Re-Tender
RATE CONTRACT

FOR

SUPPLY OF CONSUMABLES & DISPOSABLES FOR CARDIO

THORACIC

AND VASCULAR SURGERY (CTVS)

at

All India Institute of Medical Sciences (AIIMS), Jodhpur

NIT No.	**:**	**Admin/RC/07/2022-AIIMS.JDH**
NIT Issue Date	**:**	**04th July, 2023**
Last Date of Submission	**:**	**07th August, 2023** upto 03:00 PM
Date of Opening	**:**	**08th August, 2023** at 03:00 PM
Pre-Bid Meeting	**:**	**20th July, 2023 at 02:00 PM Refer Page No. 06 > Point No. 02 of "*General Terms and Conditions*"**

Tender documents may be downloaded from institute's web site
www.aiimsjodhpur.edu.in (for reference only)
and CPPP site https://eprocure.gov.in/eprocure/app

All India Institute of Medical Sciences, Jodhpur
Basni Phase – II, Jodhpur – 342 005, Rajasthan
Phone: 0291-2740741, Email: *procurement@aiimsjodhpur.edu.in*
Website: http://www.aiimsjodhpur.edu.in

All India Institute of Medical Sciences (AIIMS), Jodhpur, Rajasthan, an apex healthcare institute established by an Act of Parliament of India under aegis of Ministry of Health & Family Welfare, Government of India, invites Online bids in two bid system for Rate Contract for supply of Consumables & disposables for Cardio Thoracic and Vascular Surgery (CTVS). You are requested to quote your best offer along with the complete details of specifications, terms & conditions.

General Instructions to Bidders:

1. Bids shall be submitted online only at CPPP website: https://eprocure.gov.in/eprocure/app

2. The complete bidding process is online. Bidders should be in possession of valid digital Signature Certificate (DSC) of class II or III for online submission of bids. Prior to bidding DSC need to be registered on the website mentioned above. For any assistance for e-bidding process, if required, bidder may contact to the helpdesk at ***0291-2740741***.

3. Tenderers / Contractors / Bidders are advised to follow the instructions provided in the 'Instructions to the Contractors / Tenderer / Bidders' for the e-submission of the bids online through the Central Public Procurement Portal for e-Procurement at **https://eprocure.gov.in/eprocure/app.**

4. Bid documents may be scanned with 100 dpi with black and white option, which helps in reducing size of the scanned document.

5. Before formulating the bid and submitting the same to the purchaser, the bidder should read and examine all the terms, conditions, instructions, etc. contained in the Tender Document. Failure to provide and/or comply with the required information, instructions etc. incorporated in these Tender Documents may result in rejection of its Bid.

6. The rates quoted, approved and accepted by the Director, AIIMS shall be valid for **Two Years** from the date of **AWARD OF CONTRACT**. (Extendable on mutual agreement, if required).

7. **EMD Payment:** The bidder shall be required to submit the Earnest Money Deposit (EMD) for an amount of **Rs. 1,00,000/- (Rupees One Lakh Only)** by way of Demand Drafts or Bank Guarantee only. The demand drafts or Bank Guarantee shall be drawn in favour of "All India Institute of Medical Sciences, Jodhpur". The EMD of the successful bidder shall be returned after the successful submission of Bank Guarantee / Security Deposit and for unsuccessful bidder(s) it would be returned after award of the contract. The demand drafts or Bank Guarantee for EMD must delivered to AIIMS, Jodhpur on or before last date / time of Bid Submission. **The Hard Copy of original document in respect of earnest money deposit etc. must be delivered to the AIIMS, Jodhpur on or before last date/time of Bid Submission as mentioned above. The bid without EMD will be summarily rejected**.

    a) In case, EMD is submitted by way of Bank Guarantee, it should remain valid for 45 days beyond bid validity period. Bank Guarantee should be payable at Jodhpur only.

    b) Tenderer shall not be permitted to withdraw his offer or modify the terms and conditions thereof. In case the tenderer fails to observe and comply with stipulation

made herein or backs out after quoting the rates, the aforesaid amount of earnest money will be forfeited.

c) The Tenders without Earnest Money will be summarily rejected.
d) The Firm who are registered with National Small Industries Corporation (NSIC) / OR Small Scale Industries (SSI) / MSMEs are exempted to submit the EMD (Copy of registration must be provide along with technical bid)
e) No Claim shall lie against the AIIMS in respect of erosion in the value or interest on the amount of EMD.
f) The EMD, in case of successful bidders shall be returned after submission of performance security and in case of unsuccessful Bidders shall be retained by the Purchaser, upto a maximum period of 30 days after award of contract. No interest will be payable by the AIIMSauthorities on the EMD.

8. Bidders are requested to quote their prices on a firm & fixed basis for the entire period of the Contract. Bids of the firms received with prices quoted on variable basis shall be rejected without assigning any reasons and no communication in this regard shall be made.

9. The concerned Firm / Company whose product has been declared as of spurious or adulterated quality and any criminal cases is filled and is pending in any court shall not be eligible to participate in the bidding process. Convicted firms/company shall also not be eligible to participate in the bid. Similarly, Blacklisted / Banned / Debarred/ Bankrupt / Being Wound Up Firms / Company by any Central Government / State Government / Autonomous Bodies / Central Drug Procurement Agency is not eligible to participate in the bid.

10. Bidder must note that all the pages of bid document being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents before uploading. All pages of the Tender must be numbered and indexed. Only one tender shall be submitted by one tenderer.

11. The bidder shall provide in its tender the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the goods and services offered in the tender fully confirm to the goods and services specified by the AIIMS, Jodhpur in the tender documents. For this purpose, the bidder shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by the AIIMS, Jodhpur in the tender documents to establish technical responsiveness of the goods and services offered in its tender duly indicating relevant page numbers in the product literature.

12. Signed & stamped compliance sheet of the technical specification of the goods with technical printed literature must be enclosed with the bid. Descriptive literature / catalogues must be attached with the tender in original failing which tender may be ignored.

13. **SUBMISSION OF TENDER:**
The tender shall be submitted online in two part, viz., Technical Bid (***Annexure-I***) and Financial Bid (in attached BOQ in CPP Portal).
The offers submitted by Telegram/Fax/email/Hard Copy shall not be considered. No correspondence will be entertained in this matter.

I. TECHNICAL BID -

The following documents are to be furnished by the bidder along with **Technical Bid** as per the tender document:

i. Valid **Registration Certificate** of the firm of the Govt. / State Govt.

ii. Copy of **Constitution** or **Legal Status** of the Bidder / Manufacturer / Sole Proprietorship /Firm / Agency etc.

iii. Duly signed ***Tender Acceptance Form*** as per ***Annexure-II***.

iv. Duly filled format of ***Technical Bid*** as per ***Annexure-I***.

v. Duly signed copy of "***List of Quoted Items***" as per ***Annexure-IV***.

vi. Scanned Copy of all the undertakings and other Documents as per NIT.

vii. **Manufacturer Authorization Certificate** must be attached by Bidder as per ***Annexure-III***.

viii. **Financial Status**: - Bidder must have an annual turnover of ***₹ Two (02) Crore*** during the last 3 financial years (***2019-20, 2020-21 & 2021-22***) for similar products (Copies of ***Profit & Loss Account and Balance Sheets*** of Last Three Financial Years **(2019-20, 2020-21 & 2021-22)** duly authenticate by a Chartered Accountant should be enclosed).

ix. Copy of ***Income Tax Return*** for last Three Financial Years **(2019-20, 2020-21, 2021-22)**.

x. Copy of **PAN Card.**

xi. Copy of **GSTIN Registration Certificate**.

xii. Detailed list of Major clients (Government and Private Institutions) where item(s) are presently provided by the tenderer or supplied during last 03 (Three) Years (2019-20, 2020-21 & 2021-22).

xiii. The firm should not be blacklisted in the past by any government/ Private institution and there is no Vigilance/CBI case pending against the firm supplier. In this regards bidder must submit the attached ***Non Blacklisting Certificate*** as per ***Annexure-V***.

xiv. Brochure, original technical catalogue with detailed specification and picture of the product offered, if relevant.

xv. The bidder must upload required Quality Assurance Certifications (If applicable for any item) /documents in techno-commercial bid for each items along with item no. i.e., self- attested copies of CE/USFDA/ISO/BSP/USP/WHO/GMP/BIS as mentioned in the specification of particular tender items, failing which the offer for such items will be rejected.

xvi. Mandate form.

II. **FINANCIAL BID - Bidder must submit the Financial Bid in attached BOQ in CPP Portal.**

Note: -

1. Price should be quoted as per Item Code only, inclusive of all item/components/accessory in that particular item code.
2. L1 will be decided on the basis of whole price quoted for that particular Item code. irrespective of their components/Specification.
3. Schedule of price bid in the form of BOQ_XXXX.xls: The Price Bid format is provided as BoQ_XXXX.xls along with this Tender Enquiry Document at https://eprocure.gov.in/eprocure/app. Bidders are advised to download this BoQ_XXXX.xls as it is and quote their offer / rates in the permitted column and upload the same in the commercial bid. Bidder shall not tamper / modify downloaded price bid template in any manner. In case if the same is found to be tempered / modified in any manner, tender will be completely rejected out rightly.

General Terms and Conditions

Subject: - Notice Inviting bids for Rate Contract for supply of Consumables & disposables for Cardio Thoracic and Vascular Surgery (CTVS) at All India Institute of Medical Sciences, Jodhpur.

1. **PARTIES:**
   The parties to the contract are the contractor (the tenderer to whom the work have been awarded) and the AIIMS through Administrative Officer, All India Institute of Medical Sciences, Jodhpur for andon behalf of the Director, AIIMS, Jodhpur.

2. **"PRE – BID Meeting**" with the intending bidders shall be held on **20th July, 2023** from 02:00 PM onwards at Conference Hall, Medical Superintendent Office, AIIMS Jodhpur. All the prospective bidders are requested to submit their representations in hardcopy & email on ***procurement.aiimsjodhpur@gmail.com*** **or** **procurement@aiimsjodhpur.edu.in** on or before the said date. Representations received thereafter will not be considered further. The envelope containing the representation/ E-mail Subject should super-scribed as under: - "Representations w.r.t. Rate Contract for supply of Consumables & disposables for Cardio Thoracic and Vascular Surgery (CTVS) at AIIMS, Jodhpur (**NIT No. - Admin/RC/07/2022-AIIMS.JDH dated 04th July, 2023**".

3. Proposal for rate contract may be submitted in the prescribed format and all columns may be filled up. Incomplete proposals and tenders received after due date shall not be entertained. The Institute shall not be responsible for any postal delay and delay in receipt of the offer. Any bids received by theInstitute which does not fulfill the desired terms and conditions shall be rejected out rightly and no communication in this regard shall be sent. **Delayed / Late Bids will not be accepted, in any circumstances.**

4. Quotations qualified by such vague and indefinite expression such as **"SUBJECT TO PRIOR CONFIRMATION"** or **"SUBJECT TO IMMEDIATE ACCEPTANCE"** etc. will be treated as vague offers and rejected accordingly. Any conditional bid shall be rejected summarily.

5. Tenderer shall not be permitted to withdraw his offer or modify the terms and conditions thereof. In case the tenderer fails to observe and comply with stipulation made herein or backs out after quoting the rates, the aforesaid amount of earnest money will be forfeited.

6. No Bidder(s) shall be allowed at any time on any ground whatsoever to claim revision of or modification in the rates quoted by him. Clerical error, typographical error etc. committed by the Bidder(s) in the tender forms will not be considered after opening of the Bids. Conditions such as "**SUBJECT TO AVAILABILITY" or "SUPPLY WILL BE MADE AS AND WHEN SUPPLIES ARE RECEIVED**" etc. will not be considered under any circumstances and the Bids of those who have given such conditions shall be treated as incomplete and for that reason, shall be summarily rejected.

7. The Manufacturers (OEMs) / Principals offering for the Rate Contract may furnish the name and

address of their local authorized distributor / dealer, so that the copies of orders can be endorsed to them for expeditious supply. In such cases where local dealers / stockiest has been nominated by the principal; the bills raised by them against our purchase order will be accepted.

8. The supply of goods made through valid authorized dealer, their Name & Mail Address may be declared / indicated in the tender. Any addition and deletion of authorized dealership/ distributorship shall be intimated to the undersigned immediately on authorization of a new party.

9. At any time prior to date of submission of tender, Tender Inviting Authority may for any reason or decision, modify the terms & conditions of the tender document by a corrigendum displayed on the website of AIIMS Jodhpur ***(http://www.aiimsjodhpur.edu.in)***. In order to provide reasonable time to take the amendment into account in preparing their bid, Tender Inviting Authority may or may not, at his discretion, extend the date and time for submission of tenders.

10. Authorization certificate in respect of Foreign Firms duly self-attested and showing **VALIDITY PERIOD** may be submitted.

11. **SPECIFICATION**:
The Contractor must confirm in writing that the goods supplied by them shall be as per specification of goods mentioned in ***Annexure-XIII*** and in case of any variation, the contract shall be liable to be cancelled immediately. The Security cum Performance Guarantee will also be forfeited. Bids which are not meeting the bid specifications are not permitted and will be rejected. Full description & specifications, make / brand and name of the manufacturing firm must be clearly mentioned in the tender failing which the tender will not be considered. The tenderer must also mention whether the goods are imported / indigenous. Descriptive literature / catalogues must be attached with the tender in original failing which tender may be ignored.

12. **BID CURRENCIES**
The bidder supplying indigenous goods or already imported goods shall quote only in **Indian Rupees (INR)**. Bids, where prices are quoted in any other way shall be treated as non - responsive and rejected.

13. **BID PRICES**

i. The Bidder shall indicate in the Price Schedule provided in BoQ all the specified components of prices shown therein including the unit prices on Free Delivery at Site basis, applicable GST, HSN Code, it proposes to supply against the requirement. The Bidders shall indicate MRP in the relevant column against each item of BoQ. The details about make & model, if applicable, may also be indicated. All the columns shown in the Price Schedule should be filled up as required.

ii. In no case, the quoted rates should be more than MRP at the time of submission of quotation. If subsequently during the currency of Rate Contract there is decreased in MRP, the bidder shall inform the purchaser promptly along with revised reduced rates on pro-rata basis. In case, if bidder quotes more than MRP and/or does not inform purchaser about reduction in MRP, it

will be viewed seriously and appropriate administrative action will be taken including de-barring the firm.

iii. The rate quoted by firm should be final and written in ink or typed against each item and should not be overwritten.

14. **VALIDITY OF THE BIDS:**

i. The quoted rates must be valid for a period for 180 days from the date of closing of the tender. The overall offer for the assignment and bidder(s) quoted price shall remain unchanged during the period of validity. If the bidder quoted the validity shorter than the required period, the same will be treated as unresponsive and it may be rejected.

ii. In case the tenderer withdraws, modifies or change his offer during the validity period, bid is liable to be rejected and the earnest money deposit shall be forfeited without assigning any reason thereof. The tenderer should also be ready to extend the validity, if required, without changing any terms, conditions etc. of their original tender.

15. **RIGHT OF ACCEPTANCE:**

The AIIMS, Jodhpur reserve the right to accept the whole or any part or portion of the bid; and the bidder shall provide the same at the rates quoted. The AIIMS Jodhpur reserve the right to reject any or all tenders / quotations or all offers received in response to the tender or cancel or withdraw the tender notice without assigning any reason thereof and also does not bind itself to accept the lowest quotation or any tender and no claim in this regard shall be entertained. The Institute reserves the right to accept in part or in full or reject any or more tender(s) without assigning any reasons or cancel the tendering process and reject all tender(s) at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder or bidder(s).

16. **FIRM PRICE:**

i. Prices quoted by the bidder shall remain firm and fixed during the period of the Rate Contract and not subject to variation on any account. Purchase Orders will be placed by Centers / Hospital / Departments / Store Sections against this Rate Contract till the period of Rate Contract. Statuary variation in GST will be applicable.

ii. The Bidder(s) must quote rates including freight, insurance, cartage, labor charges etc. on Door Delivery basis at AIIMS, Jodhpur

iii. Bids of the firms received with prices quoted on variable basis shall be rejected without assigning any reasons and no communication in this regard shall be made.

iv. No escalation in rates on any account will be permitted during the contract period.

17. **ALTERNATIVE MODELS / BRANDS / QUALITY**

Alternative Models / Brands / Quality are not permitted. The Bidder are required to quote Models/Brands/Quality of best quality meeting tender specifications. Wherever, a bidder quotes alternative Models / Brands / Quality, there bid will not be considered for that item.

18. **SAMPLE /DEMONSTRATION:**

i. The tenderers may be asked/required to submit samples of the quoted items (without indicating price, clear marking of firm / agency name in each of item) ***when required by the Institute***, for quality evaluation, failing which their bids/offer shall be rejected and in case all the expenses will be borne by the tenderer. Purchase will be done only after the approval of the quality of the product by the Competent Authority. Samples should be submitted separately at **Central Store, AIIMS Jodhpur.**

ii. The firms are intimated that they should be ready for demonstration as per requirement of items and only ***ONE-WEEK*** time will be provided for arrangement of demonstration, if required, and no request for extending time for demonstration will be entertained. Failure to demonstration will result in rejection of offer.

19. **SIGNING OF TENDER:**

Individual signing the tender or other documents connected with contract must specify whether he/she signs as:

i. A sole proprietor of the concern or constituted attorney of such sole proprietor;

ii. A partner of the firm, if it is a partnership firm in which case he must have authority to execute the contracts on behalf of the firm and to refer to arbitration disputes concerning the business of the partnership either by virtue of the partnership agreement or by a power of attorney duly executed by the partners of the firm.

iii. Director or a principal officer duly authorized by the Board of Directors of the Company, if it is a company.

iv. A person signing the tender form or any document forming part of the contract on behalf of another person shall be deemed to warranty, that he has authority to bind such other person. If, on enquiry it appears that the person so signing had no authority to do so, AIIMS, Jodhpur may without prejudice, cancel the contract and hold the signatory liable for all costs, consequences and damages under the civil and criminal remedies available.

20. **TECHNICAL EVALUATION:**

i. Detailed technical evaluation shall be carried out by Purchase Committee pursuant to conditions in the tender document to determine the substantial responsiveness of each tender. For this clause, the substantially responsive bid is one that conforms to all the eligibility and terms and condition of the tender without any material deviation. The Institute's determination of bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence. The Institute shall evaluate the technical bids also to determine whether they are complete, whether required sureties have been furnished, whether the documents have been properly signed and whether the bids are in order.

ii. The Technical Evaluation Committee may call the responsive bidders for discussion or

presentation to facilitate and assess their understanding of the scope of work and its execution. However, the committee shall have sole discretion to call for discussion / presentation.

iii. Financial bids of only those bidders who qualify the technical criteria will be opened provided all other requirements are fulfilled.

iv. AIIMS Jodhpur shall have right to accept or reject any or all tenders without assigning any reasons thereof.

21. **FINANCIAL EVALUATION:**

i. The financial bid shall be opened of only those bidders who are found to be technically eligible.

ii. Arithmetical errors shall be rectified on the following basis:

a. If there is a discrepancy between the **Unit Price and Total Price** (which is obtained by multiplying the unit price by the quantity), then the **Unit Price** shall prevail and the total price shall be corrected accordingly.
b. If there is a discrepancy between **Words and Figures**, the **Lesser Amount** shall be considered as valid.
c. If the Supplier **does not accept the correction** of the errors, his **bid shall be rejected**.

iii. After due evaluation of the bid(s) AIIMS, Jodhpur will award the contract to the lowest evaluated responsive tenderer. L1 will be decided on individual item basis.

iv. Conditional bid will be treated as unresponsive and will be rejected.

v. Bidder must quote the Financial Bid as specified in BOQ.

vi. AIIMS Jodhpur, reserves the right to reject any or all offers received in response to tender or cancel or withdraw the tender notice without assigning any reason, whatsoever.

22. To assist in the analysis, evaluation and computation of the bids, the Purchase Committee of AIIMS, Jodhpur, may ask bidders individually for clarification of their bids. The request for clarification and the response shall be in writing but no change in the price or substance of the bid offered shall be permitted.

23. The Purchase Committee of AIIMS, Jodhpur shall go into all aspects including cost factors of Consumables and then decide for awarding of the tender, by quoting lower rates in respect of items, a firm does not become entitled to awarding the contract in its favor of those item(s). In order to get selection / consideration in the panel of two or three vendors for awarding of contract (in case the contract is to be awarded to more than one vendor), the criteria of selection for awarding contract will be calculating / comparing the rate of items consumed by the AIIMS, Jodhpur throughout the year and as per the requirement in view of quality, as deemed fit by the Purchase Committee. The firm has to provide samples for the items for evaluation of Purchase Committee if required. The committee will reject the quotations of the bidders whose quotation will not found of quality required by AIIMS, Jodhpur. AIIMS, Jodhpur reserves the right to accept

/ reject any quotation either in part or full without assigning any reason thereof, or award the contract to different supplier(s), for different item(s), if feasible after considering the credentials, manufacturing, capability, quality and distribution rights of the item(s). The firm are, therefore, requested to attach their credentials in regard to supply of items and experience in the field, distribution rights and their annual turnover.

24. **AWARD OF CONTRACT:**
The Institute shall consider placement of orders for jobs to those bidders whose offers have been found **technically and Financially Acceptable**. The Institute reserves the right to counter offer price(s) against price(s) quoted by any bidder. **L1** will be decided on individual item basis.

25. **PURCHASE PREFERENCE TO LOCAL SUPPLIERS:**
In pursuance of Government of India's ***Order No. P-45021/2/2017-PP (BE-II) dated 16-Sep-2020 (as amended from time to time)*** and **F. No.: Z. 28018/67/2017-EPW dated 24-Jun-2020 (revised)**, purchase preference shall be given to local suppliers in all procurements undertaken in the manner specified hereunder and the procurement shall be made as per terms and conditions contained in the said order.

26. **MINIMUM LOCAL CONTENT:**
The minimum local content shall as per Government of India's ***Order No. P-45021/2/2017-PP (BE-II) dated 16-Sep-2020 (as amended from time to time)*** and **F. No.: Z. 28018/67/2017-EPW dated 24-Jun-2020 (revised)**, till the Nodal Ministry prescribes a higher or lower percentage.

27. **MARGIN OF PURCHASE PREFERENCE:**
The **Margin of Purchase Preference** shall be **20%**. The Local supplier whose quoted price falls in the **Margin of Purchase Preference** desirous of claiming benefit of the ***Order No. P-45021/2/2017-PP (BE-II) dated 16-Sep-2020 (as amended from time to time),*** shall submit an undertaking **within 7 days** of opening of Financial Bid, that he would be ready to supply the product at **L1 price**. In case of non- receipt of the same, he would not be given **Purchase Preference.**

28. The bidders are required to submit the following annexure in compliance of public procumbent (Preference to ***Make in India***) order, 2017.
i) Affidavit of self-certification regarding local content (to be provided on ₹ 100/- stamp paper) (***Annexure-XI*****).**

29. All other terms & conditions will be as per the Department of Industrial Policy and Promotion (DIPP)'s ***Order No. P-45021/2/2017-PP (BE-II) dated 16-Sep-2020 (as amended from time to time)*** and as per Manual for Procurement of Goods i.e. **GFR-2017** etc.

30. **SIGNING THE CONTRACT:**
The successful bidder shall be required to execute the Contract Agreement accepting all terms and conditions stipulated herein on a non-judicial stamp paper of Rs. 500/- (Rs. Five Hundred only) along with performance security within fifteen days of the issue of the Letter of notification of

award. In the event of failure on the part of the successful bidder to sign the Contract within the period stipulated above, the EMD shall be forfeited and the acceptance of BID shall be considered as cancelled.

31. **PERFORMANCE SECURITY:**

i. The Successful bidder will be required to submit the performance security in the form of Fixed Deposit Receipt or Bank Guarantee from any Nationalized Bank duly pledged in the name of the "All India Institute of Medical Sciences, Jodhpur" payable at Jodhpur within 15 days from the award of contract for an amount in multiplication of ***₹ 10,000/- (Rupees Ten Thousand Only)*** per awarded item subject to Minimum ***₹ 2,00,000/- (Rupees Two Lacs only)*** and Maximum ***₹ 5,00,000/- (Rupees Five Lacs only)***. **(*Annexure-IX*)**

ii. The security deposit of successful bidders should be valid for the period of Two and half Year from the date of award of the contract and shall be refunded without any interest on it after 60 days from completion of the contractor's performance obligations under the contract as per order, or after the expiry of contract on satisfactory completion of the same whichever is later.

iii. The security deposit can be forfeited by the Institute in the event of any breach or negligence or non–observance of any condition of contract or for unsatisfactory performance of the contract.

iv. In case, the successful bidder shows inability at any stage, after the contract is finalized and awarded for whatsoever reason(s), to honor the contract, the EMD/Performance Security deposited would be forfeited.

v. No interest on security deposit and earnest money deposit shall be paid by the Institute to the tenderer.

32. **CONTRACT PERIOD:**

The rate contract is initially for a period of **Two (2) years** and may be extended till new Rate Contract gets final subject to satisfaction of the All India Institute of Medical Sciences (AIIMS), Jodhpur and on mutual consent of both the parties subject to the condition/ rules framed by the Government of India from time to time.

33. The successful Tenderer shall also provide the name and Contact no of a key person, who can be contacted at any time, even beyond the office hours & on holidays also. The person should be capable of taking orders and making arrangement for supply of the desired items even on short notice to AIIMS, Jodhpur.

34. **DELIVERY:**

i. Orders shall be issued for tentative annual requirement on actual need basis as and when required. The items will have to be supplied at AIIMS, Jodhpur on "Free Delivery at Site" basis. No transportation/ cartage /Freight/insurance charges will be provided for the same. The goods are to be supplied by F.O.R. destination and all the transit loss / expenses whatsoever, will be borne by the supplier/firm. All the aspects of safe delivery shall be the exclusive responsibility of the supplier.

ii. All India Institute of Medical Sciences (AIIMS), Jodhpur shall be the sole authority to cancel or amend the order, as per requirement, and also to place order for supply of item beyond office hours/holidays/place of supply for which, no additional payment shall be made.

iii. Delivery of goods shall be made by the supplier **within 45 days** of placing of purchase order, however, in case of emergent requirement he has to supply the required quantity of goods **within 1 week** of placing of order also. In few cases the items are to be delivered at a very short notice i.e. **within 24 hours**.

iv. The tenderers must quote rates including freight, insurance, cartage, labor charges etc. on Door Delivery basis at AIIMS, Jodhpur.

v. GST and other Govt. levies will be paid extra as applicable by the supplier.

vi. Supply should be made in full against the order and shortage will be procured from other supplier on the risk and cost of the original supplier.

35. **LIQUIDATED DAMAGES:**

Supply of material will have to be completed within the stipulated period mentioned in the purchased order. The **Liquidated Damages Charges @ 0.5% Per Week** shall be imposed, if supply made after expiry of delivery period subject to maximum 10% of the total value of relevant goods. Quantum of liquidated damages assessed and levied by the purchaser shall be final and not challengeable by the supplier.

36. **RISK PURCHASE:**

If successful tenderer fails to supply material within the stipulated delivery date or material supplied other than specification specified in our NIT, AIIMS, Jodhpur reserves the right to **Terminate the Contract** for that item(s), **Forfeiture of Security Deposit** and to procure the same or equivalent material from alternative sources at the vendor's risk, responsibility and cost. Any extra cost incurred in the procurement of the material from alternative source will be recovered from the Security Deposit / Bank Guarantee and Pending Bills of existing firm and if the value of the materials under risk purchaseexceeds, the amount of Security Deposit and / or Bank Guarantee and Pending Bills, the same may be recovered if necessary by due legal process.

37. **QUALITY OF GOODS:**

i. In case the quality of goods supplied are not in conformity with the standard given in tender and as per the samples supplied or the supplies are found defective at any stage these goods shall immediately will be taken back by the supplier and will be replaced with the tender quality goods, without any delay.

ii. The Purchase Committee reserves all right to reject the goods, if the same are not found in accordance with the required description / specifications and liquidates damages shall be charged.

iii. Supply should be made from the latest batch of production with maximum life period &

original packing.

iv. Material shall be delivered at the AIIMS, Jodhpur with remaining ***Shelf-Life of at least 75% of the Stipulated Total Shelf-Life*** from the date of manufacturing of that product.

38. **INSPECTION:**

i. AIIMS, Jodhpur shall have the right to inspect and / or to test the goods to check their conformity to the NIT Specifications at no extra cost to the AIIMS, Jodhpur.

ii. AIIMS, Jodhpur right to inspect, test and, where necessary, reject the Goods after the goods arrival at the final destination shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by AIIMS, Jodhpur prior to the goods shipment.

iii. The Director, AIIMS Jodhpur shall be the final authority to reject full or any part of the supply which is not confirming to the specification and other terms and conditions.

iv. No payment shall be made for rejected items. Rejected items must be removed by the bidders **within Two (02) Weeks** of the date of rejection at their own cost and replaced immediately. In case these are not removed, these will be auctioned at the risk and responsibility of the suppliers without any further notice.

39. **PAYMENT CLAUSE:**

i. The bill in triplicate may be sent to this office for settlement after satisfactorily delivery of the material. The bill should have full particulars of the items(s).

ii. Payment shall be released after it is ensured that the items/quantity and quality of items supplied are to the entire satisfaction of this office and accepted. If any item is found to be defective, or not of the desired quality, the same shall be replaced by the supplier immediately, for which no extra payment shall be made by AIIMS, Jodhpur.

iii. No payment shall be made in advance nor shall the loan from any bank or financial institutions be recommended on the basis of the order of award of work.

iv. The contractor shall submit the bill only after supply of the material to the satisfaction of the AIIMS Jodhpur, on receipt of a pre-receipted bill invoice from the Contractor the case of issuing sanction and passing of bill for payment will be initiated. No payment will be made for goods rejected.

v. The supplier shall not claim any interest on delay payment under the contract.

vi. No revision in rate (on higher side) will be accepted during contract period.

vii. The payment would be made for actual supply received and no claim in this regard should be entertained.

40. **FORCE MAJEURE:**

i. If, at any time during the subsistence of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, act of public enemy, civil commotion, sabotage, fire, floods, explosion, epidemics, quarantine restriction, strikers lockout or act of God (hereinafter referred to as events) provided notice of happening of any such eventuality is given by party to other within 21 Days from the date of occurrence thereof, neither party hall by reason of such event be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such non-performance or delay in performance, and deliveries have been so resumed or not shall be final and conclusive.

ii. Further, that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, either party may, at least option to terminate the contract.

41. The bidder must be a natural person, private entity, or public entity (State-owned enterprise or institution.

42. **SUBLETTING OF WORK:**
The firm shall not assign or sublet the work/job or any part of it to any other person or party without having first obtained permission in writing of AIIMS, Jodhpur, which will be at liberty to refuse if thinks fit. The tender is not transferable. Only one tender shall be submitted by one tenderer.

43. **RIGHT TO CALL UPON INFORMATION REGARDING STATUS OF WORK:**
The AIIMS, Jodhpur will have the right to call upon information regarding status of work / job at any point of time.

44. **FALL CLAUSE:**

i. If at any time during the period of contract, the price of tendered items is reduced or brought down by any law or act of the Central or State Govt. or by the tenderer himself, the tenderer shall be morally and statutorily bound to inform AIIMS, Jodhpur immediately about such reduction in the contracted prices. The AIIMS, Jodhpur is empowered to unilaterally effect such reduction as is necessary in rates in case the tenderer fails to notify or fails to agree for such reduction of rates.

ii. In case of any enhancement in TAXES due to statutory Act of the Govt. after the date of submission of the tenders and during the tender period, the additional TAXES so levied will be allowed to be charged extra as separate item without any change in price structure of the drugs approved under the tender. For claiming the additional cost on account of the increase in Taxes, the tenderer should produce letter from the concerned excise authorities indicating his commitment for the supply made to the AIIMS, Jodhpur on account of the increase in Taxes.

45. The tendering Firm / Agency / Company shall be bound by the details furnished by him / her to the All India Institute of Medical Sciences (AIIMS), Jodhpur while submitting the tender or at subsequent stage. Upon selection of the tendering Firm / Agency / Company, if at any stage, the documents furnished by him / her is found to be false or the quality of the articles or rates are found of poor quality / different specifications, it would be deemed to be a breach of terms of contract, the contract shall be cancelled at the discretion of competent authority and performance security shall be stand forfeited.

46. The AIIMS, Jodhpur reserves the right to place an order for supply of any items mentioned in the Financial Bid or otherwise, to any other firm(s) in emergency / unavoidable situation.

47. The AIIMS Jodhpur does not bind itself to accept the lowest bid or any bid and reserves the rights of accepting the whole or any part of the bid or portion of the job offered; and the bidder shall provide the same at the rates quoted.

48. If a tendering Firm/Agency/Company decides to withdraw from the bidding before the financial bids are opened, the AIIMS, Jodhpur shall forfeit the EMD deposited with the technical bid.

49. The Institute reserves the right to accept in part or in full or reject any or more tender(s) without assigning any reasons or cancel the tendering process and reject all tender(s) at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder or bidder(s).

50. AIIMS Jodhpur reserves the right to conclude more than one rate contract for the same item.

51. AIIMS Jodhpur has the option to renegotiate the price with the rate contract holder.

52. The quantity of item given, if any, in the tender is tentative, which may be increased or decreased as per the institute's requirement.

53. Order will be placed as per requirement, irrespective of value of the order.

54. **CODE OF INTEGRITY:** No official of the bidder shall act in contravention of the codes which includes prohibition of:

    i. Making offer, solicitation or acceptance of bribe, reward or gift or any material benefit, either directly or indirectly, in exchange for an unfair advantage in the procurement process or to other wise influence the procurement process.

    ii. Any omission, or misrepresentation that may mislead or attempt to mislead so that financial or other benefit may be obtained or an obligation avoided.

    iii. Any collusion, bid rigging or anti-competitive behavior that may impair the transparency, fairness and the progress of the procurement process.

    iv. Improper use of information provided by the procuring entity to the bidder with an intent to gain unfair advantage in the procurement process or for personal gain.

v. Any financial or business transactions between the bidder and any official of the procuring entity related to tender or execution process of contract; which can affect the decision of the procuring entity directly or indirectly.

vi. Any coercion or any threat to impair or harm, directly or indirectly, any party or its property to influence the procurement process.

vii. Obstruction of any investigation or auditing of a procurement process.

viii. Making false declaration or providing false information for participation in a tender process or to secure a contract.

ix. Disclosure of conflict of interest.

x. Disclosure by the bidder of any previous transgressions made in respect of the provisions of sub-clause with any entity in any country during the last three years or of being debarred by any other procuring entity.

55. **BREACH OF TERMS AND CONDITIONS:**

In case of breach of any terms and conditions as mentioned, the Competent Authority, AIIMS, Jodhpur will have the right to cancel the rate contract without assigning any reason thereof and nothing will be payable by AIIMS, Jodhpur. In that event, the security deposit shall also stand forfeited.

56. **INSOLVENCY ETC.:**

In the event of the firm being adjudged insolvent or having a receiver appointed for it by a court or any other order under the Insolvency Act made against them or in the case of a company the passingany resolution or making of any order for winding up, whether voluntary or otherwise, or in the eventof the firm failing to comply with any of the conditions herein specified AIIMS, Jodhpur shall have the power to terminate the contract without any prior notice.

57. **ARBITRATION:**

i. If any conflict or difference arises concerning this agreement, its interpretation on payment to made there-under, the same shall be settled out by mutual consultation and negotiation. If attempts for conciliation do not yield any result within a period of **30 Days**, either of the parties may make a request to the other party for submission of the dispute for decision by an Arbitral Tribunal containing Sole Arbitrator to be appointed by the Director, AIIMS Jodhpur. Such requests shall be accompanied with a panel of names of three persons to act as the sole arbitrator.

ii. In case of such arbitrator refusing, unwilling or becoming incapable to act or his mandate having been terminated under law, another arbitrator shall be appointed in the same manner from among the panel of three persons to be submitted by the claimant. The provision of **Arbitration and Conciliation Act, 1996** and the rule framed there under and in force shall be applicable to such proceedings.

58. **DISCLAIMER:**

i. The near relatives of employees of AIIMS, Jodhpur are prohibited from participation in this tender.The near relative for this purpose are defined as:

ii. Members of a Hindu Undivided Family.

iii. Their spouses

iv. The one related to the other in the manner as father, son(s), Son's wife (daughter-in-law), daughter(s) and daughter's husband (sons-in-law) brother (s) and brother's wife, sister(s) and sister's husband, brother(s)-in-law.

59. **LEGAL JURISDICTION:**

The agreement shall be deemed to have been concluded in **Jodhpur, Rajasthan** and all obligations hereunder shall be deemed to be located at **Jodhpur, Rajasthan and Court within Jodhpur, Rajasthan** will have Jurisdiction to the exclusion of other courts.

60. **APPLICABLE LAW**:

i. The contract shall be governed by the laws and procedures established by Govt. of India, within the framework of applicable legislation and enactment made from time to time concerning such Commercial dealings / processing.

ii. Any disputes are subject to exclusive jurisdiction of Competent Court and Forum in Jodhpur, Rajasthan, India only.

iii. The Arbitration shall be held in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and the venue of arbitration shall be at Jodhpur. The decision of the Arbitrator shall be final and binding on both the partied.

iv. Force Majeure: Any delay due to Force Majeure will not be attributable to the supplier. Deputy Director (Administration) AIIMS, Jodhpur.

Deputy Director (Administration)
AIIMS, Jodhpur

ANNEXURE-I

TECHNICAL BID

TENDER FORM - 1 - TECHNICAL INFORMATION AND UNDERTAKING

(Tenderer may use separate sheet wherever required)

Sr.	Details of the Firm / Bidder	Page No.	Remarks
1	Name, Address, Mobile Number, E-mail ID of the Tenderer/ Concern.		
2	Name and Mobile Number of a Key person, who can be contacted at any time		
3	Whether the Firm is located in Jodhpur (Rajasthan). (Yes/No)		
4	Details of the Earnest Money Deposit (EMD) (Yes/No) DD / Bank Guarantee No.: Validity Period (In case of Bank Guarantee): Dated: Drawn on Bank: Amount: (Rupees.....) **ANNEXURE-VIII**		
5	State clearly whether it is Sole proprietor or Partnership firm or a company or a Government Department or a Public Sector Organization		
6	Tender Acceptance Form as per NIT format -**ANNEXURE-II**		
7	Manufacturer Authorization Certificate as per NIT format **Annexure-III**		
8	***List of Quoted*** **Items** with the Specification of the item mentioned with make and complete specification along with the Technical Bid (without indicating price)- ***Annexure-IV***		
9	***Non Blacklisting Certificate*** as per NIT format- ***Annexure-V***		
10	Certificate for ***No Deviation*** as per NIT format- ***Annexure-VI***		
11	Certificate for ***Price Justification*** as per NIT format – ***Annexure-VII***		
12	Certificate for Tender as per NIT format **- Annexure-X**		
13	Self Certification regarding Local Content- **Annexure-XI**		
14	**Calculation of Local Content: Annexure-XI** (a) [*To be submitted along with BoQ]*		
15	PAN No. (Enclose the copy of PAN Card).		
16	GSTIN Registration Number (Enclose copy)		
17	Non-Conviction certificate		
18	Detail of Income Tax Return for last 3 years i.e. (***2019-20, 2020-21 & 2021-22***)		
19	Authenticated proof of turnover of the firm/Bidder		
20	Authenticated proof of turnover of principal manufacturer		
21	Copies of authenticated balance sheet for the past three years		

22	Quality Assurance Certification (If applicable for any item) CE/USFDA/ISO/BSP/USP/WHO/GMP/BIS certificate as mentioned in the specification of tender items		
23	Import License, if applicable		
24	Experience Certificate and related documents, if any		
25	Have you previously supplied these items to any government / private organization? If yes, attach the relevant proof. List of Major Customer may be given on a sheet and proof of satisfactory supply, if any. (Also provide an affidavit that you have not quoted the price higher than previously supplied any government institute)		
26	Mandate Form		
27	Any other information, if necessary		

- **Page number/serial number may be given to each and every page of Tender Documents and photocopies of the documents attached Mention Page number, wherever the copy(ies) of the document(s) are kept.**
- **In case of non-fulfilment of any of the above information/ document(s), the Tender will be summarily rejected without giving any notice.**

Date : Name :

Place : Business Address :

Signature of Bidder :

Seal of the Bidder :

Undertaking

1. That I/we have carefully studied all the terms & conditions of NIT and shall abide by it
2. That I/We shall supply the items of requisite quality
3. That I/We undertake that the information given in this tender are true and correct in all respect andI/We hold the responsibility for the same
4. That I/We undertake that sample of items will be kept ready for inspections by the AIIMS, JodhpurI/We shall be responsible for the cancellation of tender if samples are not up to mark

Date : Name :

Place : Business Address :

Signature of Bidder :

Seal of the Bidder :

ANNEXURE-II

TENDER ACCEPTANCE FORM

[To be submitted on letterhead of the Company/Firm]

I/We have downloaded/obtained the Tender Enquiry Document(s) for the above mentioned 'Tender/Work' form the website(s) namely: - **NIT No. Admin/RC/07/2022-AIIMS.JDH Dated:**…..…/ …..…/……**for Tender for** Rate Contract for supply of Consumables & disposables for Cardio Thoracic and Vascular Surgery (CTVS) **at AIIMS Jodhpur.**

I/We hereby certify that I/we have read the entire terms and conditions of the tender documents (including all documents like annexure(s), schedule(s), etc.) which from part of the contract agreement and I/we shall abide hereby the terms/conditions/clauses contained therein. The corrigendum(s) issued from time to time by your Institute too have all been taken into consideration, while submitting this acceptance letter. I/we hereby unconditionally accept the tender conditions of above mentioned tender document(s)/corrigendum(s) in it's totally/entirely. We confirm that we fully agree to the terms and conditions specified in above mentioned Tender Enquiry Document, including amendment / corrigendum if any.

We now offer to supply and deliver in conformity with your above referred document for the sum as shown in the Price Schedules (BoQ) uploaded herewith and made part of this bid. If our bid is accepted, we undertake to supply the items for which Rate Contract has been concluded, in accordance with the delivery schedule specified in the Schedule specified in the schedule of requirements. We further confirm that, if our bid is accepted, we shall provide you with a Performance Security of required amount in an acceptable form as mentioned in your NIT, in terms of, read with modification.

We agree to keep our bid valid for acceptance as required in your NIT Document, read with modification, or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this bid up to the aforesaid period and this bid may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal Rate Contract is executed, this bid read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.

We further understand that you are not bound to accept the lowest or any bid you may receive against your above- referred advertised tender enquiry.

We confirm that we do not stand deregistered/banned/blacklisted by Central / State Govt. / Ministries / Departments.

We hereby certify that if at any time, any provision of this tender are found violated or any information furnished by us is proved to be false or incorrect, we are liable for any action as deemed fit by your Institute in addition to rejection of this tender/bid & the forfeiture of the earnest money deposit.

Date	:	Name	:
Place	:	Business Address	:
		Signature of Bidder	:
		Seal of the Bidder	:

ANNEXURE-III

FORMAT FOR MANUFACTURER'S AUTHORISATION

Dated: …….

To,

The Director,
All India Institute of Medical Sciences (AIIMS), Jodhpur(Raj.)

Reference: NIT No. Admin/RC/07/2022-AIIMS.JDH, Dated:. …../…..……/ ……**for Tender for** Rate Contract for supply of Consumables & disposables for Cardio Thoracic and Vascular Surgery (CTVS) **at AIIMS, Jodhpur.**

Subject: Manufacturer Authorization Certificate

Dear Sir,

Ref. Your NIT No. **Admin/RC/07/2022-AIIMS.JDH, Dated:.** …../…..……/ ……**for Tender for** Rate Contract for supply of Consumables & disposables for Cardio Thoracic and Vascular Surgery (CTVS) **at AIIMS, Jodhpur,** We, ……who are proven and reputable manufacturers of …… …… (name and description of the Items / Category offered in the Quotation) having factories at …… ……, hereby authorize

Messrs. ……..… (name and address of the agent) to submit Bid/Quotation, process the same further, against your requirement as contained in the above referred Tender Form for the above items manufactured by us. We further confirm that no supplier or firm or individual other than Messrs.……..… (name and address of the above agent) is authorized to submit a tender, process the same further against your requirement as containedin the above referred Quotation form for the above items manufactured by us. We also hereby confirm that we would be responsible for the satisfactory execution of supply placed on the authorized agent. We also confirm that the price quoted by our agent shall not exceed than that which we would have quoted directly.

Yours faithfully,

[*Signature with date, name and designation*]

For and on behalf of Messrs. ……
[Name, address & contact detail of the manufacturer]

Note: -

1. This letter of authorization should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.

2. Original letter may be enclosed with Quotation Form during submission in the sealed cover.

ANNEXURE-IV

LIST OF QUOTED ITEMS

S. No.	Tender Ref. No.:	Item Name with specification	Whether complying with NIT's specs (Yes/No)	Make
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				

Date :

Place :

Name :

Business Address :

Signature of Bidder :

Seal of the Bidder :

ANNEXURE-V

NON BLACKLISTING CERTIFICATE

[To be submitted on letterhead of the Company/Firm]

I / We [Name of the company / firm] hereby certify that the firm has not been ever blacklisted / debarred by any Central / State Government / Public Undertaking / Institute on any account.

I / We also certify that firm will be supplied the item as per the specification given by AIIMS Jodhpur and also abideall the terms and conditions stipulated in Contract.

I / We also certify that the information given in bid is true and correct in all aspects and in any case at a later date itis found that any details provided are false and incorrect, contract given to the concern firm or participation may be summarily terminated at any stage, the firm will be blacklisted and AIIMS Jodhpur may impose any action as per NIT rules.

Date	:	Name	:
Place	:	Business Address	:
		Signature of Bidder	:
		Seal of the Bidder	:

ANNEXURE-VI

CERTIFICATE OF NO DEVIATION

[*To be submitted on letterhead of the Company/Firm]*

NIT No.: ……..

I/We, [Name of the company / firm] hereby certify that notwithstanding any contrary indication / conditions elsewhere in our offer documents, I / We have neither set any terms and conditionsnor there is any deviation taken from the conditions of AIIMS Jodhpur's tender specification, either technical or commercial, and I / We agree to all the terms and conditions mentioned in AIIMS Jodhpur's tender specification withassociated amendments & clarification.

Date	:	Name	:
Place	:	Business Address	:
		Signature of Bidder	:
		Seal of the Bidder	:

ANNEXURE-VII

CERTIFICATE OF PRICE JUSTIFICATION

[*To be submitted on letterhead of the Company/Firm]*

NIT No.: ……..

I / We, [Name of the company / firm] hereby certify that the rates provided are our best rates and we have not given these materials to any Government Department / PSU / Institution for lesser than these rates in last one year.

Date	:	Name	:
Place	:	Business Address	:
		Signature of Bidder	:
		Seal of the Bidder	:

ANNEXURE-VIII

BANK GUARANTEE FORM FOR BID SECURITY

Whereas …… …… …… …… …… (Name and address of the Bidder) (hereinafter called the "Bidders") has submitted its Bid dated …….. for the supply of ……..…… …… ……..……. (hereinafter called the "Bid") against the purchaser's ATE No. ……..…… …… …… …… ……..……. Know all persons by these presents that we …… …… …… …… …… ..…… having our registered office at …… …… ……..…… …… …… …… …… …… (Hereinafter called the "Bank") are bound unto AIIMS, Jodhpur (hereinafter called the "Purchaser") in the sum of …… for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of thesaid Bank this ……. ……. day of …… 20 ……

The conditions of this obligation are:

1) If the Bidder withdraws or amends, impairs or derogates from the bid in any respect within the period of validity of this Bid.
2) If the Bidder having been notified of the acceptance of his Bid by the Purchaser during the period of its validity:
    a. If the bidder fails or refuses to furnish the performance security for the due performance of the RateContract / Purchase Orders or
    b. If the bidder fails or refuses to accept / execute the Contract / Purchase orders or
    c. If it comes to notice at any time, that the information / documents furnished in its Bid are false orincorrect or misleading or forged

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amountclaimed by it is due to it owing to the occurrence of one or more the three conditions, specifying the occurred condition(s).

This guarantee will remain in force upto ……..……. (insert date of additional **Sixty Days After Bid Validity**) and any demand in respect thereof should reach the Bank not later than the above date.

……..…….

(Signature with date of the authorized officer of the Bank)

……..…….

(Name and designation of the Officer)

……..…….

(Seal, name & address of the Bank and address of the Branch)

ANNEXURE-IX

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY

Whereas …… …… …… …… …… (Name and address of the Bidder) (*hereinafter called the "the Supplier"*) has undertaken, in pursuance of NIT No. …… …… …… …… …….. dated …….. valid from …….. to …… ……. for supply of …… ….…… …….. (*insert description of goods*),(*Hereinafter called "the Contract"*), to AIIMS Jodhpur (Hereinafter called "the Purchaser")

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of …… …… …… ……. ……. (*insert Amount of the Performance Security in words and figures*), and we undertake to pay you, upon your first written demand declaringthe supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) aforesaid, without your needing to prove or to show grounds or reasons for your demandor the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performedthere under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition ormodification.

This guarantee will remain in force upto …… ……. (*insert* last date of currency of Contract plus WarrantPeriod (If applicable) plus additional 90 (Ninety) Days and any demand in respect thereof should reach the Bank not later than the above date.

……..
(Signature with date of the authorized officer of the Bank)

……..
Name and designation of the officer
……..

……..
Seal, name & address of the Bank and address of the Branch

ANNEXURE-X

The bidder should submit related undertaking for Restrictions on procurement from bidders from a county or countries, or a class of countries under Rule 144 (XI) of the General Financial Rules 2017 in compliance of office OM no. 6/18/2019-PPD dated 23rd July 2020. Ministry of Finance Department of Expenditure, Public Procurement Division on the basis of following Certificate given below, on the company letter head duly signed by authorized signatory for this tender.

Certificate for Tender

Tender No.:- _____
NIT name : - _____

'We have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; and solemnly certify that we are not from such a county or, if from such a country, we are registered with the Competent Authority (copy enclosed). We hereby certify that we fulfil' all requirement in this regard and are eligible to be considered."

AND

We have read the clause regarding restrictions on procurement from a bidder of a county which shares a land border with India and on sub-contracting to contractors from such a country; and solemnly certify that we are not from such a county or, if from such a country, we are registered with the Competent Authority (copy enclosed) and we shall not subcontract any work to a contractor from such countries unless such contractor is registered with the Comps eat Authority. We hereby certify that we fulfil all requirement in this regard and are eligible to be considered."

It is to declare that if, our bid/offer is accepted by the purchaser, as per undertaking given by us as per aforementioned points on the basis of certificate are found to be false, in such case this would be a ground for immediate termination of our bid/offer and further legal action in accordance with the law to be initiating on us by the procuring entity i.e. AIIMS, Jodhpur.

[Signature with date, name and designation]
For and on behalf of M/s_____
[Name & address of the manufacturers]

ANNEXURE-XI

Format for Affidavit of Self Certification regarding Local Content
(To be provided on ₹ 100/- Stamp Paper)

I …….. …….. …….. S/o, D/o, W/o ……. ……. …… ……., Resident of ……. …… ……. ……. do hereby solemnly affirm anddeclare as under.

That I will agree to abide by the terms and conditions of the policy of Government of India issued vide ***Order No. P-45021/2/2017-PP (BE-II) dated 16-Sep-2020 (revised).***

That the information furnished hereinafter is correct to best of my knowledge and belief and I undertake to produce relevant records before the procuring entity or any authority so nominated by the Government of India for the purpose of assessing the local content.

That the local content for all inputs which constitute the said drugs has been verified by me and I am responsible for the correctness of the claims made therein.

That in the event of the domestic valve addition of the product mentioned herein is found to be incorrect and not meeting the prescribed valve-addition norms, based on Government of India for the purpose of assessing the local content, action will be taken against me as per ***Order No. P-45021/2/2017-PP (BE-II) dated 16-Sep-2020 (revised).***

I agree to maintain the following information in the Company's record for a period of 8 years and shall make this available for verification to any statutory authorities:

i) Name and details of the Domestic Manufacturer (Registered Officer, Manufacturing unit location,nature of legal entity).
ii) Date on which this certificate is issued.
iii) Medicine for which the certificate is product.
iv) Procuring entity to whom the certificate is furnished.
v) Percentage of local content claimed.
vi) Name and contact details of the unit of the manufacturer.
vii) Sale Price of the product.
viii) Ex-Factory Price of the product.
ix) Freight, insurance and handling.
x) Total Bill of Material.
xi) List and total cost valve of inputs used for manufacture of the medicine certificates from suppliers,if the input is not in-house to be attached.
xii) List and cost of inputs which and imported, directly or indirectly.

For and on behalf of (Name of firm/ entity)

Authorized signatory (To be duly authorized by the Board of Director)

ANNEXURE-XI(a)

Calculation of Local Content:

[***To be submitted along with BoQ***]

Name of Manufacture	Calculation by Manufacturer (Cost per unit of product)			
Cost Component	Cost (Domestic Component) A	Cost (Imported Component) B	Total Cost (INR/ US $) C=a+b	Percentage of Local Content D=(a/c)*100
I ……				
II. ……				
III. Total Cost (Excluding tax and duties)				

Note: -

1. Cost (Domestic Component): Sum of the costs of all inputs which go into the product (including duties and taxes levied on procurement of inputs except those for which credit/ set-off can be taken) which have not been imported directly or through a domestic trader or an intermediary.

2. Cost (Imported Component): Sum of the costs of all inputs which go into the product (including duties and taxes levied on procurement of inputs except those for which credit/ set-off can be taken).

ANNEXURE-XII

FINANCIAL BID

BoQ may be uploaded as per instructions given in **Tender Enquiry Document.**

ANNEXURE-XIII

LIST OF ITEMS

RATE CONTRACT FOR SUPPLY OF CONSUMABLES & DISPOSABLES FOR CARDIO THORACIC AND VASCULAR SURGERY (CTVS) AT AIIMS JODHPUR

Sr No	Name of Items	Specification	Size/Shape/ Design	Item Code
1	CORRUGATED TUBE CONNECTOR	Should allow connection between all breathing circuits and the ET tube connector. The corrugated tube should be expandable. Should Allow movement of breathing circuit at patient end. Should be made of medical grade PVC. Should be compatible with ETT and tracheostomy tube.		1.01
2	CUFF INFLATOR AND PRESSURE GAUGE	•It is used to inflate & precisely monitor the cuff pressure of ET tube, Trachestomy Tube & LMA Cuff. •Reduce the risk of pressure necrosis and mucosal ischemia •The risk of aspiration can be avoided • Eliminates the use of syringes to inflate & deflate the cuffs b. Should have release valve to adjust the pressure. •Gauge calibrated in cm H2 O with the detachable long connecting tube. •Should have inflation bulb for the inflation of the cuff • Should have the hook at the back of fits into standard rail. • Should have widely spaced scale markings with colour coded pressure ranges. • Ergonomic one had operation		2.01
3	INTUBATION PILLOW	•It is used to inflate & precisely monitor the cuff pressure of ET tube, Trachestomy Tube & LMA Cuff. •Reduce the risk of pressure necrosis and mucosal ischemia •The risk of aspiration can be avoided • Eliminates the use of syringes to inflate & deflate the cuffs b. Should have release valve to adjust the pressure. •Gauge calibrated in cm H2 O with the detachable long connecting tube. •Should have inflation bulb for the inflation of the cuff • Should have the hook at the back of fits into standard rail. • Should have widely spaced scale markings with colour coded pressure ranges. • Ergonomic one had operation		3.01
4	NEGATIVE INSIPRATORY FORCE METER	•Should be disposable, compact, Light Weight & single patient use Negative Inspiratory Force Meter to check the Negative Inspiratory Force of the Ventilated patients with the facility of memory indicator pointer to record &rset highest force achieved by the patient individually packed ready for use. •Should be CE marked.		4.01

5	CAPNOGRAPHY CO2 SAMPLING MASK	•Should have the provision for breath to breath monitoring for both nose & •Should have the facility to deliver oxygen & allow sampling of exhaled carbondioxide from mouth & nose at the same time. •Should have attached micro filter at the CO2 sampling port end to protect the CO2 monitor •Should be able to connect the Luer lock connector to any side stream CO2 monitor. •Made up of clear medical grade soft PVC.		5.01
6	COLORIMETRIC DISPOSABLE CO2 DETECTOR	• For patients from 250gm to 15+kg. Body weight. • Should have the facility of activation by pull tab Technique. • Should be able to work for 24 hours once activated by pulling tab. • Should be able to indicate- Blue green & yellow colour. •Should have larger CO2 viewing window. •Should have 15mm I.D. Standard Taper at Patient End & 15mm O.D. Standard Taper at Circuit End. • Should be CE marked •Sizes Infant, Paediatric & Adult		6.00
7	SINGLE LUMEN CATHETER (SELDINGER TECHNIQUE)	• Should be polyurethane Single Lumen catheter with J Guide-wire non kinking kit should be radio opaque with fixation wing & integral extension tube with flexible & transparent extension tube (PUR) • Size – Catheter 12-22G, • Lengths- 10cm-20cm		7.01
8	LA LINE CENTRAL CATHETER(ALL SIZES)	• Should be long I.V Catheter with external needle and fixed proximal hub catheter in fully radiopaque polyurethane protected by a non touch-handling sleeve marking every cm 10 to 20cm. • Should be made available in assorted sizes.		8.01
9	SWAN GANZ PA CATHETER INTRODUCER KIT SET:	• Percutaneous Sheath introducer set should have bonded hemostasis valve & side port along with .035 x 45 cm straight & “J” tip guide wire for introducing 7.5 Fr& 8.0 Fr PA Catheter. • It should have sheath diameter of 8.5 F & sheath length of ≈11 cm. It should be made of radiopaque polyurethane & should have a coating of Heparin as well as antimicrobial material (Benzalkonium Chloride) on entire sheath surface. • It should come with 1 catheter contamination shield, ≈80 cm in length. • It should have one 4-waystopcock, one vessel dilator & four 4x 4gauze pads.0ne disposable scalpel, # 11 blade & one 18 ga x 2 ½ thin wall needle.		9.00

10	SWAN GANZ THERMODILUTION VIP CATHETER	• Flow directed 5-lumen balloon tipped pulmonary artery catheter. 7.5 Fr in diameter &≈ 110 cm in length • It should have a coating of Heparin as well as antimicrobial material (Benzalkonium Chloride) on entire catheter surface. • Should be able to give Cardiac output using Thermo dilution method • Should be able to give PA pressure, PAWP & RA Pressure when connected to trasducer. • Should have proximal infusion & proximal injectateports at ≈31 cm &≈30 cm respectively. • It should come with one volume-limiting syringe of 1.5cc for balloon inflation		10.01
11	SWAN GANZ PA CATHETER	• Flow directed 3 lumen balloon tipped pulmonary artery catheter, 7 Fr in diameter& ≈110 cm in length• Should be able to give PA pressure, PAWP & RA Pressure when connected totransducer. Should have proximal infusion port at 30 cm. Recommended guide wire size0.89 mm.• It should come with one volume-limiting syringe of 1.5cc for balloon inflation.		11.01
12	PRESSURE INFUSION BAG	.Should be made up of durable plastic to prevent the rip & tear of bag Should have clear sleeve around the bag to see the contents of the fluid bag. Should have convenient IV pole loop hanger Should have I.V Bag holder to hang the fluid bag inside. Should have double sealing to prevent the rip or tear of pressure bag Should have stopcock valve. Should have efficient palm fitted bulb for the inflation of bag. Pressure gauge should have 360-degree window to see pressure from all sides. Should have built in bleed valve to check the over inflation of the bag. Sizes- 3000ml. Each bag should have aneroid pressure gauge with inflation capacity of 400 to 700 mmHg.		12.01
	CLOSED CIRCUIT (PEDIATRIC):	a. ISO marked. b. Length-1.75mtr. double tubing with a Y connector with least dead space. c. Y connector adopter 15mm to 20 mm connector. d. Latex free medical plastic material, disposable, non-irritant to tissue, and should not react to anesthetic gases and volatile agents. e. Outer diameter (OD) 10-12mm. f. Bag-1L. capacity, natural latex medical grade rubber, antistatic, soft and should not react with anesthetic gases and agents. g. Expandable type, corrugated, non-kinkable tube.		13.01

14	T PIECE WITH APL VALVE	• Should be good quality, light weight, non conductive disposable T piece with corrugate tubing 1.8m circuit length, low resistance, 500 ml bag with APL valve with 15F/22F connector, safety cap.		14.01
15	ANESTHETIC CIRCUIT HOLDER OF ADULT, PEDIATRIC AND NEONATAL Circuits	•ANESTHETIC CIRCUIT HOLDER OF ADULT, PEDIATRIC AND NEONATAL CIRCUITS		15.01
16	ENDOTRACHEAL TUBES WITH CUFF (DISPOSABLE):	• Pre-sterilized, single use • Siliconized PVC non-toxic to tissues. • Implantation tested marking on the tube. • Thermo-sensitive to adapt to tracheal anatomy. • Non-kinkable. • Bevel with Murphy eye. • Radio-opaque line all along the length of the tube to detect the correct position on X-ray. • Should adopt universal connector of 15mm and should be compatible with all circuits. • Cuff should be bonded, non-herniating. • Size range- 2.5 to 8.0 mm in 0.5mm increments. • Inflation of the cuff balloon via a one-way valve with a pilot balloon and should be on the concave aspect of the tube. • Depth marker at the proximal cuff end, 3 cm from the cuff. • Cuff should be smooth, non-traumatic, low-pressure high volume. • ETT opening should be beveled type, rounded edge, facing to the left end of the tube with an angle of 38 +/- 10 0 • Markings on the tube to know the depth of insertion and fixation at mouth. • Specified mention on the tube- o Nasal/oral o Outside diameter OD in mm. o Inside diameter ID in mm.	2.5	16.01
			3	16.02
			3.5	16.03
			4	16.04
			4.5	16.05
			5	16.06
			5.5	16.07
			6	16.08
			6.5	16.09
			7	16.10
			7.5	16.11
			8	16.12
			8.5	16.13
			9	16.14
			9.5	16.15
			10	16.16
			10.5	16.17
			11	16.18
17	DOUBLE LUMEN ENDOTRACHEAL TUBE:	a. Made of medical grade PVC b. Left and right sided. c. All sizes. d. Bronchial cuff should be of blue color and its pilot balloon should be also of blue color for the ease of differentiating between tracheal & bronchial cuffs. e. Pre-sterilized, ready for use. f. Should have pre-inserted stellate to help maintain the shape and curve of the tube.		17.01
18	THERMOPLASTIC SUPRA-GLOTTIC AIRWAY DEVICE	• Should have soft non inflatable anatomical seal, epiglottis blocker; buccal cavity stabilizer, integrated bite block; integrated gastric channel for passage of nasogastric tube	1	18.01
			1.5	18.02
			2	18.03
			3	18.04
			4	18.05
			5	18.06
19	Percutaneous tracheostomy set with tracheostomy tube:	• Should be with tracheostomy tube. • Should have multiple dilators of different sizes- 14Fr., 21Fr., 24Fr., 27Fr. • Guiding catheter over which the dilator is introduced. • The guide wire should have position markings.	6	19.01
			6.5	19.02
			7	19.03
			7.5	19.04
			8	19.05

		• Should have introducer needle with sheath. • Should be supplied with essential accessories.	8.5	19.06
20	CORRUGATED TUBE CONNECTOR	• Should allow movement of breathing circuit at patient end. • Should allow connection between all breathing circuits and the ET tube connector. • The corrugated tube should be expandable. • Should be made of medical grade PVC. • Should be compatible with ETT and tracheostomy tube.		20.01
21	CATHETER MOUNTS WITH BRONCHOSCOPY PORT:	• Should be flexible & Extendable • Should be having bronchoscopy port. • Should be 360 degree rotating head.		21.01
22	SUCTION TUBE 30M COIL, 7MM ID WITH BUBBLE NON CONDUCTIVE			22.01
23	SUCTION TUBE 30M COIL 5MM ID WITH BUBBLE NON CONDUCTIVE			23.01
24	HME filters for neonatal:	Low dead space, hydrophobic filtration incorporated with heat and moisture exchange filter and with retainable gas sampling port, disposable good quality.		24.01
25	ANTI MICROBIAL BREATHING SYSTEM HEATED WIRE	• Should be light weight and flexibleto minimize drag on circuits, • 1.5m heated inspiratory tubing, • Silver impregnated 0.5m humidifier connection tube, • Auto float humidification chamber with dual float • Sizes: Adult, pediatric, Neonatal.	Adult	25.01
			Pediatric	25.02
			Neonatal	25.03
26	SUCTION CATHETER THUMB CONTROLLED	• Working length should be at least 50cms (working length without Connector) for 10 Fr. above; should be at least 40 cm. in length below 10 Fr. • Should be color-coded and should have open end with lateral eye with length marked in centimeters with male connector with vacuum control device as ISO specifications. • Should be in straight soft blister packing. • Should have markings on the full length of the tube • Should have markings on the catheter. • Sizes 6,8,10,12,14,16, and 18 Fr.	6	26.01
			8	26.02
			10	26.03
			12	26.04
			14	26.05
			16	26.06
			18	26.07
			20	26.08
27	LEUCOCYTE REDUCING BLOOD TRANSFUSION SET:	Blood set should have drip chamber and filter with proven leucocyte reduction properties for leucocyte free blood transfusion for organ transplant use. It should have filter size 40 microns and 180 sq. cm of filter area and should have attached IV set with a luer lock tip.		27.01
28	MEASURED VOLUME SET (ISO/CE)	• Should be made up of PVC material • Should have soft cylindrical type measure volume chamber with float valve to prevent air embolism • The set should have transparent tubing and chamber. • Should have capacity of 100ml and 150 ml. • Should have drip nozzle with reduced size of drop that has to be uniform at 60 drops/ml. • Should have molded bubble latex bulb for extra medication or Y port for injection. • Should be sterile ready for use.	100-110 ml	28.01
			150-200 ml	28.02

		• Should be double packed. • Should have short bevel 23 G Vein needle. • Should have built in airway for bottle perforating spike (air vent).		
29	SURGIAL TAPE NON WOVEN, VISCOSE RAYON POROUS BACKING (MICRO PORE TYPE PAPER TAPE) WITHOUT Dispencer		Sizes : 3 X 9.10 mtrs.	29.01
30	SPIRAL (POLYETHYLENE) TUBING	• Should be spirally coiled tubing (polyethylene) for drug infusion (Drug compatible). • Size – 100,150,200,300 & 400cm. • Should be US FDA APPROVED	100 cm	30.01
			150 cm	30.02
			200 cm	30.03
			300 cm	30.04
			400 cm	30.05
31	POLYETHYLENE PRESSURE EXTENSION TUBE	• Should be polyethylene high pressure extension tube (drug compatible)• Size – 11, 30,50,100,150& 200cm.• Should be US FDA APPROVED.	50 cm	31.01
			100 cm	31.02
			150 cm	31.03
			200 cm	31.04
32	EXTENSION LINE FOR LIGHT SENSITIVE DRUGS	• Extension line for light Sensitive drugs (anti UV). • Size – 100,150,200cm. • Should be US FDA APPROVED.	100 cm	32.01
			150 cm	32.02
			200 cm	32.03
33	BASIC PARALLEL VENTILATOR CIRCUIT:	• It should have 200 cm long multichannel tubing to ensure continuous supply. FDA & CE marked should incorporate with in-line nebulization T Valve with Automatic closer preventing pressure drop. Must be clear construction.		33.01
34	FLEXIBLE TUBING – SILICONE:	• Highly flexible medical grade silicone tubing, autoclavable, can be sterilized by EO. • Sizes : 6mm & 8mm; • Length of tube roll should be 60.0mtr.	6 mm	34.01
			8 mm	34.02
35	DISPOSABLE SHOE COVER:	• Should be of good quality (thick) • Made from non-toxic non-woven, thick fabric./plastic • Well stitched in universal regular size. • Skid resistant & dust proof. • Hard elasticated for better grip and easy to wear. • Should cover the ankles. • Size: Assorted- (Std. size of shoe from 7 to 12) & blue color.	7	35.01
			8	35.02
			9	35.03
			10	35.04
			11	35.05
			12	35.06

36	DISPOSABLE FOLEY'S CATHETER (2 WAY) – ADULT &PAED	• Disposable 2 way latex Foley catheter • Should bemanufactured from natural rubber latex coated with silicone so as to eliminatethe risk of encrustation. • Should have symmetrical large capacity balloon to ensure a straight tip andproper flow for good sphincter action to preventbladder leakage. • Should have coned distal end with burr free eyes for a-traumaticinsertion. • Should have hard valve to ensure easy inflation and deflation of balloon. • Balloon capacity- 3-5 ml for pediatric and 30 to 50 ml for adult catheter. • Length- 20-30 cm. • Should have colour coded for instant size identification. • Should be sterile and should be individually packed in peel-able pack. • Sizes-22 only • ISO 9002 CE marking, should confirm to ASTM- F623-99 Guideline specification for Foley's catheter.	22 fr	36.01
37	SYRINGE(with luer lock)	a) Should be made of clear PVC. b) Should have rubber seal in the piston c) Should have a luer lock	10 ml	37.01
			20 ml	37.02
			50 ml	37.03
38	ABSORBABLE DISPOSABLE PILLOW COVER FOR STANDARD SIZE 75X55CM	Made of nonwooven fabric		38.01
39	DISPOSABLE CHAMBER FOR BAL COLLECTION WITH ADAPTER	Disposable sterile container for Bronchoscopy application.		39.01
40	Bite block size 4:	Bite block size 4 for oral fixation of ETT size 6.5-8.0mm, Laryngeal Tube size 2 & 2.5 tube should clip into the bite block for protection against occlusion.		40.01
41	Bite block size 5	Bite block size 5 for oral fixation of ETT size > 8.5mm, Laryngeal tube Size 2 & 2.5 LMA 2 & 2.5 tube should clip into the bite block for protection against occlusion.		41.01
42	Bite block Size 6	Bite block size 6 for oral fixation of laryngeal Tube size 3,4,&5 and LMAs, Tube should clip into the bite block for protection against occlusion.		42.01
43	MEDICAL GRADE SODA LIME CO2 ABSORBENT GRANULES	Medical grade best quality soda lime granules. Hardness, moisture and absorption should be international agency certified. Should be good quality for closed circuit. There should be high contrast pink to white color change after absorbent capacity is exhausted. Pack size should be 5 liter/container.		43.01
44	Disposable DVT Sleeve (Calf & Thigh)	Disposable DVT Sleeve (Calf & Thigh)	Thigh Pair	44.01
			Calf and Thigh Pair	44.02
45	Disposable DVT Sleeve (calf)		Calf Pair	45.01
46	SPECIFICATION FOR BIS SENSORS	• It should have four sensors element to capture, recognize and discard artifact. • Connector should provide secure click-in connection with	Adult	46.01
			Pediatric	46.02

		push button release • It should include an additional above eye element, which captures critical eye motion data, along with other important physiological signals. • It should have flexible design adjusts to different head sizes • It should have FDA approval • Should be supplied by authorized channel partner from principal company/ manufacture. Electrode Gel: Potassium Chloride (KCl) , latex free. Sizes ADULT and PEDIATRIC		
47	NIRS SENSORS.	ADULT, Neonatal AND PEDIATRIC	Adult	47.01
			Neonatal	47.02
			Pediatric	47.03
48	DISPOSABLE PULSE OXIMETER SENSORS (SP02)	• Should be compliant with the equipment intended to continuously estimate and display non-invasively a patient's arterial blood oxygen saturation and pulse rate • Proposed sensors must comply with NellcorTechnology. • Digit sensors should be available in Adult, Pediatric, Neonatal and Infant sizes to accommodate diverse patient sizes, weights and needs. • Seller must have all types of sensors available (e.g., finger, forehead, and ear). Sensor must be available in Adult, Pediatric, Infant and Neonatal Sizes. • Sensor extension cables must be available in 4' and 9' lengths. • The sensors must be compatible with all generations of NellcorOximetry Technology in NellcorOximeters and OEM/Licensee Multi-para meter systems with all generation of Nellcor technology. • The sensor shall resist inadvertent displacement. • The sensor shall resist interference from ambient light. • The sensors shall not be adversely affected by fluid spills or common disinfectant solutions.	Finger Adult	48.01
			Finger Pediatric	48.02
			Finger Neonate	48.03
			Finger Infant	48.04
			Ear Neonate	48.05
			Ear Infant	48.06
			Ear Pediatric	48.07
			AdhesiveForehead	48.08
49	INFANT FEEDING TUBE:	• Size: 3,4, to 10 Fr., color-coded. • Silken smooth tube, medical grade siliconized PVC. • X-ray opaque line. • Fitted with female luer mount with built-in stopper/ lid. • Packed in peel-off pouch, not coiled packing. • Sterilized ready to use. • Length of tube minimum- 50 +/- 5 cm. • Smooth rounded tapered distal end with two lateral eyes.	3	49.01
			4	49.02
			5	49.03
			6	49.04
			7	49.05
			8	49.06
			9	49.07
			10	49.08

50	URINE COLLECTION BAG WITH TRANSPARENT VOLUME/Flow meter CHAMBER:	• Sterile ready for use. • Bag should be manufactured from clinical grade transparent PVC. • Bag Capacity- 2000ml.marked in increments of 50 ml. and Volume measuring chamber should be 250-300 ml capacity with 10 ml incremental markings. • Fitted with non-return valve to avoid spillage. • One-meter long super smooth, highly flexible non-kinkable tube which should provide approx. 6.5 mm diameter with universal male connector. • Leak proof, single piece/ wielded manufacture. • Provided with hanging device to be fitted on to the bed. • Stopper drain should be attached with the bag.		50.01
51	Clinical thermometer:	• Good quality. • Digital, battary fitted. • For oral temperature measurement.		51.01
52	Surgical Adhesive GLUE	• BSA (Bovine Serum Albumin) & glutaraldehyde in the ratio of 4:1 surgical glue • Thrombin Free • Biodegradable and Biocompatible1 • Simple, ergonomic design allows for unmatched preparation and ease of use. • No reconstitution or manual mixing • NO NEED OF Room temperature storage - No warming/thawing • Open and use - Ready in just seconds • SHOULD BE Sets up in 20-30 seconds and reaches full strength in just two minutes • SHOULD BE Seals anastomoses, reinforces friable tissue, and adheres dissected tissues together used for sealing, adhering and reinforcing tissue	2 ml	52.01
			5 ml	52.02
			7.5 ml	52.03
			10 ml	52.04
			15 ml	52.05
			20 ml	52.06
53	AORTIC PUNCH	Should have Sharp, dual cutting edge for clean, precise removal of aortic tissue• should have a conical tip for easy insertion by straight or button-hole technique• Punch should be available with tapered cutting blade to increase visibility.• Should be available in all functional sizes• Should have long and short handle configuration	2.5 mm	53.01
			3 mm	53.02
			3.5 mm	53.03
			4 mm	53.04
			4.5 mm	53.05
			5 mm	53.06
			5.5 mm	53.07
54	Coronary artery retraction clips Sizes 3mm and 5mm	• Should be designed to improve exposure to a coronary anastomosis site. Should be able to small prongs and gently hold tissues away from the vessel to improve vision.	3 mm	54.01
			5 mm	54.02
55	Temporary pacing wire	• Should include unipolar atrial and ventricular pacing, pediatric unipolar pacing, and the bipolar pacing lead. Should come with both end needles.		55.01
56	Tissue Stabilizer for beating heart	• Should be a low profile tissue stabilizer with auto spread feature of pods.		56.01
57	Heart positioner for beating heart	• Should be a low profile positioner for apex and off apex position use/ to lift the heart.		57.01

58	Tissue Stabilizer for Minimally invasive beating heart surgery.	• Should be stabilizer to be used via thoracotomy with detachable shaft and should have fully rotating pods.		58.01
59	Heart positioner for Minimally invasive beating heart surgery	Should be a positioner with detachable shaft for MICS via thoracotomy.		59.01
60	Mist Blower	• Should have specialized nozzle utilizing a micro orifice for fluid delivery and a separate orifice for gas delivery. Should have the malleable shaft and on/off control on the hand piece.	With Accessory Tubings	60.01
			Without Accessory Tubings	60.02
61	Arteriotomyshunts(Intra Coronary Shunts)	• Sizes 1.0,1.25,1.5,1.75,2.0,2,5,2.5, 2.75 & 3.0mm. • Should be beveled tip. • Should have fully transparent body. • Should come with the tag	1	61.01
			1.25	61.02
			1.5	61.03
			1.75	61.04
			2	61.05
			2.25	61.06
			2.5	61.07
			2.75	61.08
			3	61.09
			3.25	61.10
			3.5	61.11
			4	61.12
61A	Arteriotomyshunts(Intra Coronary Shunts)	• Sizes 1.0,1.25,1.5,1.75,2.0,2,5,2.5, 2.75 & 3.0mm. • Should be beveled tip. • Should have fully colored, very soft material body. • Should come with the tag	1	61.13
			1.25	61.14
			1.5	61.15
			1.75	61.16
			2	61.17
			2.25	61.18
			2.5	61.19
			2.75	61.20
			3	61.21
			3.25	61.22
62	ACT Cartridges	a. Should have double cell measurement to increase accuracy of results, and cometable with ACT Machine b. Should use liqiuid kaolin activator for real time efficient clot detection, c. Should allow room temperature storage	Medtronic ACT Machine	62.01
			Helena ACT Machine	62.02
63	SPECIFICATION FOR INTRA AORTIC BALLOON CATHETER	• IAB Catheter should be of 7.5 Fr with displacement volume of 24cc, 34cc & 40 cc. and 8Fr with volume displacement 50cc. • It should be more abrasion resistant and have good fatigue resistance • Should immediate inflate at start up without manual filling of the catheter. • It should be compatible with Data scope /Arrow pumps • It should have exact 7.5Fr size sheath and dilator set.	24 cc	63.01
			34 cc	63.02
			40 cc	63.03

		• It should have 0.025 3mm J PTFE stainless steel guide wire. • It should be approved by US FDA.	50 cc	63.04
64	EMERGENCY CRICOTHYROIDOTOMY SET :	• Should have a conical introducer,• Dilators should be made of stainless steel,• Cricothyroidotomy tubes should be of medical grade plastic.• With 15 mm connector,flexible tube extension made of silicone, scalpel,one way syringe,comfort neck band• Sizes 2mm, 4mm.	2 mm	64.01
			4 mm	64.02
65	MICRO AGGREGATE BLOOD FILTER FOR RED CELL TRANSFUSION	• Filter media should be 40 micron rated polyester screen media with uniform pore size • Should have total filter surface area of > 170 Sq.cm • Should have average capacity of filtering 10 units of blood.		65.01
66	PACKED RED CELL & WHOLE BLOOD LEUCOCYTE REDUCTION FILTERS.	a. Bedside filtration of one & two unit of packed red blood cells or whole blood b. Should have universal spike with microbiological recovery vent c. Should be with attached straight administration set/automatic self leveling drip chamber d. Performance should consistently average less than 2x105 residual leukocytes per unit e. Red cell recovery should average greater than 90%. f. Filter housing hold up volume should be <25ml for one unit filter and <35ml for two unit filter g. It should be single use h. Should be latex free		66.01
67	FORCED WARMING BLANKET	• Should be disposable and two layered;• Should consist of non woven propylene fabric for body warming.• Should be usable with forced air warming units.• Material should be latex free and should meet flammability standard 16 CPR 1610 for safety.• The manufacturer must have all the below listed types of blankets and should quote the prices separately for separate blankets• Full Body Adult• Underbody Adult with Arm and Head Openings• Pediatric Full body• Pediatric underbody Blanket.• Should be compatible with common machines.• Should be CE certified	• Full Body Adult	67.01
			• Underbody Adult with Arm and Head Openings	67.02
			• Pediatric Full body	67.03
			• Pediatric underbody Blanket.	67.04
68	LV Vent:	• Left ventricular vent should consist of round tipped dual lumen tube with lateral eyes, suture collars & proximal funnel connectors used for emptying the Left Ventricle for clearer view during surgery. All sizes. Malleable body and vented connector Malleable body and non-vented connector non-vented connector and malleable introducer	All Codes	68.01
			10 FR	68.02
			13 FR	68.03
			16 FR	68.04
			16 FR	68.05
			18 FR	68.06
			16 FR	68.07
			18 FR	68.08
			20 FR	68.09

69	AntegradeOstialCardioplegia Cannula - All Size:	• Antegrade-cardioplegia cannula should be made of soft 100% silicone conduit with distal bulbous end & should have luer lock connector at the proximal end for administration of cardioplegia solution into the coronary ostia. Sizes: 3.5, 4, 4.5, 5, 5.5, 6, 6.5 mm.	3.5 mm	69.01
			4 mm	69.02
			4.5 mm	69.03
			5 mm (15 fr)	69.04
			5.5 mm (17 Fr)	69.05
			6. mm	69.06
			6.5 mm (20 Fr)	69.07
70	Cardioplegia Cannula with Introducer and Hub	• Cardioplegia cannula should be made of soft 100% silicone & should be tapered conduit with distal open tip having adjacent lateral eyes, followed by a flange for secure. positioning. It should have proximal luer lock & a SS needle with hub. 2.5 inch, Without Side Vent Arm	4 fr	70.01
			5 fr	70.02
		• Cardioplegia cannula should be made of soft 100% silicone & should be tapered conduit with distal open tip having adjacent lateral eyes, followed by a flange for secure. positioning. It should have proximal luer lock & a SS needle with hub. 5.5 inch length, with Side Vent Arm	5 fr	70.03
			7 fr	70.04
			9 fr	70.05
			11 Fr	70.06
		• Cardioplegia cannula should be made of soft 100% silicone & should be tapered conduit with distal open tip having adjacent lateral eyes, followed by a flange for secure. positioning. It should have proximal luer lock & a SS needle with hub. 5.5 inch length, Long Tip, With Side Vent Arm	7 fr	70.07
			9 fr	70.08
			11 Fr	70.09
		• Cardioplegia cannula should be made of soft 100% silicone & should be tapered conduit with distal open tip having adjacent lateral eyes, followed by a flange for secure. positioning. It should have proximal luer lock & a SS needle with hub. 5.5 inch length, without Side Vent Arm	5 fr	70.10
			7 fr	70.11
			9 fr	70.12
			11 Fr	70.13
		• Cardioplegia cannula should be made of soft 100% silicone & should be tapered conduit with distal open tip having adjacent lateral eyes, followed by a flange for secure. positioning. It should have proximal luer lock & a SS needle with hub. 5.5 inch length, with pressure monitoring Arm	9 fr	70.14
71	Arterial cannula for arch cannulation Sizes 18 FR - 24 Fr.	• Should have elongated one piece wire wound body with radiopaque suture ring and dilator with depth markings. Vented	18 fr	71.01
			20 FR	71.02
			22 Fr	71.03
			24 Fr	71.04
		• Should have elongated one piece wire wound body with radiopaque suture ring and dilator with depth markings. non-vented connector	18 fr	71.05
			20 FR	71.06
			22 Fr	71.07
			24 Fr	71.08
72	Axillary artery one piece cannula with central arterial pressure measurement	Sizes 18 Fr.-24Fr.Should have elongated one piece wire wound body with radiopaque suture ring and dilator with depth markings. Should have integrated pressure monitoring port at tip	18 fr	72.01
			20 FR	72.02
			22 Fr	72.03
			24 Fr	72.04

73	One piece Pediatric Aortic cannula Size 6FR-16 Fr Vented	Should be beveled with thin wall tips and should be elongated one piece. An adjustable Flow-Guard style introducer along with depth markings assist with positioning of the cannulae.	6 Fr	73.01
			8 Fr	73.02
			10 FR	73.03
			12 Fr	73.04
			14 Fr	73.05
			16 FR	73.06
74	Straight Tip Arch cannula Sizes 8Fr-24 Fr vented and Non vented; Pediatric and. And Adult . Should be beveled thin wall tips attached to tapered cannula bodies. Should be available in pediatric and adult sizes.	Should be beveled thin wall tips attached to tapered cannula bodies. Non-Vented, 1/4 in connection, 7 inch. Long	6 Fr	74.01
			8 Fr	74.02
			10 FR	74.03
			12 Fr	74.04
			14 Fr	74.05
			16 FR	74.06
			18 FR	74.07
			20 FR	74.08
			22 Fr	74.09
			24 Fr	74.10
		Should be beveled thin wall tips attached to tapered cannula bodies. Non-Vented, 3/8 in connection, 7 inch. Long	20 FR	74.11
			22 Fr	74.12
			24 Fr	74.13
		Should be beveled thin wall tips attached to tapered cannula bodies. Non-Vented, 3/8 in connection, 8 inch. Long	18 FR	74.14
			20 FR	74.15
			22 Fr	74.16
			24 Fr	74.17
		Should be beveled thin wall tips attached to tapered One - Piece cannula bodies with adjustable knot ring, and direction guide. Vented, 3/8 in connection, 11 inch. Long	20 FR	74.18
			22 Fr	74.19
			24 Fr	74.20
		Should be beveled thin wall tips attached to tapered One - Piece cannula bodies with adjustable knot ring, and direction guide. Non-Vented, 3/8 in connection, 11 inch. Long	18 FR	74.21
			20 FR	74.22
			22 Fr	74.23
			24 Fr	74.24
		Should be beveled thin wall tips attached to tapered One - Piece, Kink Resistent wirewound cannula bodies with direction guide. Vented, 3/8 in connection, 11-12 inch. Long	20 FR	74.25
			22 Fr	74.26
			24 Fr	74.27
		Should be beveled thin wall tips attached to tapered One - Piece, Kink Resistent wirewound cannula bodies with direction guide. Non-Vented, 3/8 in connection, 11-12 inch. Long	18 FR	74.28
			20 FR	74.29
			22 Fr	74.30
			24 Fr	74.31
75	Angled tip Arterial cannula Sized 8 Fr - 24 Fr	• Should be beveled thin wall tips attached to tapered cannula bodies. Should have kink resistant wire wound bodies. 45 degree, 3/8 in, Vented. Connector, 12 inch Long	18 FR	75.01
			20 FR	75.02
			22 Fr	75.03
			24 Fr	75.04
		• Should be beveled thin wall tips attached to tapered cannula bodies. Should have kink resistant wire wound	18 FR	75.05
			20 FR	75.06

		bodies. 45 degree with side hole at tip, 3/8 in, Vented. Connector, 12 inch Long	22 Fr	75.07
			24 Fr	75.08
		• Should be beveled thin wall tips attached to tapered cannula bodies. Should have kink resistant wire wound bodies. 45 degree, 3/8 in, Non-Vented. Connector, 12 inch Long	18 FR	75.09
			20 FR	75.10
			22 Fr	75.11
			24 Fr	75.12
		• Should be beveled thin wall tips attached to tapered cannula bodies. Should have kink resistant wire wound bodies. 45 degree with side hole at tip, 3/8 in, Non-Vented. Connector, 12 inch Long	18 FR	75.13
			20 FR	75.14
			22 Fr	75.15
			24 Fr	75.16
76	Arterial cannula angled with diffused flow tip Sizes 18 Fr-24Fr	• Should be one piece wire wound body with integrated flutes for diffused flow. Vented, 3/8 in connector, 11-12 Inch Long	18 FR	76.01
			20 FR	76.02
			22 Fr	76.03
			24 Fr	76.04
		• Should be one piece wire wound body with integrated flutes for diffused flow. Non-Vented, 3/8 in connector, 11-12 Inch Long	18 FR	76.05
			20 FR	76.06
			22 Fr	76.07
			24 Fr	76.08
		• Should be one piece wire wound body with integrated flutes for diffused flow. Clear Body near Tip. Vented, 3/8 in connector, 11-12 Inch Long	18 FR	76.09
			20 FR	76.10
			22 Fr	76.11
			24 Fr	76.12
		• Should be one piece wire wound body with integrated flutes for diffused flow. Clear Body near Tip.Non-Vented, 3/8 in connector, 11-12 Inch Long	18 FR	76.13
			20 FR	76.14
			22 Fr	76.15
			24 Fr	76.16
77-A	Femoral one piece Arterial and venous cannula kit	• Should be one piece wire wound body with bio-active material coating. Sould come with standard insertion kit (1mm Guidewire, Length 100-180 cm, Incremental Dilator set, Saldinger Needle, Knife) • Sizes 8-21 Fr. Femoral arterial cannula	8 Fr	77.01
			10 FR	77.02
			12 Fr	77.03
			14 Fr	77.04
			15 FR	77.05
			16 FR	77.06
			17 FR	77.07
			18 Fr	77.08
			19 Fr	77.09
			20 FR	77.10
			21 fr	77.11
		• Should be one piece wire wound body with bio-active material coating. Sould come with standard insertion kit (1mm Guidewire, Length 100-180 cm, Incremental Dilator set, Saldinger Needle, Knife) 8-29 Fr. Femoral Venous cannula	8 Fr	77.12
			10 FR	77.13
			12 Fr	77.14
			14 Fr	77.15
			15 FR	77.16
			16 FR	77.17

			17 FR	77.18
			18 Fr	77.19
			19 Fr	77.20
			20 FR	77.21
			21 fr	77.22
			22 Fr	77.23
			23 FR	77.24
			24 Fr	77.25
			25 Fr	77.26
			26 FR	77.27
			27 FR	77.28
			28 FR	77.29
			29 fr	77.30
77-B	Femoral one piece Arterial and venous cannula	• Sizes 8-21 Fr. arterial and 8-29 Fr. Venous cannula • Should be one piece wire wound body. Femoral Artrial	8 Fr	77.31
			10 FR	77.32
			12 Fr	77.33
			14 Fr	77.34
			15 FR	77.35
			16 FR	77.36
			17 FR	77.37
			18 Fr	77.38
			19 Fr	77.39
			20 FR	77.40
			21 fr	77.41
		• Sizes 8-21 Fr. arterial and 8-29 Fr. Venous cannula • Should be one piece wire wound body. Femoral Venous	8 Fr	77.42
			10 FR	77.43
			12 Fr	77.44
			14 Fr	77.45
			15 FR	77.46
			16 FR	77.47
			17 FR	77.48
			18 Fr	77.49
			19 Fr	77.50
			20 FR	77.51
			21 fr	77.52
			22 Fr	77.53
			23 FR	77.54
			24 Fr	77.55
			25 Fr	77.56
			26 FR	77.57
			27 FR	77.58
			28 FR	77.59
			29 fr	77.60

77-C	Femoral one piece Arterial and venous cannula, Non-wire wound (kink resistant, thin wall, radiopaque bodies with multiple side holes. Depth markings assist with positioning of the cannulae. All cannulae are supplied with a tapered tip dilator which facilitates insertion over 0.038 in (0.1 cm) guidewire.)	Venous 21in Length, non-vented 3/8 in (0.95 cm) connector (guidewires not included	17 fr	77.61
			21 fr	77.62
		Venous, 25.5in length, non-vented 3/8 in (0.95 cm) connector and 0.038 in (0.1 cm) x 180 cm guidewire	28 Fr	77.63
		Venous, 25.5in length, 3/8 in (0.95 cm) connector and 0.038 in (0.1 cm) x 180 cm guidewire	28 Fr	77.64
		Arterial, 7in length, Vented 3/8 in (0.95 cm) connector	14 Fr	77.65
			17 fr	77.66
			21 Fr	77.67
		Arterial, 7in length, non-Vented 3/8 in (0.95 cm) connector	14 Fr	77.68
			17 fr	77.69
			21 Fr	77.70
77-D	Femoral cannulae and insertion Kits :- These kits are designed to provide the appropriate size femoral arterial and venous cannulae for femoral access cardiopulmonary bypass. Designedfor percutaneous or direct visualization insertion, these kits contain one femoral arterial and one femoral venous cannula and the following insertion components : 18g Saldinger Needle (nos 2), 8Fr Dilator (nos 2), 12 Fr Dilator (nos 2), 1mmx180cm Guidewire (nos 2), 3/8 in (0.95 cm) arterial line adapter tube, Knife 11no.	7 in (17.8 cm) overall length arterial with non-vented 3/8 in (0.95 cm) connector and 21 in (53.3 cm) overall length venous with non-vented 3/8 in (0.95 cm) connector	17 Fr Arterial and 21 Fr Venous	77.71
		7 in (17.8 cm) overall length arterial with non-vented 3/8 in (0.95 cm) connector and 21 in (53.3 cm) overall length venous with non-vented 3/8 in (0.95 cm) connector	21 fr Arterial and 21 Fr Venous	77.72
		7 in (17.8 cm) overall length arterial with vented 3/8 in (0.95 cm) connector and 21 in (53.3 cm) overall length venous with non-vented 3/8 in (0.95 cm) connector	14 Fr arterial and 17 Fr venous	77.73
			17 Fr arterial and 21 Fr venous	77.74
			21 Fr arterial and 21 Fr venous	77.75
78	Femoral Multistage venous cannula	one-piece, kink resistant wirewound body with multiple side holes that provide for additional drainage sites. An introducer featuring depth marks, along with a tip taper location indicator, assists in positioning of the cannula. A percutaneous kit containing additional dilators, scalpel, 0.038 in (0.1 cm) x 180 cm guidewire, and needle accompany each venous cannula. Non-vented , 3/8 in Connector	19 Fr	78.01
			21 fr	78.02
			25 Fr	78.03
79	Standard insertion kit for femoral cannulation	Kit for femoral cannulation should contain Scalpel # 11 blade, Introduce needle 18 ga, vessel dilator 8-10 Fr and 12-14 Fr Guidewire .038 in X 180 cm, catheter tip Syringe	1 Kit	79.01
80	Carpentier Bi-caval femoral venous cannula	• Sizes : 24/29 Fr, 30/33Fr Should be one piece wire wound multiple side holes body with two stage to position it in SVC and IVC and come with percutaneous kit. Depth markings assist with positioning of the cannulae. All cannulae are supplied with a tapered tip dilator and 0.038 in (0.1 cm) x 180 cm guidewire. Non-Vented, 3/8 in connector	24/29 Fr	80.01
			30/33 Fr	80.02

		• Sizes : 24/29 Fr, 30/33Fr Should be one piece wire wound multiple side holes body with two stage to position it in SVC and IVC and come with percutaneous kit. Depth markings assist with positioning of the cannulae. All cannulae are supplied with a tapered tip dilator and 0.038 in (0.1 cm) x 180 cm guidewire. Non-Vented, 1/2 in Connector	24/29 Fr	80.03
			30/33 Fr	80.04
81	Single stage venous cannula with Metal tip Sizes 12-31 Fr	• Should have kink resistant wire wound taper body with beveled, Right Angle metal tip.pediatric and adult cannulae feature kink resistant, wirewound bodies with beveled metal, multi-port tips. This construction allows for high flow rates with minimal pressure differential. A tip orientation line assists with positioning of the cannulae 14 in (35.6 cm) overall length, 1/4in Connector	12 fr	81.01
			14 Fr	81.02
			16 fr	81.03
			18 fr	81.04
			20 fr	81.05
		• Should have kink resistant wire wound taper body with beveled, Right Angle metal tip.pediatric and adult cannulae feature kink resistant, wirewound bodies with beveled metal, multi-port tips. This construction allows for high flow rates with minimal pressure differential. A tip orientation line assists with positioning of the cannulae 14 in (35.6 cm) overall length, 3/8in Connector	12 fr	81.06
			14 Fr	81.07
			16 fr	81.08
			18 fr	81.09
			20 fr	81.10
			22 fr	81.11
			24 fr	81.12
			28 Fr	81.13
			31 fr	81.14
		• Should have kink resistant wire wound taper body with beveled, Right Angle metal tip.pediatric and adult cannulae feature kink resistant, wirewound bodies with beveled metal, multi-port tips. This construction allows for high flow rates with minimal pressure differential. A tip orientation line assists with positioning of the cannulae 14 in (35.6 cm) overall length, Extended Tip, 3/8in Connector	24 fr	81.15
			28 Fr	81.16
			31 fr	81.17
82	Single stage Venous cannula with right angle Sizes 12-40 Fr	pediatric and adult cannulae feature one-piece, kink resistant, wirewound bodies with tapered, multi-port tips. This construction allows for high flow rates with minimal pressure differential. Depth markings assist with positioning of the cannulae. right angled with plastic tip. 12-15 in (30.5 - 38.1 cm) overall length Connection site 1/4 in – 3/8 in	12 fr	82.01
			14 Fr	82.02
			16 fr	82.03
			18 fr	82.04
			20 fr	82.05
			22 fr	82.06
			24 fr	82.07
			26 Fr	82.08
			28 Fr	82.09
			30 Fr	82.10
			32 Fr	82.11
			34 Fr	82.12
			36 Fr	82.13
			38 Fr	82.14
			40 Fr	82.15
		pediatric and adult cannulae feature one-piece, kink resistant, wirewound bodies with tapered, multi-port tips. This construction allows for high flow rates with minimal pressure differential. Depth markings assist with positioning of the cannulae. right angled with plastic tip. 12-15 in (30.5 - 38.1 cm) overall length Connection site 1/2 in	36 Fr	82.16
			40 Fr	82.17

83-A	Single stage straight venous cannula malleable Sizes 12-40 Fr	Should have kink resistant malleable wire wound taper body with tapered multiport tips. 12-15 in (30.5 - 38.1 cm) overall length Connection site 1/4 in – 3/8 in	12 fr	83.01
			14 Fr	83.02
			16 fr	83.03
			18 fr	83.04
			20 fr	83.05
			22 fr	83.06
			24 fr	83.07
			26 Fr	83.08
			28 Fr	83.09
			30 Fr	83.10
			32 Fr	83.11
			34 Fr	83.12
			36 Fr	83.13
			38 Fr	83.14
			40 Fr	83.15
		Should have kink resistant malleable wire wound taper body with tapered multiport tips. 12-15 in (30.5 - 38.1 cm) overall length Connection site 1/2 in	36 Fr	83.16
			40 Fr	83.17
83-B	Single stage straight venous cannula Sizes 12-40 Fr	Should have kink resistant wire wound taper body with tapered multiport tips. 12-15 in (30.5 - 38.1 cm) overall length Connection site 1/4 in – 3/8 in	12 fr	83.18
			14 Fr	83.19
			16 fr	83.20
			18 fr	83.21
			20 fr	83.22
			22 fr	83.23
			24 fr	83.24
			26 Fr	83.25
			28 Fr	83.26
			30 Fr	83.27
			32 Fr	83.28
			34 Fr	83.29
			36 Fr	83.30
			38 Fr	83.31
			40 Fr	83.32
		Should have kink resistant wire wound taper body with tapered multiport tips. 12-15 in (30.5 - 38.1 cm) overall length Connection site 1/2 in	36 Fr	83.33
			40 Fr	83.34
83-C	silicone single stage Venous cannulae with inflatable cuff	This cannula features a silicone, kink resistant, wirewound body with an inflatable cuff, 15 in (38.1 cm) overall length, Connection site 3/8 in	37 fr	83.35
83-D	single stage Venous cannulae with Atrial Basket Tip	This cannula features a non-wirewound body with an atrial basket 15.5 in (39.4 cm) overall length Connection site 1/2 in (1.27 cm)	37 Fr	83.36

83-E	VAd cannula for Ventricular Assist	This cannula is suited for left or right atrial cannulation. Features include a kink resistant, wirewound body with a radiopaque, right angle, swirl tip. This design maximizes continuous drainage flow rates and minimizes collapsing around the tip. 14in, 3/8in connector	36 Fr	83.37
83-F	Atrial caval Venous cannulae	These cannulae feature a swirl tip and large slotted atrial basket with either a non-wirewound or kink resistant, wirewound body. The soft pliable swirl tip creates a stent-like action to promote continuous flow and minimize "chatter." The oval body models have a unique, low profile body, which provides the needed drainage while taking up less space in the surgical field. Depth markings assist with positioning of the cannula. 15 in Length		
		non-wirewound Connection site 1/2 in	34/51 Fr	83.38
		wirewound Connection site 3/8 in	34/38 Fr	83.39
		wirewound Connection site 1/2 in	34/48 Fr	83.40
		Wirewound body, non-vented Connection site 1/2 in	34/38 Fr	83.41
			34/48 Fr	83.42
		Oval wirewound Connection site 3/8 in	34/38 Fr	83.43
		Oval wirewound Connection site 1/2 in	34/48 Fr	83.44
		Oval Wirewound body, non-vented Connection site 1/2 in	34/38 Fr	83.45
			34/48 Fr	83.46
84	Double-stage venous cannula round and oval shape	• Should be two-stage cannula with oval body in various sizes. Should be two-stage cannula with round body in various sizes. Should have cannula body with thin walled with depth marking Two Stage Venous Cannulae Two Stage Venous Cannulae nonvented These cannula body feature with OVAL Body Vented These cannula body feature with OVAL Body, Non-Vented:		
		Two Stage Venous Cannulae	28/36 Fr	84.01
			36/46FR, 32/40FR, 34/46FR, 36/51FR, 29/29FR	84.02
		Two Stage Venous Cannulae nonvented	28/36 Fr	84.03
			36/46 Fr	84.04
			32/40 Fr	84.05
			34/46 Fr	84.06
			36/51 Fr	84.07
		These cannula body feature with OVAL Body Vented	32/40 Fr	84.08
			34/46 Fr	84.09
		These cannula body feature with OVAL Body, Non-Vented:	32/40 Fr	84.10
			34/46 Fr	84.11
85			29/29/29 Fr	85.01

	Three stage venous cannula	Should be three stage venous cannula for VacuumAssisted Venous Drainage(VAVD)/Kinetic Assisted Venous Drainage(KAVD), Connection site 3/8 in, vented	29/46/37 Fr	85.02
		Should be three stage venous cannula for VacuumAssisted Venous Drainage(VAVD)/Kinetic Assisted Venous Drainage(KAVD), Connection site 3/8 in, Non-vented	29/29/29 Fr	85.03
			29/46/37 Fr	85.04
86	Multiple Stage Venous cannula Sizes 23 Fr and 29 Fr	Should have polyurethane wire wound body with radiopaque markers and multiple holes at distal end. Should have malleable Introducer	23 fr	86.01
			29 fr	86.02
87-A	Aortic root cannula Sizes 4 Fr-11 Fr	These pediatric and adult cannulae feature radiopaque tips attached to clear PVC bodies. Additional features available with these cannulae include: aortic root pressure monitoring and left heart venting. All cannulae are supplied with a stainless steel introducer needle. All DLP® Aortic Root Cannulae can be used to aspirate air emboli as well as administer cardioplegia.		
		5.75 in (14.6 cm) overall length slotted long tip and standard introducer	7 fr	87.01
			9 fr	87.02
		5.75 in (14.6 cm) overall length, Long tip and standard introducer	7 fr	87.03
		5.75 in (14.6 cm) overall length,, Flanged long tip and standard introducer	7 fr	87.04
			9 fr	87.05
		Pressure monitoring tip and standard introducer	11 Fr	87.06
		2.5 in overall length, standard tip and standard introducer , white tip, clear flange	4 fr	87.07
		2.5 in overall length, standard tip and standard introducer, Blue tip and Flange	4 fr	87.08
		5.5 in (14.0 cm) overall length, standard tip and standard introducer,	4 fr	87.09
			5 fr	87.10
			7 fr	87.11
			9 fr	87.12
			11 fr	87.13
		5.5 in (14.0 cm) overall length, standard tip and Flow Guard introducer,	7 fr	87.14
			9 fr	87.15
87-B	Minimal Invasive Aortic root cannula	Minimally Invasive Aortic Root (MiAR) cannula feature a 12.25 in (31 cm) cannula body to allow access into the chest for small incision techniques. This length also allows positioning of the luer connection to the cardioplegia line out of the surgeon's way, outside the chest incision. Additionally, these MiAR models include the Flow-GuardTM feature to maintain hemostasis during removal of the needle from the cannula	7fr	87.16
			9fr	87.17
88	Aortic root cannula with Vent line Sizes • Should have radiopaque tips attached to clear bodies with separate vent line.	5.75 in (14.6 cm) overall length slotted long tip and standard introducer	7 fr	88.01
			9 fr	88.02
		5.75 in (14.6 cm) overall length, Long tip and standard introducer	7 fr	88.03
		5.75 in (14.6 cm) overall length,, Flanged long tip and standard introducer	7 fr	88.04
			9 fr	88.05
		Pressure monitoring tip and standard introducer	11 Fr	88.06
			14 ga (7 Fr)	88.07

		5.75 in (14.6 cm) overall length,Flanged long tip and standard introducer	14 ga (7 Fr) with side holes	88.08
		5.5 in (14.0 cm) overall length, standard tip and standard introducer,	5 fr	88.09
			7 fr	88.10
			7 fr with 8in Vent line	88.11
			9 fr	88.12
			9 fr with two clamp	88.13
			11 fr	88.14
		5.5 in (14.0 cm) overall length, standard tip and Flow Guard introducer,	7 fr	88.15
			9 fr	88.16
89	Aortic root cannula pediatric Neonatal Sizes 4 Fr	-	4 fr	89.01
90	Cardiopleiga needles: Neonatal, Pediatric and Adult Sizes. 5Fr and 8 Fr	• Should be able to aspirate air from Aorta, Should have radiopaque tip and standard 10 in length or a shortened 2.5 in., Should have stainless steel tip with plastic depth stop, Needle should be attached to flexible tubing with drape clamp and female luer.	5 fr	90.01
			8 fr	90.02
91	Silicon coronary Ostial cannula	silicone bodies with soft bulb shaped tips. All cannulae have a female luer connection site.	15 fr	91.01
			17 fr	91.02
			20 fr	91.03
92-A	Ostial perfusion cannula with basket tip and soft tip	• Should have flanged, radiopaque basket tips/soft tips attached to malleable stainless shafts. All cannulae have a female luer connection site, 6 in (15.2 cm) overall length Basket tip spherical tip soft, concave tip soft, convex tip	All size	92.01
		Basket tip	10 Fr	92.02
			12 fr	92.03
			14 Fr	92.04
		spherical tip		92.05
		soft, concave tip		92.06
		soft, convex tip		92.07
92-B	high Flow coronary Artery ostial cannulae	flanged, radiopaque basket tips or soft silicone tips attached to large bore, malleable stainless steel shafts. All cannulae have a female luer connection site. 7.5 in (19.1 cm) overall length 90° angle tip 90° angle soft silicone tip 45° angle soft silicone tip 45° angle soft		92.08
		90° angle tip	10 Fr	92.09
			12 fr	92.10
			14 Fr	92.11
		90° angle soft silicone tip	10 Fr	92.12
		45° angle soft silicone tip	10 Fr	92.13

		45° angle soft	12 fr	92.14
93	Minimally invasive Aortic root cannula with length more than 30 cm	• Should have more than 30 cm long body to allow insertion during MICS		93.01
94	Minimally invasive retrograde cardioplegia cannula with deflecting tip	• Should have tip deflecting models for sinus placement through thoracotomy should beable to allow minimum 10mm sweep. Should be auto/ manual inflatable.		
		Tip deflecting Thoracotomy	13 Fr manual-inflate cuff	94.01
			13 Fr auto-inflate cuff	94.02
		Tip deflecting	13 Fr manual-inflate cuff	94.03
			13 Fr auto-inflate cuff	94.04
95-A	Retrograde cardioplegia cannula with Auto inflate Sizes 13 Fr and 15 Fr	• Should have silicon/ PVC bodies with auto inflatable cuff and pressure monitoringlines; should have multiport tip/ integral stopcock.pediatric and adult cannulae feature silicone bodies and manual-inflate cuffs with pressure monitoring lines. All cannulae have a guidewire stylet and either a male luer handle or a Tru-Touch® handle. All cannulae come with a syringe for cuff inflation.		
		9 in (22.9 cm) overall length, smooth cuff and wirewound body	10 Fr	95.01
		12.5 in (31.8 cm) overall length Smooth cuff, wirewound body, and integral stopcock	13 fr	95.02
			15 fr	95.03
			15 fr with True Touch	95.04
		12.5 in (31.8 cm) overall length Smooth cuff, wirewound body	15 fr	95.05
95-B	silicone RCSP cannulae with Manual-inflate cuff	These pediatric and adult cannulae feature silicone bodies and manual-inflate cuffs with pressure monitoring lines. All cannulae come with a smooth cuff and a syringe for cuff inflation.		95.06
		9 in (22.9 cm) overall length, smooth cuff and wirewound body, No Stylet	10 Fr	95.07
		12.5 in (31.8 cm) overall length Smooth cuff, wirewound body, and integral stopcock	13 fr	95.08
			15 fr, No Stylet	95.09
			15 fr with Solid Stylet and True Touch	95.10
		12.5 in (31.8 cm) overall length Smooth cuff, wirewound body	15 fr with Solid Stylet	95.11
		9.5 in, smooth cuff, non-wirewound body, and integral stopcock	6 fr, No stylet	95.12
			6 fr, Guidewire stylet	95.13

96	Multiple perfusion set	Should have silicon/ PVC bodies with auto inflatable cuff and pressure monitoring lines; should have multiport tip/ integral stopcock. Should be able to perform simultaneous perfusion of Aortic root and upto 3 or more vein grafts	12 in (30.5 cm) overall length, 4 - 3 in (7.6 cm) length legs with white clamps, female luer on single inlet leg with 4 legs	96.01
			12 in (30.5 cm) overall length, 4 - 8 in (20.3 cm) length legs with 3 red clamps and 1 blue clamp, female luer on single inlet leg with 4 legs	96.02
			12 in (30.5 cm) overall length, 4 - 10 in (25.4 cm) length legs with red, blue, yellow, and white clamps, female luer on single inlet leg with 4 legs	96.03
			12 in (30.5 cm) overall length, 4 - 10 in (25.4 cm) length legs with 3 red clamps and 1 blue clamp, male luer on single inlet leg with 4 legs	96.04

			15 in (38.1 cm) overall length, Female luer on single inlet leg with 4 legs, 1 - 3 in (7.6 cm) length leg with blue clamp	96.05
			15 in (38.1 cm) overall length, Female luer on single inlet leg with 4 legs, 3 - 10 in (25.4 cm) length legs with red clamps	96.06
			15 in (38.1 cm) overall length, Female luer on single inlet leg with 4 legs and vent line, 1 - 8 in (20.3 cm) length vented leg with red clamp on vent line	96.07
			15 in (38.1 cm) overall length, Female luer on single inlet leg with 4 legs and vent line, 3 - 10 in (25.4 cm) length legs with red clamps	96.08

			15 in (38.1 cm) overall length, Female luer on single inlet leg with 4 legs and vent line, 1 - 8 in (20.3 cm) length vented leg with stiff tubing and red clamp on vent line	96.09
			15 in (38.1 cm) overall length, Female luer on single inlet leg with 4 legs and vent line, 3 - 10 in (25.4 cm) length stiff tubing and red clamps	96.10
			15 in (38.1 cm) overall length, Female luer on single inlet leg with 4 legs and vent line, 1 - 12 in (30.5 cm) length vented leg with yellow clamp on vent line	96.11
			15 in (38.1 cm) overall length, Female luer on single inlet leg with 4 legsand vent line, 3 - 10 in (25.4 cm) length legs withred clamps	96.12

			15 in (38.1cm) overall length, Female luer on single inlet leg with 4 legs and 3 free flow vessel cannulae, 1 - 3 in (7.6 cm) length leg with blue clamp	96.13
			15 in (38.1cm) overall length, Female luer on single inlet leg with 4 legs and 3 free flow vessel cannulae, 3 - 10 in (25.4 cm) length legs with red clamps	96.14
			15 in (38.1cm) overall length, Female luer on single inlet leg with 4 legs and 3 one-way valve vessel cannulae, 1 - 3 in (7.6 cm) length leg with blue clamp	96.15
			15 in (38.1cm) overall length, Female luer on single inlet leg with 4 legs and 3 one-way valve vessel cannulae, 3 - 10 in (25.4 cm) length	96.16

			legs with red clamps	
			15 in (38.1cm) overall length, Female luer on single inlet leg with 6 legs, 1 - 3 in (7.6 cm) length leg with blue clamp	96.17
			15 in (38.1cm) overall length, Female luer on single inlet leg with 6 legs, 5 - 10 in (25.4 cm) length legs with red clamps	96.18
97	Distal perfusion kit	-		97.01
98	Left Heart Vent Catheters Sizes 10 Fr,13Fr,15Fr,16Fr,18Fr,20Fr,24Fr	Either PVC or silicone made, along with straight, preformed, and malleable bodies with depth markings In pediatric and adult sizes With a malleable or stiff guidewire style introducer for easy insertion and placement. Should terminate with a vented or non-vented 1/4 in (0.64 cm) connector.	PVC 13 in (33.0 cm) overall length, Preformed 1.5 in (3.8 cm) tip and vented connector, 10 Fr (3.3 mm) (8 holes in tip)	98.01
			PVC 13 in (33.0 cm) overall length, Preformed 2 in (5.1 cm) tip and vented connector, 13 Fr (4.3	98.02

			mm) (14 holes in tip)	
			PVC 13 in (33.0 cm) overall length, 2 in (5.1 cm) tip, vented connector, and malleable introducer, 13 Fr (4.3 mm) (14 holes in tip)	98.03
			PVC 15 in (38.1 cm) overall length, Malleable body and vented connector; 10 Fr (3.3 mm) (9 holes in tip)	98.04
			PVC 15 in (38.1 cm) overall length, Malleable body and vented connector; 13 Fr (4.3 mm) (9 holes in tip)	98.05
			PVC 15 in (38.1 cm) overall length, Malleable body and vented connector; 15 Fr (5.0 mm) (20 holes in tip)	98.06

			PVC 15 in (38.1 cm) overall length, Malleable body and non-vented connector, 16 Fr (5.3 mm) (11 holes in tip)	98.07
			PVC 15 in (38.1 cm) overall length, Malleable body and non-vented connector, 18 Fr (6.0 mm) (11 holes in tip)	98.08
			PVC 17 in (43.2 cm) overall length, Integrated pressure monitoring lumen and 3/8 in barbed connector, 24 Fr (8.0 mm) (6 holes in tip)	98.09
			Silicone 16 in (40.6 cm) overall length, Non-vented connector and malleable introducer, 16 Fr (5.3 mm) (20 holes in tip)	98.10
			Silicone 16 in (40.6 cm) overall length, Non-vented connector and malleable introducer,	98.11

			20 Fr (6.7 mm) (24 holes in tip)	
			Silicone 16 in (40.6 cm) overall length, Non-vented connector and preformed introducer, 20 Fr (6.7 mm) (24 holes in tip)	98.12
99	Pericardial Sumps Sizes 20 Fr	Should have a fluted tip, encased in a stainless steel spring and with a weight ath the end, the tip should be attached to a soft flexible tubing with a connector	15 in (38.1 cm) overall length, 20 Fr (6.7 mm) 1/4 in (0.64 cm) connector	99.01
			15 in (38.1 cm) overall length, 20 Fr (6.7 mm) 1/8 in (0.32 cm) connector	99.02
100	Intra-cardiac sump Size 20 Fr	Should have a weighted/ non weighted perforated pool tip to maximize suction and minimize tissue trauma for atraumatic suction within the heart chambers, the perforated tip should be attached to tubing which terminates with a 1/4 in (0.64 cm) connector	15 in (38.1 cm) overall length, Weighted tip, 20 Fr (6.7 mm)	100.01
			12 in (30.5 cm) overall length, non weighted, 12 Fr (4.0 mm) (10 holes in tip)	100.02
			15 in (38.1 cm) overall length, non weighted, 20 Fr (6.7 mm) (28 holes in tip)	100.03

			3 in (7.6 cm) approx. shaft and tip length, Frazier tip, 6 Fr (2.0 mm) shaft	101.01
			3 in (7.6 cm) approx. shaft and tip length, soft tip, 6 Fr (2.0 mm) shaft with 10 Fr (3.3 mm) tip	101.02
101-A	Cardiac Suction Tubes	Should have comfortable hand grips with a vacuum control port. The tip shaft should be made from a malleable stainless steel shaft which can be shaped to the surgeon's preference, and should be with or without a soft silicone tip. Should be equipped with a length of tubing and clamp terminating with a 1/4 in (0.64 cm) connector	4.25 in (10.8 cm) approx. shaft and tip length, Frazier tip, 10 Fr (3.3 mm) shaft	101.03
			6 in (15.2 cm) approx. shaft and tip length, Frazier tip. 6 Fr (2.0 mm) shaft	101.04
			6 in (15.2 cm) approx. shaft and tip length, soft tip. 6 Fr (2.0 mm) shaft with 10 Fr (3.3 mm) tip	101.05
101-B	Intracardiac Suction Tube	Should have a comfortable hand grip and the tip shaft made of malleable stainless steel which can be shaped to the surgeon's preference, and should have a perforated pool tip to maximize suction and minimize tissue trauma and should be equipped with a length of tubing terminating with a 1/4 in (0.64 cm) connector	6 in (15.2 cm) overall length, Perforated pool tip, 10 Fr (3.3 mm) shaft with 20 Fr (6.7 mm) tip (28 holes in tip)	101.06
102	Intracardiac Suction Tube	The tip shaft should be made from rigid stainless steel, it (macro) should have a fluted pool tip to maximize suction and minimize tissue trauma. The smaller sucker should have a soft, vented tip designed to clear blood from the anastomotic site with gentle suction	6 in (15.2 cm) approx. shaft and tip length, 20 Fr (6.7 mm) tip with 16 Fr (5.3 mm) shaft (Macro)	102.01

			4.75 in (12.1 cm) approx. shaft and tip length, 9 Fr (3.0 mm) tip with 11 Fr (3.7 mm) shaft (Mini)	102.02
103	Pulmonary Artery Vent Cannulae	Should have a soft, pliable tip terminating with a female luer with an introducer needle for easy introduction and placement with a movable depth marker on the body of the cannula.	6 in (15.2 cm) overall length, 16 Fr (5.3 mm)(12 holes in tip)	103.01
104	Tourniquet Sets Sizes 12 Fr, 16 Fr and 19 Fr	Should have color coded tubes with varying lengths for adults and pediatric, should have wire snares included with the tube set.	Tube length of 4 in (10.2 cm) and 6 in (15.2 cm), 12 Fr. [3 - 4 in (10.2 cm) bronze, 3 - 6 in (15.2 cm) bronze, 2 - snares]	104.01
			Tube length of 5.5 in (14.0 cm), 12 Fr. (1 - red, 2 - blue, 3 -clear, 1 - snare)	104.02
			Tube length of 5.5 in (14.0 cm), 12 Fr. (1 - red, 2 - blue, 5 - clear, 2 - snares)	104.03
			Tube length of 7 in (17.8 cm), 12 Fr. (1 - red, 1 - blue, 1 - snare)	104.04
			Tube length of 7 in (17.8 cm), 12 Fr. (1 - red, 1 - blue, 3 - clear, 1 - snare)	104.05
			Tube length of 7 in (17.8 cm), 12 Fr. (1 - white radiopaque, 1 - looped snare)	104.06

			Tube length of 7 in (17.8 cm), 12 Fr. (6 - small O.D. white radiopaque, 1 - snare)	104.07
			Tube length of 7 in (17.8 cm), 19 Fr. (3 - large O.D. white radiopaque, 1 - snare)	104.08
			Tube length of 7 in (17.8 cm), 12 Fr. (2 - red, 2 - blue, 2 - clear) and 16 Fr. (2 - large O.D. clear, 1 - snare)	104.09
			Tube length of 7 in (17.8 cm), 12 Fr. (2 - red, 1 - blue, 1 - snare)	104.10
			Vena Cava sets, Tube length of 7 in (17.8 cm), 12 Fr. (3 - clear, 1 - snare)	104.11
			Vena Cava sets, Tube length of 7 in (17.8 cm), 12 Fr. (4 - clear, 1 - snare)	104.12
105-A	Vessel cannulae	Should have a clear and radiopaque bodies and available with or without a one way valve. All the cannulae should terminate with a female luer and have tips in various sizes and shapes.	2 in (5.1 cm) overall length, 3 mm blunt tip	105.01
			2 in (5.1 cm) overall length, 2 mm blunt tip	105.02
			2 in (5.1 cm) overall length, 4 mm acorn tip	105.03

			2 in (5.1 cm) overall length, 3 mm beveled tip	105.04
			2 in (5.1 cm) overall length, Clear body with radiopaque band, 3 mm blunt tip	105.05
			2 in (5.1 cm) overall length, Radiopaque body, 3 mm beveled tip	105.06
			2 in (5.1 cm) overall length, Radiopaque body, 3 mm blunt tip	105.07
			2.5 in (6.4 cm) overall length, Clear body with one way valve, 3 mm beveled tip	105.08
			2.5 in (6.4 cm) overall length, Clear body with one way valve, 3 mm blunt tip	105.09
			2.5 in (6.4 cm) overall length, Radiopaque body with one way valve, 3 mm blunt tip	105.10
105-B	IMA Cannula	Should have a stainless steel shaft with a bulb shaped tip terminating with a female luer.	1.8 in (4.6 cm) overall length, 1 mm tip	105.11
106	ArteriotomyCannula Sizes 2mm,3mm,4mm,5mm,6mm	Should have a polyurethane tube with a bulb shaped tip connected to a winged female luer	1.3 in (3.3 cm) overall length	106.01
			2.3 in (5.8 cm) overall length	106.02

			6.3 in (16.0 cm) overall length	106.03
107	Rapid priming set	These should facilitate the transfer of fluid during the priming of the circuit. Shouldhave large bore spikes attached to flexible tubing with a clamp. Should terminate witheither an open end tube or a male luer.	35 cm	107.01
			40 cm	107.02
108	Rapid Priming"Y" Set Length around 1 m	These should facilitate the transfer of fluid during the priming of the circuit. Should have large bore spikes attached to flexible tubing with a clamp. Should attach to a " Y" adapter with a length of tubing and another clamp.		108.01
109-A	ADULT OXYGENATOR	• Priming volume should be less than 300 ml. • Blood flow range should be 0-7lts/min. • Oxygen transfer should be atleast 400ml/min. • Heat exchange efficiency should not be less than 0.50. • Housing material should be of polycarbonate. • Surface area of the fibers should be from 1.8m 2 to 2.4m 2 • Heat exchanger should be made of stainless steel and surface area should be approx. 20cm 2 Blood inlet port (from pump) 3/8 Blood outlet port 3/8 Cardioplegia port 1/4 GasInlet port 1/4 Gas Outlet port 1/4 Water Ports ½ Maximum Pressure Blood inlet 1000 mmHg water Inlet 42 PSI • Blood storage capacity of hard shell reservoir should be approx. 4000ml • Minimum operating volume of reservoir should be 200ml. • Hard shell reservoir should have cardiotomy filter and de-foaming part • Hard-shell reservoir should have venous filter with pore size 452mm • The hard-shell reservoir should have Venous blood inlet port ½ Blood outlet port (to pump) ⅜ Suction ports (six) ¼ Water Inlet 42 PSI Vertical port to CR Filter ¼ Quick Prime port ¼ Auxiliary port ¼-⅜ • Sustainable negative pressure should be 15010mmHg		109.01

109-B	SPECIFICATION FOR Semi-ADULT OXYGENATOR	• Priming volume should be less than 250 ml. • Blood flow range should be 0-5lts/min. • Oxygen transfer should be atleast 400ml/min. • Heat exchange efficiency should not be less than 0.50. • Housing material should be of polycarbonate. • Surface area of the fibers should be from 1.8m 2 to 2.4m 2 • Heat exchanger should be made of stainless steel and surface area should be approx. 20cm 2 Blood inlet port (from pump) 3/8 Blood outlet port 3/8 Cardioplegia port 1/4 GasInlet port 1/4 Gas Outlet port 1/4 Water Ports ½ Maximum Pressure Blood inlet 1000 mmHg water Inlet 42 PSI • Blood storage capacity of hard shell reservoir should be approx. 4000ml • Minimum operating volume of reservoir should be 150ml. • Hard shell reservoir should have cardiotomy filter and de-foaming part • Hard-shell reservoir should have venous filter with pore size 452mm • The hard-shell reservoir should have Venous blood inlet port ½ Blood outlet port (to pump) ⅜ Suction ports (six) ¼ Water Inlet 42 PSI Vertical port to CR Filter ¼ Quick Prime port ¼ Auxiliary port ¼-⅜ • Sustainable negative pressure should be 15010mmHg		109.02
110	PEDIATRIC OXYGENATOR	· Priming volume should beless than 150ml. • Blood flow range should be 0.40 to 03ltrs/min. • Oxygen transfer should not be less than 250ml/min. • Pressure drop should be least-up to 100mmHg or less. • Heat exchange efficiency should not be less than 0.65. • Housing material should be of polycarbonate. • Surface area of the fibers should be approx 1.0m 2 . • Heat exchanger should be made of stainless steel and surface area should be approx 1300cm 2 . Blood inlet port 3/8 Blood outlet Port 3/8 Cardioplegia port 1/4 Gas Inlet Port 1/4 Gas Outlet port 1/4 Water Port 1/2 Maximum Pressure Blood inlet 1000mmHg, Water Inlet 42 PSI • Blood Storage capacity of hard shell reservoir should be max 3000ml. • Minimum operative volume of hard shell reservoir should be 100ml. • Hard-shell reservoir should have cardiotomy filter and defoaming part. • Hard-shell reservoir should have venous filter with pore size should be 20mm • The hard-shell reservoir should have • Venous blood inlet port 3/8 rotatable • Blood outlet port (to pump) 3/8 • Suction port(six) ¼ • Vertical port to CR filter 3/8 • Quick prime port ¼ • Auxiliary port 3/8 Water Inlet 42 PSI		110.01

111	NEONATAL OXYGENATOR	• Blood flow range should be 0.1 – 2 liters/min. • Priming Volumes should be around 40 ml. • Oxygen transfer should be minimum 100 ml/min. • Pressure drop should be least up to 100mmHg or less. • Heat exchange efficiency should not be less than 0.65. • Housing material should be of polycarbonate. • Surface area of the fibers should be ≈0.5m 2 and material should be micro porous polypropylene. • Heat exchanger should be made of stainless steel and surface area should be approx 0.035m 2 . • Blood inlet port (from pump) ¼ Blood outlet port ¼ Luer port (for recirculation or blood cardioplegia) one luer lock on blood outlet Gas inlet port ¼ Gas outlet port 5/16 Water ports ½ Maximum pressure Blood inlet 1000mmHg • Blood storage capacity of hard shell reservoir should be 1000ml • Minimum operating volume of hard-shell reservoir should be 15ml • Hard-shell reservoir should have cardiotomy filter and defoamer • The hard-shell should have • Venous blood inlet port ¼ • Blood output port (to pump) ¼ • Suction port (five) 3/16 • Quick prime port ¼ • Vent port ¼ • Auxiliary port ¼-3/8 Maximum sustainable negative pressure in reservoir -150mmHg Water inlet 2Kgf/cm 2		111.01
112	SPECIFICATIONS FOR PEDIATRIC ARTERIAL FILTER WITH BYPASS LOOP	The Arterial Filter should be for pediatric use. Priming volume should not be more than 90ml Filter pore size should be 30-40 micron.The outlet and inlet blood posts should be 3/8 or ¼".The filter should allow maximum blood flow rate of 5.0L/min.The filter should be provided with a bypass loop at the inlet and outletport.		112.01
113	CARDIOPLEGIA HEAT EXCHANGER(BCD)	It should have priming volume less than 50 ml. Blood flow rate should be between 0-600 ml/min Filter screen should be around 100 um. Inlet connection should be ¼and outlet connection should be 3/16. Heat exchange surface area should be ≈.20m 2 . Heat exchange should be of stainless steel corrugated/ convoluted pipes. Bubble trap should be integrated for highly efficient de-bubbling Integrated by pass manifold for easy de-bubbling Exchangeable water in /water out Blood flow path bottom up It should have a Stopcock Prime/ Perfusion for easy priming. It should have tip in the surgeon pack so that it can be connected to cardioplegia cannula. It should be available both in 4:1 and 1:4 configurations.		113.01

114	PEDAITRIC HEMOCONCENTRATOR	It should have priming volume approx 35ml. • Effective surface area of the Fibers should be approx 0.5m 2 . • Blood port should be ¼with Luer locks. • Filtrate port should be ½. • Maximum Trans-membrane Pressure should be 500mm Hg. • It should have tubing lines along with reservoir Bag.		114.01
115	SPECIFICATION FOR ADULT HEMOCONCENTRATOR	The priming volume should be 70 ml • Effective surface area of the fibers should be ≈1m 2 . • Blood port should be ¼ With Luer locks • Filtrate port should be ½ (1/4adapter). • Blood flow range should be 100-500ml. • Maximum Trans-membrane pressure should not be more than 500mm Hg. • It should have tubing with reservoir bag.		115.01
116	SPECIFICATION FOR NEONATAL HEMOCONCENTRATOR	It should have priming volume less than 20 ml. • Membrane surface area should be ≈0.2m 2 . • Max Membrane pressure should not be more than 600mm Hg. • Capillary wall thickness should be ≈50um. • It should have inlet/outlet lines, male luer lock connections, filter safety cap, filtrate line and additional filtrate bag (200ml).		116.01
117-A	SPECIFICATION FOR CUSTOM TUBING PACK	final Design for Custom tubing. Pack will be given by AIIMS, Jodhpur, with usual connectors, tubes, pressure monitoring lines and filter. Should come in sterile Plastic Tub Pack and user friendly and pakaging favors to required sterility. • Custom Tubing Pack Adult. Custom Tubing Pack with arterial filter with PVC tubing medical grade -6 as per AIIMS Jodhpur design. Filter/Tubing should be CE/USFDA Approved. • Custom Tubing Pack pediatric with PVC tubing medical grade – 6Filter/Tubing should be CE/US FDA Approved • Custom Tubing Pack with neonatal arterial filter with PVC tubing medical grade- 6Filter/Tubing should be CE/USFDA Approved • Custom tubing packs with 3/16arterial and ¼ venous lines for small neonates. Made. from medical grade-6 PVC. Filter/Tubing should be CE/USFDA approved		117.01
118	EXTRA CORPOREAL MEMBRANE OXYGENATOR (NEONATAL), For Maqute Rotaflow	• ECMO should have a validation for 14 days and should be phthalate free (NO DOP). • Membrane used should be of polymethylpentene fibers. • Priming volume should be 100 ml. • Should have contact surface area ≈0.70 square meters. • Should cater for blood flow from 0.2 to 1.5 L/min. • Heat exchanger surface area should be ≈0.4 square meter. • Heat Exchanger performance factor should be of 0.77 (1.5 liter /min). • Oxygenator and tubing should have coating of Phosphorylcholine. • Inlet and outlet connector preferred is 1/4 (6.35 mm).		118.01

119	EXTRA CORPOREAL MEMBRANE OXYGENATOR (PAEDIATRIC), For Maqute Rotaflow	ECMO should have a validation for 14 days and should be phthalate free (NO DOP). • Membrane used should be of polymethylpentene fibers. • Should have priming volume 200 ml. • Should have contact surface area of around1.4 square meters. • Should cater for blood flow from 0.3 to 4 liter /min. • Heat exchanger should have surface area of ≈0.8 square meter. • Heat exchanger performance factor should be of ≈0.6 (@ 4 liter /min). • Oxygenator and tubing should have coating of Phosphorylcholine(PC). • Inlet and outlet connections preferred is 3/8(9.53 mm)		119.01
120	EXTRA CORPOREAL MEMBRANE OXYGENATOR (ADULT), For Maqute Rotaflow	ECMO should have a validation for 14 days and should be phthalate free (NO DOP). • Membrane used should be of polymethylpentene fibers. • Should have priming volume of≈250ml. • Should have contact surface area of 1.7-1.9 square meters. • Should cater for blood flow from 0.4 to 7 liters/ min. • Heat exchanger should have surface area of ≈0.8square meter. • Heat exchanger performance factor should be ≈0.6 (@ 4 liters /min). • Oxygenator and tubing should have coating of Phosphorylcholine.(PC) • Inlet and outlet connections preferred is 3/8 (9.53 mm)		120.01
121	ADULT OXYGENATOR (Integrated with arterial filter & heat exchanger)	Oxygenator should have integrated arterial filter with cardiotomy/ venous reservoir. • Should have integrated arterial filter with self venting technology. • Heat exchanger surface area should be no more than 0.2m 2 . • Venous filter should be 50micro meter. • Priming volume should not be more than 300ml. • Blood flow range should be 0.5 to 7 LPM. • Heat exchange efficiency should not be less than 0.50 at max flow. • pressure drop should be minimum, up to 110 mmHg or less. • Arterial filter should be 35micron meter. • Membrane surface area should be 2-2.5 m 2 .		121.01
122	SMALL ADULT OXYGENATOR (Integrated Filter and Heat Exchanger)	Oxygenator should have integrated arterial filter with cardiotomy/venous reservoir.• Should have integrated arterial filter with self venting technology.• Heat exchanger surface area should be no more than 0.14m 2 .• Venous filter should be 50micro meter.• Priming volume should not be more than 150ml• Blood flow range should be 0.5 to 5 LPM.• Heat exchange efficiency should not be less than 0.5 max flow @ 5 LPM• Pressure drop should be minimum up to 110 mmHg or less.• Arterial filter should be35micro meter.		122.01

123	PAEDIATRIC INFANT OXYGENATOR(Integrated Filter and Heat Exchanger)	• Oxygenator should have integrated arterial filter with cardiotomy/ venous reservoir. • Should have integrated arterial filter with self venting technology. • Heat exchanger surface area should be no more than 0.035m 2 . • Venous filter should be50micro meter. • Priming volume should not be more than 45ml. • Blood flow range should be 0-1.5Ltrs/min. Heat exchange efficiency should not be less than 0.6 at max flow. Pressure drop should be minimum up to 100mmHg or less @ 1.5 LPM Arterial filter should be35micro meter.		123.01
124	Arterial Perfusion CannulaeAdult.	Non-wire reinforced beveled tip Size 18Fr, 20Fr, 22Fr and 24 Fr. Overall lengthshould be approx.15cm with suture bump.		124.01
125	Arterial Perfusion Cannulae Pediatric	Sizes: 8Fr, 10Fr, 12Fr,14Fr and 16Fr. Non wire reinforced bevel tip. Overall length 18cm with suture bump.		125.01
126	Venous Cannulae Single Stage. (neonate)	Thin Flexible wire reinforced straight open light house tip. Overall length approx.28cm with ¼ acceptance size 12Fr, 14Fr and 16Fr		126.01
127	Venous Cannulae Single Stage(pediatric)	Thin Flexible wire reinforced straight open light house tip. Overall length approx. 35cm with ¼and 3/8 acceptance Size 18Fr, 20Fr, 22Fr and 24Fr.		127.01
128	Venous Cannulae Single Stage(small adult)	Thin flexible wire reinforced straight open lighthouse tip. Overall length 35cm with 3/8 acceptance Size 26Fr and 28Fr.		128.01
129	Venous Cannulae Single Stage(adult)	Thin Flexible wire reinforced straight open lighthouse tip. Overall length should be approx.40cm with 3/8 acceptance Size 30Fr, 32Fr, 34Fr, 36Fr, 38Fr and 40Fr.		129.01
130	Venous Cannulae Right Angled	Wire reinforced 90 0 angled plastic tip 10Fr, overalllength approx.28cm and ¼ acceptance.		130.01
131	Venous Cannulae Right Angled	Wire reinforced 90 0 angled plastic tip 12Fr, 14Fr and 16Fr. Overall length should be approx. 33cm with ¼& 3/8 acceptance		131.01
132	Venous Cannulae Right Angled	Wire reinforced 90 0 angled plastic tip 18Fr and 20Fr. Overall length should be approx. 35cm with 3/8 acceptance		132.01
133	Venous CannulaeRight Angled	Wire reinforced 90 0 angled plastic tip 22Fr, 24Fr and 28Fr. Overall length should be approx.38cm with 3/8 acceptance.		133.01

134	Retrograde Cannula catheter	Self-inflating smooth balloon with preshapedstylet and handle 14Fr. Overall lengt should be approx. 27cm & should have 18-20 mm sized smooth balloon.		134.01
135	Aortic Perfusion Cannulae;	Wire reinforced dispersion tip Sizes: 21Fr and 24Fr overall length approx.35cm and vent.		135.01
136	Dual Stage Venous Cannulae;	Wire reinforced 32/40Fr and 36/51Fr. Overall length should be approx. 40cm and ½acceptance.		136.01
137	Femoral Arterial Cannulae;	Wire reinforced overall length should be 19.5.2 cm with ¼ vented connector sizes: 8Fr, 10Fr, 12Fr and 14Fr.		137.01
138	Femoral Arterial Cannulae;	Wire reinforced overall length should be approx. 24cm with 3/8 vented connector sizes: 16Fr, 18Fr and 20Fr.		138.01
139	Femoral Venous Cannulae;	Wire reinforced overall length should be approx. 24cm with ¼ non vented connector.Sizes 8Fr, 10Fr, 12Fr and 14Fr.		139.01
140	Venous Femoral Cannulae;	Wire reinforced overall lengthshould be 752 cm with 3/8 non vented connector sizes 18Fr, 20Fr, 22Fr,24Fr and 28Fr.		140.01
141-A	Antegrade CardioplegiaCannulae	12/14/16 ga. without vent.		141.01
141-B	Antegrade CardioplegiaCannulae	12/14/16 ga. with vent		141.02
142-A	Cardiotomy Venous Reservoir with Filter	Adult,		142.01
142-B	Cardiotomy Venous Reservoir with Filter	Paediatric,		142.02
142-C	Cardiotomy Venous Reservoir with Filter	Neonatal		142.03
143-A	Disposable connector all sizes; Y, with leur lock			143.01
143-B	Disposable connector all sizes; Y without leur lock			143.02
143-C	Disposable connector all sizes; Straight with leur lock			143.03
143-D	Disposable connector all sizes; Straight without leur lock			143.04
144-A	Disposable Single Tubing all sizes (½,⅜,¼,3/16)	1/4 x16ft		144.01
144-B	Disposable Single Tubing all sizes (½,⅜,¼,3/16)	1/2x3/32		144.02
144-C	Disposable Single Tubing all sizes (½,⅜,¼,3/16)	3/8x3/32		144.03
145	Wire enforced Arterial Cannula	6Fr to 20Fr		145.01
146	Pruitt(Distal Limb arterial perfusion cannula			146.01

147	Long, Flexible, wire-enforced cannula for ascending aortic & arch cannulation with obturator.	All Sizes by OEM		147.01
148	Long Flexible, wire-enforced cannula for ascending aorta & arch cannulation with guide wire.	All Sizes by OEM		148.01
149	Long Flexible wire enforced cannula for ascending aorta and arch cannula angled, With side holes.	All Sizes by OEM		149.01
150	Balloon tip antegrade cerebral perfusion cannula.	All Sizes By OEM		150.01
151	Complete Bovine Aortic Pericardial Valve	Should be bio engineered, computer optimized to ensure uniform thickness of leaflets and have tissue deflection test to ensure uniform flexibility in all three leaflets. . Long term clinical data should be available, establishing more than atleast 15 years expected durability in clinical study, long term follow up data on hemodynamic performance establishing consistency in low gradients. Should have standard low- pressure fixation &adequate treatment of tissues to preserve natural leaflet dimensionality & flexibility, while extracting phospholipids. Should have more than 10 yrs. Experience globally. Scalloped sewing ring for Aortic annulus conformity is preferable. • Aortic Sizes 19/21/23/25/27 • Should be FDA APPROVED Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis		151.01
152	COMPLETE BOVINE MITRAL PERICARDIAL VALVE	• Bio- engineered: Computer optimized to ensure uniform thickness, with Tissue deflection tests to ensure uniform flexibility in all three leaflets, unique design mounting feature such as flexible stent& optimal tissue stent compatibility for greater reliability. Long term clinical data available, establishing more than & consistency in hemodynamic performance. Low-pressure fixation & chemical treatment of tissue to preserve natural leaflet dimensionality & flexibility, while extracting maximum phospholipids. Should have more than 20 yrs experience globally. Should have convenient deployment and LVOT markers for ease of Implantation at Mitral position. • MITRAL SIZE 25/27/29/31/33 • Should be FDA APPROVED Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis		152.01

153	COMPLETE BOVINE MITRAL SUPRA ANNULAR PERICARDIAL TISSUE VALVE.	• Bio mechanically engineered tissue valve with three leaflets of identical thickness, and identical Flexibility. Should be a True supra annular valvewith a saddle shaped sewing ring with posterior flexibility & anterior rigidity for optimal conformity at Mitral position, Should have LVOTO markers for correct orientation, preventing any LVOT obstruction, with convenient deployment system to prevent suture looping and ease of deployment. • Low profile tissue valve with asymmetrical sewing ring should preserve sub valvularapparatus and prevent LV impingement. Should have Tissue treatment to irreversibly extract both calcium binding sites Phospholipids, residual glutraldehyde, should have a flexible stent & optimal tissue stent compatibility for greater reliability. Clinical data to be available establishing long term durability and consistency in hemodynamic performance. • Sizes: 25 to 33mm • Should be FDA APPROVED Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis		153.01
154	COMPLETE BOVINE AORTIC SUPRA ANNULAR PERICARDIAL TISSUE VALVE	• Bio-mechanically engineered tissue valve with three Leaflets of identical thickness and identical flexibility. Should be a true supra annular valve. Scallop shaped sewing ring for aortic position.Should be Low profile tissue valve. Should have Tissue treatment to irreversibly extract both calcium binding sites phospholipid, and residual glutraldehyde, should have Flexible and Durable Stent. Short term and long term clinical data should be available, establishing Durability & consistency in hemodynamic performance. Should have a sizer (barrel and replica end) for optimum sizing and placement. • Size 19 to 29mm • Should be FDA approved Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis		154.01

155	COMPLETE BOVINE PERICARDIAL LOW PROFILE AORTIC TISSUE Valve.	• Bio-Mechanically engineered tissue valve with three leaflets of identical thickness, and Identical Flexibility. • Should be a true supra annular valve. • Should have a Scallop shaped sewing ring consistent with Aortic annulus. • Should have tissue treatment to Irreversibly extract both calcium binding sites phospholipid residual glutraldehyde, • Should have a flexible stent & optimal tissue stent compatibility for greater reliability. • Short and long term clinical data should be available, establishing Durability & consistency in hemodynamic performance. • Should have Low profile height for optimizing Coronary Ostial&sino- tubular junction clearance. Should have Three Mid commissure markers for correct orientation of the valve. • Should have a slick stent post & stent base allowing ease of implantation in small aortic root. • SIZES: 19 to 29mm Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Should be FDA APPROVED		155.01
156	Tricuspid Repair Ring	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis• Sterile double packed tricuspid rigid ring with an anterior gap with polyester of PTFE cloth with marking for commissures.• Should have an oval shape and opening for AV node.• Sizes 26mm 28mm 30mm 32mm.		156.01
157	Mitral Repair Ring	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Sterile double packed rigid ring complete or with anterior gap with polyester or PTFE cloth with marking for commissures. • Kidney shaped for mitral position. • Cover sizes 26mm, 28mm, 30mm, 32mm, 34mm, 36 mm		157.01

158	IMR annuloplasty ring:	• Should have a complete rigid ring. • To be constructed of a strong, durable alloy. • Should have a increased sewing margin in the P2-P3 region, • Should be marked with suture and designed to accommodate a double suture row. • Should have a Dipped P3 region to accommodate higher stresses from downward LV displacement. • Should have a convenient holder/handle to increase ease of use & operative efficiency • Sizes 24,26,38,30,32, 34, 36mm Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Should be FDA APPROVED		158.01
159	3-D Tricuspid Annuloplasty Ring:	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Should be a rigid annuloplasty ring with three-dimensional shape and with an incomplete ring shape to avoid the sensitive conduction system. • Should have a downward angle in septal region to help reduce the stress on sutures and the risk of ring dehiscence. • Sizes 26, 28, 30,32,34mm. • Should be FDA approved.		159.01
160	ARTIFICIAL MECHANICAL HEART VALVE BILEAFLET MITRAL BILEAFLET MITRAL (for supra- annular implant)	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Rotatable design, leaflets made up of pyrolytic carbon / standard durable alloy and polyester sewing cuff. • Should have low profile height. • Should have minimum vertical leaflet exposure to result in NO LVOT obstruction • Should have greater posterior wall clearance • Wide range of sizes from 23/24mm – 34/37mm • Should have both CE and FDA approval		160.01

161	ARTIFICIAL MECHANICAL HEART VALVE	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Rotatable design, leaflets made up of pyrolytic carbon / standard durable alloy and polyester sewing cuff. • Should have low profile height. • Should have minimum vertical leaflet exposure to result in NO LVOT obstruction • Should have greater posterior wall clearance • Wide range of sizes from 24 mm – 34 mm • Should have both CE and FDA approval		161.01
162	ARTIFICAL HEART VALVE BILEAFLET AORTIC	• Rotatable design, leaflet made up of pyrolytic carbon and polyester sewing cuff, with pivot guard design. • Should have low profile height. • Should have minimum vertical leaflet exposure. • Wide range of sizes from 19mm-31mm. Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Should have both CE and FDA approval		162.01
163	BI LEAFLET MECHANICAL HEART VALVE	• Aortic Sizes 16mm,18mm,20mm,22mm,24mm,26mm • Mitral sizes 19mm, 21mm,22mm,23mm,24mm, 25mm, 26mm, 27mm,28mm,29mm,31mm,33mm •Should have Open Pivot Bi leaflet mechanical Heart valve with 75- 90 degrees opening angle, should be in single place, solid carbon orifice design with strengthening band. Should have no recess or cavities in the hinge area. Valves should be available in all the sizes as mentioned above. Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis Should be rotatable and should be FDA approved		163.01
164	ARTIFICAL HEART VALVE BILEAFLET AORTIC for Supra-annular implant	Rotatable design, leaflet made up of pyrolytic carbon and polyester sewing cuff, with pivot guard design. Should have low profile height. Should have minimum vertical leaflet exposure. Wide range of sizes from 16 mm- 28mm Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis Should have both CE and FDA approval		164.01

165	ARTIFICAL HEART VALVE BILEAFLET AORTIC (for Supra-annular –intra-annular implant)	Rotatable design, leaflet made up of pyrolytic carbon and polyester sewing cuff, with pivot guard design. Should have low profile height. Should have minimum vertical leaflet exposure. Wide range of sizes from 17mm- 25mm. Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis Should have both CE and FDA approval		165.01
166	BILEAFLET AORTIC VALVE WITH CONDUIT	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis• Should have double velour woven graft.• Should be collagen impregnated to control hemostasis and reduce the hemorrhagic complications.• Should have mechanical heart valve with low-pressure gradients. With pivot guard design and leaflet opening and >75 degrees.• Cuff design should enhance implantability.• Should have minimum taper conduit to facilitate strong coronary anastomosis.• Should not have any pleats to allow easier positioning and attachment of the coronary arteries.• Wide range of sizes from 19mm-33mm.Should Provide Graft Cautary• Should have both CE and FDA approval.		166.01
167	PORCINE TISSUE HEART VALVE MITRAL/ AORTIC	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Should have stented, triple composite design with separate porcine leaflets to optimize leaflets cooptation and reduce stress. • Should have anti-calcification treatment to reduce calcification. • Low profile height. • In aortic position should be available in sizes 19mm-31mm. • In mitral position should be available in sizes 25mm to 33mm. • Should have both CE and FDA approval.		167.01

168	PERICARDIAL EXTERNALLY MOUNTED TISSUE HEART VALVE(AORTIC)	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Should have stented, pericardial single layered leaflet externally mounted to optimize hemodynamics. Should have tissue to tissue interface adding to durability. • Should have anti calcification treatment to reduce calcification. • Supra annular design. • In aortic position should be available in sizes 19mm-29mm. • Should have both CE and FDA approval.		168.01
169	ANNULOPLASTY RINGS MITRAL	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Titanium alloy core with polyester woven cloth. • 3 D motion. • Should have both CE and FDA approval. • Wide range of sizes 24mm- 34mm		169.01
170	ANNULOPLASTY RING FLEXIBLE	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Fully flexible ring/band. • Should have X-ray visibility. • Should have both CE and FDA approval. • Wide range of sizes - 25mm-35mm		170.01
171	Rigid remodeling ring for mitral valve repair	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Size 24mm,26mm,28mm,30mm,32mm,34mm,38mm,40mm • Should be fully rigid remodeling ring. • Should have physiologic mitral valve shape. • 25% annular height to commissural width ratio anterior, 15% annular height to commissural width ratio posterior. • Should have saddle shape and polyester knit covering with Titanium/silicone core		171.01

172	Annuloplasty ring for tricuspid valve repair	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Low profile Ring, • Sizes 26mm,28mm,32mm,34mm,36mm • Should be incomplete ring to avoid interference in conduction system, height should be less than 3.5mm. • Should have titanium core encapsulated with silicone and covered with polyesterfabric. • Septal lateral compression.		172.01
173	Composite Annuloplasty ring for Mitral repair	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Sizes 24mm,26mm,28mm,30mm,32mm,34mm,36mm,38mm • Should have semi rigid posterior remodeling with anterior flexibility, • should have polyester knit covering with MP-35N/ silicone core		173.01
174	Full Aortic Root Bioprosthetic Stentless Valve	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis Sizes: 19 mm, 21mm, 23 mm, 25 mm, 27 mm • Should be third generation stentless Native asymmetrical Porcine aortic root, • Should have more than 12 years durability and hemodynamic clinical data, • Should have AOA tissue treatment to mitigate calcification & Physiological fixation to preserve leaflet function which facilitates open leaflet in systolic position		174.01
175	Bio prosthesis Stented Porcine Aortic with thin sewing ring	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basisAortic Sizes:19mm,21mm,23mm,25mm,27mm,29mm• Should be third generation Native asymmetrical Porcine tissue valve,• Should have thin sewing ring• Should have more than fifteen years durability clinical data,• Should have AOA tissue treatment to mitigate calcification & Physiological fixation to preserve leaflet function which facilitates open leaflet in systolic position,• Should have Flexible acetyl homopolymer stent,• should have unique implant facilitating system for conduction of minimally invasive surgeries with automated deflection of stent posts		175.01

176	Composite Annuloplasty Band for Mitral repair	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis Sizes:24mm,26mm,28mm, 30mm,32mm, 34mm,36mm,38mm • Should have Semi-rigid posterior remodeling, • Should not have any anterior part • Should cover trigones • Should have Polyester knit covering with MP-35N/silicone core, • should have trigone islets for anchoring at Trigones		176.01
177	Flexible Annuloplasty ring for Mitral and Tricuspid repair	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis Sizes:23mm,25mm,27mm, 29mm,31mm, 33 mm,35mm • Should have Low profile system, • Should have Chordal guide feature to facilitate chordal repair • Should have flexible shape to freely allow mitral and tricuspid annular motion		177.01
178	Flexible Annuloplasty band for Mitral and Tricuspid repair	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis Sizes:23mm,25mm,27mm, 29mm,31mm, 33 mm,35mm • Should have Low profile system, • Should have Chordal guide feature to facilitate chordal repair, • Should have flexible shape to freely allow mitral and tricuspid annular motion, • Band length should extend beyond Trigone		178.01
179	OPEN PIVOT BI LEAFLET MECHANICAL HEART VALVE WITH FLEXI CUFF	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis • Aortic Sizes 16mm,18mm,20mm,22mm,24mm,26mm • Mitral sizes Should have wide range of sizes •Should have Open Pivot Bi leaflet mechanical Heart valve with >80degrees opening angle, Should be in single place, solid carbon orifice design with strengthening band. Should have no recess or cavities in the hinge area. Should have flexible cuff to fit easily in asymmetric annulus. Should be supra annular design for both aortic and mitral positions. Should be rotatable and should be FDA approved		179.01

180	COMPOSITE BILEAFLET AORTIC VALVE WITH DACRON GRAFT CONDUIT	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis Should have rotatable, bileaflet, Should have no recess or cavities in the hinge area Should have woven, double velour graft. Graft should be collagen impregnated. Should have expanded cuff for easy suturing. should provide Graft Cautary Should be available in wide range of sizes.		180.01
181	MONOLEAFLET MECHANICAL HEART VALVE	Vender/Supplier needs to keep-stored-Locally, all sizes quoted, in their inventory so that compleete set of all sizes prothesis is made available in OT. Prothesis Sizer set needs to be provided by Vender on FOC basis Mitral sizes 21-33 mm, Aortic 17-31 mm Should have smooth movement monoleaflet configuration with minimum 70 degrees opening angle. Should be easily implantable and rotatable.Should preferably be premounted on a handle. Sewing ring should be low profile; leaflet and housing should be made of strong , durable alloy.		181.01
182	Dacron straight woven Grafts	6mm to 16 mm, 30-35 cm long, Collagen coated.		182.01
183	Dacron straight woven Grafts	18mm to 28 mm, 30-35 cm long,Collagen coated.		183.01
184	Dacron straight woven Grafts	30mm to 38 mm, 30-35 cm long,Collagen coated.		184.01
185	Dacron straight woven Grafts	6mm to 16 mm, 60-70 cm long,Collagen coated.		185.01
186	Dacron straight woven Grafts .	18mm to 28 mm, 60-70 cm long,Collagen coated		186.01
187	Dacron straight woven Grafts.	30mm to 38 mm, 60 cm-70 long,Collagen coated		187.01
188	Dacron bifurcated woven grafts	12mmX6 mm, 14mmX7mm, 16mmX8mm,. 18mm X9mm with 40-50. cmslength,Collagen coated.		188.01
189	Knitted Dacron straight graft	6mm to 16 mm with 30-35 cm length,CollagenCoated		189.01
190	Knitted Dacron straight graft	18mm to 24 mm with 30-35 cm length,Collagen Coated		190.01
191	Knitted Dacron straight graft	6mm to 16 mm with 60-70 cm length,Collagen Coated		191.01
192	Knitted Dacron straight graft	18mm to 24 mm with 60-70 cm length,Collagen Coated		192.01
193	Dacron bifurcated knitted grafts	12mmX6 mm, 14mmX7mm, 16mmX 8mm,. 18mm X 9mm with 40-50 cms		193.01
194	Dacron Woven 3 branch arch grafts	20mm to 34 mm,Collagen coated.		194.01
195	Dacron Woven 4 branch arch grafts	20mm to 34 mm,Collagen coated.		195.01
196	Dacron Woven Thoraco-abdominal grafts	20mm to 30mm, Collagen coated.		196.01

197	Dacron Woven graft 20 to 34mm with 8mm and 10 mm perfusion side branch, 40-50 cm length, Collagen coated.			197.01
198	Dacron Woven extra length graft with offset branch graft 22 to 32 mm with 8mm perfusion side branch, Collagen coated.			198.01
199	Dacron Woven pre-curved graft 22 mm to 32 mm with 8mm perfusion side branch, Collagen coated.			199.01
200	Woven Trifurcate 12mm X 6mm X 6mm, 14 mm X7mm X 7mm, 16mm X 8mm X 8mm, 40-50 cm in length,Collagen coated			200.01
201	Dacron Knitted axillo-bifemoral bifurcated graft with extended support,Collagen coated.			201.01
202	Dacron Knitted Axillo-bifemoral graft 90 degrees angle with 60 cm side branch 8mm and 10 mm,Collagen coated.			202.01
203	Dacron Knitted Femoral-Femoral grafts 6mm and 8 mm 30cm and 40 cm long,Collagen coated			203.01
204	Dacron Knitted straight Peel able support 6mm, 8mm and 10 mm, Collagen coated.			204.01
205	Dacron straight woven Grafts 6mm to 16 mm, 30-35 cm long , Gelatin coated.			205.01
206	Dacron straight woven Grafts 18mm to 28 mm, 30-35 cm long, Gelatin coated.			206.01
207	Dacron straight woven Grafts 30mm to 38 mm, 30-35 cm long, Gelatin coated.			207.01
208	Dacron straight woven Grafts 6mm to 16 mm, 60-70 cm long, Gelatin coated.			208.01

209	Dacron straight woven Grafts 18mm to 28 mm, 60-70 cm long, Gelatin coated.			209.01
210	Dacron straight woven Grafts 30mm to 38 mm, 60 cm-70 long, Gelatin coated.			210.01
211	Knitted Dacron straight graft 6mm to 16 mm with 30-35 cm length, Gelatin coated.			211.01
212	Knitted Dacron straight graft 18mm to 24 mm with 30-35 cm length, Gelatin coated.			212.01
213	Knitted Dacron straight graft 6mm to 16 mm with 60-70 cm length, Gelatin coated.			213.01
214	Knitted Dacron straight graft 18mm to 24 mm with 60-70 cm length, Gelatin coated.			214.01
215	Dacron bifurcated knitted grafts 12mmX6 mm, 14mm X 7mm, 16mmX 8mm,.18mm X 9mm with 40-50 cms length, Gelatin coated.			215.01
216	Dacron Woven 3 branch arch grafts 20mm to 34 mm, Gelatin coated.			216.01
217	Dacron Woven 4 branch arch grafts 20mm to 34 mm, Gelatin coated.			217.01
218	Dacron Woven Thoracoabdominal grafts 20mm to 30mm, Gelatin coated.			218.01
219	Dacron Woven graft 20 to 34mm with 8mm and 10 mm perfusion side branch, 40-50 cm length, Gelatin coated.			219.01
220	Dacron Woven extra length graft with offset branch graft 22 to 32 mm with 8mm perfusion side branch, Gelatin coated.			220.01
221	Dacron Woven pre-curved graft 22 mm to 32 mm with 8mm perfusion side branch, Gelatin coated.			221.01

222	Woven Trifurcate 12mm X 6mm X 7mm, 14 mm X7mm X 7mm, 16mm X 8mm X 8mm, 40-50 cm in length, Gelatin coated.			222.01
223	Dacron Knitted axillo-bifemoral bifurcated graft with extended support, Gelatin coated.			223.01
224	Dacron Knitted Axillo-bifemoral graft 90 degrees angle with 60 cm side branch 8mm and 10 mm,Collagen coated.			224.01
225	DACRON MARKING PATCH (Filamentous Fabric)	• Should be Nominal Thickness; around 0.6 mm • Water permeability; approximately 1800ml • Popularly known as ”MARKING PATCH” • Markings arrow should indicate, in which direction the patch is to be stitched. • Sizes 2” x 2”, 4 x4” and 6x6 ‘ inches	2"x2" 4"x4" 6"x6"	225.01 225.02 225.03
226	Double Velour Fabric	• Should have Nominal Thickness; 1.4-1.6mm. • With Water permeability of approximately 3800 ml. • Should have No Reference markings. • Used for Repair of Intracardiac defects and for VSD repair in Adults. • SIZES: - 4”X4” & 6”X6”	2"x2" 4"x4" 6"x6"	226.01 226.02 226.03
227	Outflow Tract Fabric	• PTFE. • Should have Nominal Thickness: around 0.9mm. with Water Permeability: 250ml. • Used for Aortic repair, Pulmonary Outflow tracks patching & other Intracardiac Defects. • SIZES: - 4X4 & 6”X6”	4"x4" 6"x6"	227.01 227.02
228	Thin Wall Patch of PTFE	• Should have multidirectional node fiber structure, to accommodate cellular in growth & give uniform strength throughout the patch Surface. • Should be soft & pliable for easy surgical positioning. • No Pre clotting should be required. • Should have excellent biocompatibility for cardiac& vascular repairs and peripheral vascular reconstruction. • Should have Thicknessaround 0.4mm suitable for Aortic & Vascular repair • SIZES:- 1CMX9CM,2X9CM & 3CMX6CM (OVAL SHAPED)	1x9 cm 2x9 cm 3x6 cm Oval shaped	228.01 228.02 228.03
229	Regular Wall Patch of PTFE	• Should have multidirectional node fiber structure to accommodate cellular in-growth. • Should be soft & pliable for easy surgical positioning. • No Pre clotting should be required. • Should have excellent biocompatibility for cardiac& vascular repairs and peripheral vascular reconstruction. • Thickness – 0.6mm • SIZES:- 3CM X 3CM,5CMX7.5CM,2.5CMX15CM & 10CMX15CM (RECTANGULAR)	3CM X 3CM, 5CMX7.5CM, 2.5CMX15CM 10CMX15CM	229.01 229.02 229.03 229.04
230	Low Porosity FELTS Patch of PTFE	• Should have Thickness 1.5 to 1.8mm. • Should have Low Porosity to control bleeding and for buttress for sutures. • SIZES:-2' X 2", 4”X4’ & 6”X6’	2"x2" 4"x4" 6"x6"	230.01 230.02 230.03
231	PTFE Normal felt;		2"x2"	231.01

		• Should have Thickness 1.5 to 1.8mm. • To be used as a buttress for sutures and Friable tissue • SIZES:- 2”x2 ,4”x4 & 6”x6	4"x4"	231.02
			6"x6"	231.03
232	PTFE Hard (Thick) FELTS	• Should have Thickness around 3 mm to provide added support to tissue. • SIZES:- 4”X4” & 6”X6”	4"x4"	232.01
			6"x6"	232.02
233	PTFE FELTS PLEDGETS	• Shape:-Rectangle, Square Oval &Round. Should have Thickness around 1.6mm	4.8mm x 6.0mm (Rectangle	233.01
			9.5mmx4.8 mm (Rectangle)	233.02
			4.8mm x 6.0mm (Oval)	233.03
			6.0x6.0mm (Square)	233.04
234	e-PTFE graft			234.01
235	Regular & Small Beadings (Rings) PTFE graft all sizes and length.			235.01
236	BT Shunt PTFEgrafts all sizes and length			236.01
237	Large Diameters e PTFE Grafts all sizes and length e-PTFE Stretch Large Diameter			237.01
238	Reinforced Aortic Vascular Graft of all diameters and length			238.01
239	e-PTFE Cardiovascular Patch	• Sizes:- 5cm x 15cm x 0.6mm, 10cm x 15cm x 0.6mm, 3cmx 6cm x 0.4mm		239.01
240	e-PTFE Pericardial Membrane 0.1mm thick	• Sizes:- 5cm x 15cm x 0.6mm x10cm x 15cm x 0.6mm, 3cmx 6cm x 0.4mm		240.01
241	e-PTFE Pericardial Membrane 0.1mm thick	• Size 6cm x 12cm/12cmx12cm/15cm x 20cm		241.01
242	e-PTFE Stretch Reinforced Thin Wall Heparin Bonded Vascular Graft	10cms length Size: 3mm/3.5mm/4mm/5mm/6mm diameter		242.01
243	e PTFE Stretch Reinforced Thin wall Non Ringed Heparin Bonded Vascular Graft	40/80cms length Size: 6/7/8/mm diameter		243.01
244	e- PTFE Stretch Reinforced Removable Ringed Thin Wall Heparin Bonded Vascular Graft	50/70/80cm length size: 6/7/8mm diameter		244.01
245	e-PTFE Stretch Reinforced Thin Wall limbed Bifurcated Vascular Graft Size : 12/6x50cm	14/7x40cm/50cm; 16/8x50cm; 18/9x50cm; 20/10x50cm; 22/12 x40cm; 24/12x40cm		245.01
246	e PTFE Suture	Should come with standard length and needle sizes as OEM is making,	CV-0	246.01
			CV2	246.02

			CV3	246.03
			CV4	246.04
			CV5	246.05
			CV6	246.06
			CV7	246.07
			CV8	246.08
247	e-PTFE Stretch re-in forced removable ringed thin wall pre configured axillo bi femoral vascular graft.	Size: i) 8mm diameter x 70cm/40cm length		247.01
		ii) 8mm diameter x 90cm/40cm length		247.02
248	e-PTFE Radially Supported graft	e PTFE stretch re- in forced low profile integrated radially supported thin wall vascular graft. Size 6mm/7mm/8mm diameter 40cm/60cm/80cm length	6mm/7mm/ 8mm x 40cm/length	248.01
			Size 6mm/7mm/ 8mm x 60cm length	248.02
			Size 6mm/7mm/ 8mm x 80cm length	248.03
249	e PTFE stretch re-in forced removable ringed thin wall vascular graft	removable ringed Size: 6mm/8mm diameter x 50cm/70cm/80cm length	6mm/7mm/ 8mm x 50cm/length	249.01
			Size 6mm/7mm/ 8mm x 70cm length	249.02
			Size 6mm/7mm/ 8mm x 80cm length	249.03
250	Ascending aortic reconstruction graft	• One piece design collagen coated VALSALVA graft for repair or reconstruction of the ascending aorta. • Should mimic the anatomy and blood flow dynamics of the natural sinuses of Valsalva • Unique un-crimped section that does not stretch should allow easy sewing of valve remnants or prosthetic valve • Should facilitate estimation of the length required for optimal placement of valve remnants or prosthetic valve to ensure optimal clinical outcomes. • Should have the ability to be precisely trimmed and shaped in case of remodeling technique procedures. • At least 3 References line should act as a guide for prosthetic valve. • Coated polyester fabric Cross linked Type I bovine collagen • Water permeability < 5m * cm -2 min-1 @ 120mmHg		250.01

251	I.V. Set with flow controller (DEHP Free)	• Specially designed I.V. set for controlling the flow rate of fluid made of medical grade DEHP free polymer nonreactive to water-soluble materials. • Gravity drive infusion set with wide dial, which operates as thumb wheel like roller clamp. • Security door to prevent the accidental change of flow rate. • disposable set. • Sterile, individually packed in blister pack		251.01
252	Snugger Set	All sizes: Three pairs of smooth snuggers with Yellow, Blue & Pink colors for vessel identification.Each snare set consists of thumb holder handle for easy maneuverability. Specially designed for putting purse string sutures, made of medical grade PVC. Sizes Adult &Pediatric.	Size: Adult	252.01
			Size: Pediatric.	252.02
253	Disposable Suction Tube & Tip	Medical grade PVCmolded handles with kink resistant tube for per operative suctioning. Tip of Handle should be crown/ standard shape. Vent port to be provided in handle which should be closed with tight sleeve. Soft flexible adaptors at both end of the tube for connection with secure fitment between suction source& handle. Tube Length 2500 mm, OD: 9 mm, ID: 6 mm. Sterile packed in poly pouch pack.		253.01
254	Thoracic catheter	All Sizes: Extra soft thoracic drainage catheter, made of DEHP free medical grade polymer, gentle to body tissues & most suitable for thoracic drainage. Catheters are marked at every 2cm from the last eye. Sterile, double (straight) packed in peel able pouch pack. Sizes required: Sizes: 16, 20, 24, 28, 32, 36, 40 FG		254.01
255	Thoracic catheter Right Angled (90o)	All Sizes: Extra softangledthoracic drainage catheter, made of DEHP free medical grade polymer, gentle to body tissues & most suitable for thoracic drainage. Catheters are marked at every 2cm from the last eye. Sterile, double packed in peelable pouch pack. Sizes: 16, 20, 24, 28, 32, 36, 40 FG		255.01
256	Thoracic catheter with trocar – All Sizes	Thoracic drainage catheter with trocar for thoracic drainage purpose. Catheters to be marked at every 5, 10, 15 & 20 cm from the last eye. Fitted with tapered connector. Sterile, packed in peelable pouch pack. Sizes: 12, 16, 20, 24, 28, 32, 36 FG		256.01
257	Chest Drainage Bottle – 2000 ml	Under water seal drainage system.Double chamber compact unit with 2000 ml capacity.Easy to read graduation on bottle to determine the drainage volume precisely. Clearly marked initial level to ensure the underwater seal. Separate suction port for connection with suction unit. Should have valve to prevent excess suction. Kink resistant large bore tubing to facilitate unrestricted flow. Unit to be provided with metal hangers and floor stand. Sterile, packed in peelable pouch pack.		257.01

258	Chest Drainage Bottle – 1200 ml:	Under water seal drainage system. Single chamber compact unit with 1200 ml capacity. Easy to read graduation on bottle to determine the drainage volume precisely.Should have valve to prevent excess suction. Clearly marked initial level to ensure the underwater seal. Specially designed positive pressure relief valve. Separate suction port for connection with suction unit. Kink resistant large bore tubing to facilitate unrestricted flow. Unit to be provided with metal hanger/ floor stand. Sterile, packed in peelable pouch pack		258.01
259	Chest Drainage Bottle – 500 ml	Under water seal drainage system. Single chamber compact unit with 500 ml capacity. Easy to read graduation on bottle to determine the drainage volume precisely. Clearly marked initial level to ensure the underwater seal. Separate suction port for connection with suction unit. Kink resistant large bore tubing to facilitate unrestricted flow. Should have valve to prevent excess suction. Unit to be provided with metal hanger/ floor stand. Sterile, packed in peelable pouch pack		259.01
260	FOGARTY ARTERIAL EMBLECTOMY CATHETER	• Vinyl Latex Balloon tipped catheter for Arterial Emblectomy procedure. • Usable length 60-80 cm, Size 2F to 8F. • Recessed winding technique for balloon attachment for maintaining balloon symmetry for uniform contact with vessel wall, providing consistent clot removal		260.01
261	THRU LUMEN FOGARTY CATHETER	• Vinyl Latex Balloon tipped catheter for Arterial Embolectomy procedure. • Usable length 80 cm. • Size 2F-8F. • Second lumen for guide wire compatibility facilitating crossing occluded, tortuous &stenotic arterial wall OR to be used for drug delivery & blood sampling. • Stainless steel bushes under proximal & distal balloon windings for visualization under fluoroscopy. • Recessed winding technique for balloon attachment for maintaining balloon symmetry for uniform contact with vessel wall, providing consistent clot removal	2F	261.01
			3F	261.02
			4F	261.03
			5F	261.04
			6F	261.05
			7F	261.06
			8F	261.07
262	ELECTRO CAUTERY RETURN PLATE WITH CORD	• All sizes should be available • Disposable Sticky patient return split monitoring style. • Pre attached cable (US FDA approved) • All sizes should be available • Disp. Sticky patient return split monitoring style. • Cord should be provided separately. • US FDA approved	Adult	262.01
			Pediatric	262.02
			Neonatal	262.03
263	ELECTRO CAUTERY RETURN PLATE WITHOUT CORD	• Made up of reinforced spun-bond film composite material, blue laminate of polypropylene non-woven fibers and polyethylene film. • Highly absorbent yet impervious across entire drape. • Low-linting, non-breathable, abrasion resistant, durable, strong tear resistant, conformable, with self adhesive containing hypoallergenic acrylate type adhesive with a silicone coated paper liner. • ETO Sterilized.	Adult	263.01
			Pediatric	263.02
			Neonatal	263.03
264	Disposable surgical drape	• Made up of reinforced spun-bond film composite material, blue laminate of polypropylene non-woven fibers and	Genaral OT Backtable	264.01

		polyethylene film. • Highly absorbent yet impervious across entire drape. • Low-linting, non-breathable, abrasion resistant, durable, strong tear resistant, conformable, with self adhesive containing hypoallergenic acrylate type adhesive with a silicone coated paper liner. • ETO Sterilized.	Adult, CABG	264.02
			Adult, Valve Surgery	264.03
			Adult, Multipurpose	264.04
265	CABG drape Pack	4 Self adhesive cautery bags(30cmx35cm),3 Op tapes(10cmx55cm),4 Lint free hand towels(23.5cmx38cm),4 Self adhesive towel drapes(91.5cmx100cm),1 Self Adhesive Medium drape(183cmx183cm),1 Self Adhesive Large drape(150cmx250cm),1 Instrument table drape(150cmx200cm),1 Large Instrument table drape(183cmx240cm),1 Self Adhesive Bilateral Split drape(183cmx200cm),2 Triangular drape(91.5cmx91.5cmx129cm). ETO Sterlised		265.01
266	CAUTREY LEAD	• Disposable. • Hand control button switch with PTFE coated blade electrode. • Should be light weight • US FDA approved • Should be compatible with all standard brands of cautery machines.		266.01
267	TITANIUM LIGATING CLIPS “SIZE – Micro”	• Wire of the clip should be ‘ Heart shaped for a firm grip on Vessels • Clips should be of ‘Chevron’ shape for better closure • Cartridge should have adhesive backing for better control while loading. • Clips should be easy to lad with soft loading technique. • Clip cartridges should be color coded for better identification. • Clips quoted should be registered in India for selling. • Should have all required documentations like from 10 A and Form 41 etc. • Should be US FDA approved with clinic data backing for the same	Unit size will be One Cartirade of 6 clips	267.01
			Applicator for Micro Clip	267.02
268	TITANIUM LIGATING CLIPS “SIZE – SMALL”	• Wire of the clip should be ‘ Heart shaped for a firm grip on Vessels • Clips should be of ‘Chevron’ shape for better closure • Cartridge should have adhesive backing for better control while loading. • Clips should be easy to lad with soft loading technique. • Clip cartridges should be color coded for better identification. • Clips quoted should be registered in India for selling. • Should have all required documentations like from 10 A and Form 41 etc. • Should be US FDA approved with clinic data backing for the same	Unit size will be One Cartirade of 6 clips	268.01
			Applicator for Small Clip	268.02
269	TITANIUM LIGATING CLIP “ SIZE MEDIUM	• Wire of the clip should be ‘Heart shaped’ for a firm grip on vessels• Clips should be of ‘Chevron’ shape for better closure.• Cartridge should have adhesive backing for better control while loading.• Clips should be easy to load with soft	Unit size will be One Cartirade of 6 clips	269.01

		loading technique.• Clip cartridges should be color coded for better identification.• Clips quoted should be registered in India for selling. Should have all required documentations like from 10A and form 41 etc.• Should be US FDA approved with clinic data backing for the same	Applicator for Medium Clip	269.02
270	TITANIUM LIGATING CLIPS"SIZE- MEDIUM LARGE"	• Wire of the clip should be 'Heart shaped' for a firm grip on vessels. • Clips should be of "Chevron' shape for better closure. • Cartridge should have adhesive backing for better control while loading. • Clips should be easy to load with soft loading technique. • Clip cartridges should be color-coded for better identification. • Clips quoted should be registered in India for selling. Should have all required documentation like form 10A and form 41 etc. • Should be US FDA approved with clinic data backing for the same	Unit size will be One Cartirade of 6 clips	270.01
			Applicator for Medium -Large Clip	270.02
271	TITANIUM LIGATING CLIPS" SIZE-LARGE	• Wire of the clip should be 'Heart shaped for a firm grip on Vessels. • Clips should be of 'Chevron' Shape for better closure • Cartridge should have adhesive backing for better control while loading. • Clips should be easy to load with soft loading technique. • Clip cartridges should be color-coded for better identification. • Clip quoted should be registered in India for selling. Should have all required documentation like from 10A and form 41 etc. • Should be US FDA approved with clinic data backing for the same.	Unit size will be One Cartirade of 6 clips	271.01
			Applicator for Large Clip	271.02
272	APPLICATOR FOR TITANIUM CLIPS(Micro, Small, Medium, Medium - Large and Large)	Should be available in three shapes :CURVED, ANGLED & RIGHT ANGLED • Device to be compatible for titanium clips listed in the tender item code 268, 269 to 271		272.01
273	Aortic punch Long handle	• Size: 2.5cm to 6cm • Should have sharp dual cutting edge for clean, precise removal of aortic tissue. • A conical tip should be there for easy insertion by straight or button hole technique. • Ten blade sizes for trimming to desired size and shape 2.5mm – 6.0mm		273.01
274	Pediatric bronchial blocker	• Should have a catheter with a bifurcated distal end resembling the bifurcation of the trachea. During insertion through a standard endotracheal tube, both distal ends easily find their way into the two main stem bronchi. Under bronchoscopic vision the lung can be isolated by inflating the balloon. The inflated balloon will always be located at the entrance of the main bronchus. The EZ-Blocker should not dislocate after inflation of the isolated lung. If renewed isolation is required the balloon can be re-inflated without the need to reposition the balloon. Size -7mm.		274.01

275	DISPOSABLE CAMERA SLEEVE	• Transparent, plastic disposable, sterile camera sleeves, for use during MICS, for epicardial echo. • Circular diameter-6inches . • Lengthmore than 1meter		275.01
276	Specifications for tyvek roll	• Tyvek sheet in rolls, backed with a strong plastic top layer suitable for both Ethylene oxide and plasma sterilization. • Should be compatible with all standard brands of plasma and steam sterilization systems • Should have STERILISATION PROCESS indicator to confirm effective sterilization • required in. 70 mtrs Roll	5 cm	276.01
			7.5 cm	276.02
			10. cm	276.03
			15 cm	276.04
			17.5 cm	276.05
			20 cm	276.06
			25 cm	276.07
			30. cm	276.08
			35 cm	276.09
			40 cm	276.10
			45 cm	276.11
			50 cm	276.12
			60 cm	276.13
277-A	SURGICAL BRUSH with IODINE POVIDONE AND CHLOROHEXIDINE			277.01
277-B	SURGICAL BRUSH with CHLOROHEXIDINE			277.02
278	Vacuum Drainage Sets	• Device for close wound drainage under negative pressure post operatively with option to use one or two catheters. • Drain catheters should be provided with radio opaque line and smooth eyes. • Connecting tube should be kink resistant and should be provided with additional strength to withstand the suction. • Chamber should be easy to depress so as to activate the suction of bellow unit. • Should be available with different catheter. • Should be sterile and individually packed. • Sizes of 10, 12, 14, 16, 18 FG.	10	278.01
			12	278.02
			14	278.03
			16	278.04
			18	278.05
279	DRESSING ALL SIZES	• Adhesive, surgical site dressing. • Sterile. • Individually packed. • All sizes		279.01
280	ADHESIVE TRANSPARENT DRAPE (SURGICAL SITE FILM) ALL SIZES	• Should be equivalent to Povidine Iodine impregnated. US-FDA Approved • Should be self-adhesive sterile drape for surgery and wound dressing incise drape. • Should be available in assorted sizes.		280.01

281	Bedsores prevention air mattress	Air mattress for prevention and treatment of bedsores stage. • Should be low air loss and alternating pressure mattress. • Should have unique strip type design, which can change shape with the elevation of bed of the patient. • Should prevent bed sores/ accelerate healing of existing bedsores. • Should keep the interface pressure against patient's skin at a level below capillary occlusion. Should have mechanism to fit on the hoze of compressor • Mattress should resist a temperature of -30 degree Celsius and should support weight of 110kg. • Dimensions should be approx.180 x 80 x 7.5 cms. • Should be individually packed.		281.01
282	Respiratory muscle exerciser	(Inspiratory muscle trainer device) • Should incorporate a flow-independent, one-way valve to ensure consistent resistance, • Should feature an adjustable specific pressure setting to be set at a particular time. • It should work via inhalation to exercise the respiratory muscles. • It should have flow independent one-way valve, which should work at constant pressure regardless of patient's airflow. • It should be easy to set at adjustable pressure, whichcan be used/held in any position. • It should be easy to clean & should have the capacity to be used with mouthpiece. • It should be individually packed in poly bag.		282.01
283	Reusable Gel Pack	Reusable Gel packs for pain management. • It should be able to be kept in freezer for cold therapy. • It should be able to be microwaved (for appx. 2mintues) / kept in boiling water to provide hot fomentation. • Gel packs must be of a superior quality and non-toxic filling should be safe and hold temperatures for longer duration. • Should be durable, burst & puncture resistant. • Should have been designed to ensure even spread of gel inside the pack. • Two sizes: Large: 15 x 30cm (6" x 12") & Medium: 10 X 25 cm (4" x10").	Large Small	283.01 283.02
284	Carotid Shunts :	• Should have A Wide selection for Carotid Endartrectomy procedures. SHUNTS should be available in various sizes and lengths, including Straight, Tapered and "T" Design to add versatility in use.		284.01
285	DISP. BULL DOG CLAMPS ALL SIZES	Disposable' bull dog' clamps for temporary occlusion of vascular structures. Atraumatic.Made with standard quality plastic. Should be ETO sterlisable for repeated use.		285.01
286	Vessel Scraper	Should be able to scape fat away from the coronary artery. • Should be light weight. • Should be pre mounted on a disposable handle		286.01
287	Arteriotomy Knife	Should have high quality, sharp pointed blade for precise incision. • Should be suitable to make incision in 1mm artery. • Should be pre mounted on a disposable handle.		287.01

288	Sternal band	Polyethero-ether ketone material pack of 5 OEM will provide Required instrument set on FOC basis		288.01
289	Polypropylene Blue Monofilament with Tungsten Rhenium alloy needle	8-0 3/8 Circle, 8mm Double Needle Taper point 60-70CM		289.01
290	Polypropylene Blue Monofilament with Tungsten Rhenium alloy needle	6-0 3/8 Circle 13 MM DA Taper point 60-70CM		290.01
291	Polypropylene Blue Monofilament with Tungsten Rhenium alloy needle	7-0 3/8 Circle 9.3 MM DA Taper point 60-70CM		291.01
292	Polypropylene blue monofilament , Suture with 1:1 suture needle thickness ratio	5-0 3/8 Circle 9mm-10 DA Taper point 60cm		292.01
293	Polypropylene blue monofilament , Suture with 1:1 suture needle thickness ratio	5-0 3/8 Circle 9-10mm Taper point 60cm		293.01
294	Polypropylene blue monofilament , Suture with 1:1 suture needle thickness ratio	4-0 3/8 Circle 13mm Taper point 60-70CM		294.01
295	Polypropylene blue monofilament ACC BI-curve needle	7-0 ACC BI-Curve 9-10mm , DA BI-curve contrast needle 60-70CM		295.01
296	Undyed Coated Polyglactin 910 coated with Irgacare MP (purest form of triclosan) , braided	3-03/8 Circle 24mm Cutting ETHALLOY MULTI-PASS70-75cm		296.01
297	Undyed Coated Polyglactin 910 coated with Irgacare MP (purest form of triclosan) , braided	2-0 1/2 Circle 36mm Taper point CT-1 90-100cm		297.01
298	Undyed Coated Polyglactin 910 coated with Irgacare MP (purest form of triclosan) , braided	1-0 1/2 Circle 36mm Taper point CT-1 90-100cm		298.01
299	Braided Polyster green coated with Polybutylate **4 Sutures Per Pack per foil PTFE Pledgets (6mmc3mmx1.5mm)**	2-0 1/2 Circle 17MM DA Taper cut 90-100cm		299.01
300	Braided Polyster green coated with Polybutylate , **4 Sutures Per Pack per foil PTFE Pledgets (6mmc3mmx1.5mm)**	2-0 1/2 Circle 26MM DA taper cut 90-100cm		300.01

301	Braided polyester with polybutylate coating ,, Braided Multistrand 5 Green & 5 White strands in a foil PTFE POLYMER PLEDGET 6mm x 3mm x 1.5mm (10 Suture - Per Foil)	2-0 1/2 Circle 17mm DA Taper cut 75-90cm		301.01
302	Braided polyester with polybutylate coating, , Braided Multistrand 5 Green & 5 White strands in a foil PTFE POLYMER PLEDGET 3mm x 3mm x 1.5mm (10 Suture - Per Foil)	2-0 1/2 Circle 17mm DA Taper cut 75-90cm		302.01
303	Braided polyester with polybutylate coating, , Braided Multistrand 5 Green & 5 White strands in a foil PTFE POLYMER PLEDGET 6mm x 3mm x 1.5mm (10 Suture - Per Foil)	2-0 1/2 Circle 26mm DA Taper cut 75-90cm		303.01
304	PROLENE Blue Monofilament 75 cm Firm POLYMER PLEDGETS 3mm x 3mm x 1.5 mm	5-0 1/2 Circle Needle 13mm DA round body 75-90cm		304.01
305	PROLENE Blue Monofilament 75 cm Firm POLYMER PLEDGETS 3mm x 3mm x 1.5 mm	4-0 1/2 Circle Needle 17mm DA round body 90-100cm		305.01
306	**CABG On Pump Procedure Kit for single Procedure – repacked, Include Sutures :-**	2 foils of 7-0 Polypropylene 3/8 Circle CC DA 60 cm 9.3 mm, 2 foils of 6-0 Polypropylene 3/8 Circle 75 cm 13 mm, 1 foil of 5-0 Polypropylene 1/2 Circle RB DA 90 cm 17 mm, 1 foil of 4-0 Polypropylene 1/2 Circle RB DA 90 cm 17 mm, 1 foil of 6 no STEEL 1/2 Circle Cutting CCS, 3 Blunt point 4x45 cm 48 mm 1 foil of BONE WAX 2.0 gm, 1 foil of 0 no Silk 1/2 Circle RB Black Braided 90 cm 30 mm, 2 foil of 4-0 Silk 1/2 Circle RB Black Braided 90 cm 16 mm, 2 foil of 2-0 Undyed Polyglactin 910 1/2 Circle RB Braided 100cm 36 mm, 1 foil of 1 Undyed polyglactin 910 1/2 Circle RB Braided 100cm 36 mm, 1 foil of 3-0 Undyed polyglactin 910 1/2 circle RB Braided 75 cm 24 mm		306.01

307	**CABG Off Pump Procedure Kit for single Procedure – repacked, Include Sutures :-**	1 Foil of 8-0 Polypropylene 3/8 Circle TP DA 60 cm 8 mm, 1 Foil of 7-0 Polypropylene 3/8 Circle CC DA 60 cm 9.3 mm, 2 foils of 6-0 Polypropylene 3/8 Circle 75 cm 13 mm, 1 foil of 5-0 Polypropylene 1/2 Circle RB DA 90 cm 17 mm, 1 foil of 4-0 Polypropylene 1/2 Circle RB DA 90 cm 17 mm, 1 foil of 6 no STEEL 1/2 Circle Cutting CCS, 3 Blunt point 4x45 cm 48 mm 1 foil of BONE WAX 2.0 gm, 1 foil of 0 no Silk 1/2 Circle RB Black Braided 90 cm 30 mm, 2 foil of 4-0 Silk 1/2 Circle RB Black Braided 90 cm 16 mm, 2 foil of 2-0 Undyed Polyglactin 910 1/2 Circle RB Braided 100cm 36 mm, 1 foil of 1 Undyed polyglactin 910 1/2 Circle RB Braided 100cm 36 mm, 1 foil of 3-0 Undyed polyglactin 910 1/2 circle RB Braided 75 cm 24 mm		307.01
308	Suture pledget	Polyvinylidene Fluoride Monofilament 3/8 circle tapercut/roundbody, 6/0, double armed, 10mm, 60cm, with pledget 2x3.5x0.4		308.01
309	Suture pledget	Polyvinylidene Fluoride Monofilament 3/8 circle tapercut/roundbody, 6/0, double armed, 10mm, 75cm, with pledget 2x3.5x0.4		309.01
310	Suture pledget	Polyvinylidene Fluoride Monofilament 1/2tapercut/roundbody, 5/0, double armed, 13mm, 75cm, with pledget 2x3.5x0.4		310.01
311	Suture	Polymide 6.6 treated monofilament 3/8 circle taper point 5/0 double armed ,16mm, 80cm		311.01
312	Suture	Polymide 6.6 treated monofilament 3/8 circle taper point 6/0 double armed ,16mm, 80cm		312.01
313	Clips micro	Titanium clips micro, white, one cartridge 9 clips, 2.6mm		313.01
314	Clips small	Titanium clips small, yellow,one cartridge 9 clips,3.6mm		314.01
315	Clips medium	Titanium clips medium, blue, one cartridge 9clips, 5.6mm		315.01
316	Clips Medium large	Titanium clips medium large , green, one cartridge 6clips, 9.0mm		316.01
317	Clips large	Titanium clips large, orange,one cartridge 6 clips, 12.3mm		317.01
318	Applicator	Applicator micro, Small, Medium, Medium large, Large with various length And angles At tip for item No. 313-317		318.01
319	Oxygenator infant-Paeditric	Infant- paeditric oxygenator totally coated phosphorylcholine coating, prime volume 99ml, surface0,84m2, blood flow 0.5-3.0 l/min		319.01
320	Oxygenator infant-Paeditric with filter	Infant- paeditric oxygenator totally coated phosphorylcholine coating with modular cascade filtration (with interated arterial filiter) prime volume 130ml, surface0,84m2, blood flow 0.5-3.0 l/min		320.01
321	Oxygenator Adults	THE LOWEST PRIME ADULT OXYGENATOR phosphorylcholine coating, Oxygenator is specially designed to have the lowest priming volume (190 ml) surface area 1,35m2, max blood flow 7,0 l/min with low contact surface area, combining excellent gas transfer performances with clinical flexibility for small adult and adult Patients. OPTIMAL ERGONOMIC DESIGN FOR PERFUSION COMFORT. Improved ease of use thanks to the top venous inlet port and a large variety of connector adapters for enhanced customization capabilities.		321.01

322	CARDIOPLEGIA DELIVERY SYSTEM :	The Cardioplegia Heat Exchanger aims to meet all the performance expectations with the following product features: a) Priming between 20-30 ml b) k) A flow dynamic engineering system which can effectively mix the blood and crystalloid solution to the desired preparations (1:4& 4:1 ratios) Complete blood for warm shot also Allows delivery in any ratio either Delnido 4 part Crytalloid:1 blood) or Microplegia(1 part crystalloid and 4 part blood) c) Portsareavailableforinfusion,sampling,temperaturereading,andthe inlet/outlet connector easily adapt 1⁄4'' tubes for infant, paediatric and adult patient use. d) While priming, the perfusionist can easily purge air through the one port between the inlet and outlet with minimal holdup volume. e) The pleated anodized aluminium heat exchanger hasminimum surface area ,delivery froth –free, to allow the excellent mixing of blood with cardioplegia. f) An air trap column at the entry port provides additional safety by trapping any micro air bubbles going out. g) Thebottom-in,top-outflowpathenablescompletedrainagewith minimal blood holdup volume. h) The PVC recirculation lines are preconnected with their respective connectors to ensure easy setup and use. i) Available individually packed or preconnected with recirculation line j) Product has double protective packing that can be pealed easily when assembling k) A cardioplegia Heat exchanger which can infuse the contents to the patient as and when the surgeons wantsinstantly without any delay . l) An in-built 200 µ Filter to prevent micro air bubbles.		322.01
323	Four Lumen Central Line Catheter 8.5 Fr. (13Cm Length)	It should have Four (4) lumen Central Venous catheter with Straight Needle. Catheter Size 8.5 Fr. It should have Nitonol Guide wire (45/60 cm * 3 mm) and (Diameter Distal 16 G Medial 1 14 G, Medial 2 18 G, Proximal 18 G). Length of catheter 13 cm.		323.01
324	central venous catheter single lumen 16 G	It should be sterile Single packing Single lumen catheter 16g set for cauterization of the vena cava according to the catheter through cannula technique, Length 40 cm Dilator 4/5 Fr, Guide wire		324.01
325	central venous catheter Tripe lumen 4.5 f	It should have Four (4) lumen Central Venous catheter with Straight Needle. Catheter Size 4.5 Fr. It should have Nitonol Guide wire (45/60 cm * 3 mm) and (Diameter Distal 23G , Medial 20 G, Proximal 23 G). Length of catheter 6cm cm.		325.01
326	central venous catheter Tripe lumen 5.5 f	It should have Four (4) lumen Central Venous catheter with Straight Needle. Catheter Size 5.5 Fr. It should have Nitonol Guide wire (45/60 cm * 3 mm) and (Diameter Distal 22G Medial 18 G, Proximal 22 G). Length of catheter 8 cm.		326.01
327	Bulldog Clamp	Novaclip atraumatic spring clip,17mm straight,Blue		327.01
328	Bulldog Clamp	Novaclip atraumatic spring clip,12mm straight,Magenta		328.01
329	Bulldog Clamp	Novaclip atraumatic spring clip, 12mm angled, Yellow		329.01

330	Bulldog Clamp	Greyhound Adjustable spring clip, 6mm straight		330.01
331	Applier	Applicator for Sofia / Greyhound® Spring Clips	* Adhesive with povidone Iodine. * It Should be USFDA approved. * It Should be effective against methicillin-resistant Staphylococcus aureus (MRSA) at a depth of 1000 microns.	331.01
332	Applier	Applicator for NOVACLIP® spring clips		332.01
333	Enclose II	Proximal Anastomosis Assist Device (with Aortic Punch 3.5 mm)		333.01
334	Enclose II	Proximal Anastomosis Assist Device (with Aortic Punch 4.0 mm)		334.01
335	Enclose II	Proximal Anastomosis Assist Device (with Aortic Punch 4.5 mm)		335.01
336	Antimicrobial Incise Drapes	* It Should be GAMMA sterilize only. * For covering incision area(Overall size 66cm X 45cm OR Adhesive area 56cm X 45cm). * Adhesive with povidone Iodine. * It Should be USFDA approved. * It Should be effective against methicillin-resistant Staphylococcus aureus (MRSA) at a depth of 1000 microns.		336.01
337	Antegrade Ostial Cardioplegia Cannula-Neonatal	Antegrade-cardioplegia cannula should be made of soft 100% silicone conduit with distal bulbous end & amp; should have luer lock connector at the proximal end for administration of cardioplegia solution into the coronary ostia, suitable for doing neonatal arterial switch surgery		337.01
338	ePTFE Conduit	length 35 cm, sizes 16, 18, 20, 22 ringed		338.01
339	ePTFE Conduit	length 35 cm, sizes 16, 18, 20, 22 non ringed		339.01
340	BT Shunt ePTFE made m	sizes 3.0mm, 3.5mm, 4.0mm, 4.5mm, 5.0mm		340.01
341	Bovine Pericardial Patch	Ready-to-use, rinseless preparation, glutaraldehyde fixed/ glutaraldehyde free, anticalcification treatment, size 8x8 cm, preferably USFDA approved		341.01
342	Non Absorbable monofilament polypropylene surgical suture	5-0, 1/2 circle, taper point, 13mm needle, 60-75 cm, non pledgeted, double arm		342.01
343	Non Absorbable monofilament polypropylene surgical suture	5-0, 1/2 circle, taper point, 17mm needle, 60-75 cm, non pledgeted, double arm		343.01
344	Non Absorbable monofilament	6-0, 1/2 circle, taper point, 8-10mm needle, 6-75 cm, non pledgeted, double arm		344.01

	polypropylene surgical suture			
345	**ECMO PLS Kit Adult**	A. Centrifugal Pump.Max flows: 0 to 10 lits/min.Channel type.Priming volume: 20 - 32 ml.Diffusion membrane.Oxygenator.Hollow fiber Polymethylpentene.Max Flows: 0.5 to 7 lits/min.Surface area: 1.8 sq. mts.Heat exchanger: Integrated into oxygenator. Heat exchanger membrane type: Polyurethane.Coated with Bioline (Albumin + Heparin)		345.01
346	**ECMO PLS Kit Adult MECC**	A. Centrifugal Pump.Max flows: 0 to 10 lits/min.Channel type.Priming volume: 20 - 32 ml.Diffusion membrane.Oxygenator.Hollow fiber Polymethylpentene.Max Flows: 0.5 to 7 lits/min.Surface area: 1.8 sq. mts.Heat exchanger: Integrated into oxygenator. Heat exchanger membrane type: Polyurethane.Coated with Bioline (Albumin + Heparin)		346.01
347	**ECMO PLS Custom Pack Adult**	A. Centrifugal Pump.Max flows: 0 to 10 lits/min.Channel type.Priming volume: 20 - 32 ml.Diffusion membrane.Oxygenator.Hollow fiber Polymethylpentene.Max Flows: 0.5 to 7 lits/min.Surface area: 1.8 sq. mts.Heat exchanger: Integrated into oxygenator. Heat exchanger membrane type: Polyurethane.Coated with Bioline (Albumin + Heparin)		347.01
348	**Ecmo canulas Venous**	Bioline coated Sizes 19, 21, 23, 25, 30		348.01
349	**Ecmo canulas Arterial**	Bioline coated Sizes 13, 15, 17, 19, 22		349.01
350	**Heart –Stabilizer**	Thin mount with a constant low profile design for an optimized work area.Stabilizer allows a vertical drop of the FLEXLINK arm into the chest cavity.Proprietary technology provides 180º side-to-side range of motion of the arm.Integrated channels secure tubing away from the work area		350.01
351	**IAB Catheters**	The balloon must have a co-lumen design The balloon membrane has to be of durathathane material 7.5 french catheter with no step down		351.01
352	**Heart positioner**	Active suspension technology allows normal cardiac motion and maintains stable hemodynamics.Tissue-conforming suction cup uses gentle vacuum to securely lift and hold the heart.Designed for apical or nonapical placement		352.01
353	**Knitted Graft**	Collagen-coated polyester .Reverse locknit knitting technique.radial tensile strength.No suture hole bleeding.bovine collagen.Cross-linked Type.Water permeability ≤ 5ml • cm-2 • min-1@120 mmHg.Wall thickness** 0.49 mm Sizes 40 CM 6,7,8,10,		353.01
354	**Knitted Graft**	Collagen-coated polyester .Reverse locknit knitting technique.radial tensile strength.No suture hole bleeding.bovine collagen.Cross-linked Type.Water permeability ≤ 5ml • cm-2 • min-1@120 mmHg.Wall thickness** 0.49 mm Sizes 40 CM ,12,14,16,18,20,22,25		354.01
355	**Knitted Graft**	Collagen-coated polyester .Reverse locknit knitting technique.radial tensile strength.No suture hole bleeding.bovine collagen.Cross-linked Type.Water permeability ≤ 5ml • cm-2 • min-1@120 mmHg.Wall thickness** 0.49 mm Sizes 70 CM 6,7,8,11		355.01

356	**Silver Knitted Graft**	Silver acetate collagen-coated polyester graft. Knitted, Woven.antimicrobial.reduce the risk of graft-related infection Silver acetate does not promote bacterial resistance Validated intended use with rifampicin loading.bovine collagen.Water permeability ≤ 5ml • cm-2 • min-1@120 mmHg Sizes 40 CM 6,7,8,10,		356.01
357	**Silver Knitted Graft**	Silver acetate collagen-coated polyester graft. Knitted, Woven.antimicrobial.reduce the risk of graft-related infection Silver acetate does not promote bacterial resistance Validated intended use with rifampicin loading.bovine collagen.Water permeability ≤ 5ml • cm-2 • min-1@120 mmHg Sizes 40 CM 12,14,16,18,20,22,25		357.01
358	**Silver Knitted Graft**	Silver acetate collagen-coated polyester graft. Knitted, Woven.antimicrobial.reduce the risk of graft-related infection Silver acetate does not promote bacterial resistance Validated intended use with rifampicin loading.bovine collagen.Water permeability ≤ 5ml • cm-2 • min-1@120 mmHg Sizes 70 CM 6, 7, 8, 11		358.01
359	**Knitted Bifurgated Graft**	Collagen-coated polyester .Reverse locknit knitting technique.radial tensile strength.No suture hole bleeding.bovine collagen.Cross-linked Type.Water permeability ≤ 5ml • cm-2 • min-1@120 mmHg.Wall thickness** 0.49 mm Sizes 12x6, 14x7, 16x8, 18x10		359.01
360	**Silver Knitted Bifurgated Graft**	Silver acetate collagen-coated polyester graft. Knitted, Woven.antimicrobial.reduce the risk of graft-related infection Silver acetate does not promote bacterial resistance Validated intended use with rifampicin loading.bovine collagen.Water permeability ≤ 5ml • cm-2 • min-1@120 mmHg Sizes 12x6, 14x7, 16x8, 18x10		360.01
361	**Woven Graft**	Collagen-coated external-velour polyester .minimize thrombus formation.weave design.Coated polyester fabric Cross-linked Type I bovine collagen.Water permeability ≤ 5ml • cm-2 • min-1@120 mmHg.Wall thickness** 0.38 mm. Sizes 12,14,16,18,20,22,24,26,28,30,33		361.01
362	**Silver Woven Graft**	Collagen-coated external-velour polyester .minimize thrombus formation.weave design.Coated polyester fabric Cross-linked Type I bovine collagen.Water permeability ≤ 5ml • cm-2 • min-1@120 mmHg.Wall thickness** 0.38 mm. Sizes 12,14,16,18,20,22,24,26,28,30,33		362.01
363	**INTERGARD WOVEN AORTIC ARCH Graft**	Pre-sewn and Anatomically correct angle of branches designed for total replacement allow reduced cardiac ischemic time.Coated polyester fabric Cross-linked Type I bovine collagen.Water permeability* ≤ 5ml • cm-2 • min-1@120 mmHg.Wall thickness** 0.38 mm.45°suture retention** 2.53 kg. Sizes 20,22,24,26,28,30,32,35		363.01
364	**CARDIOROOT**	one piece-design collagen-coated VALSALVA. For ascending aorta.Should mimic the anatomy and blood flow dynamics of the natural sinuses of Valsalva.Anatomically correct shape.Unique uncrimped section that does not stretch:can be precisely trimmed and shaped.Water permeability ≤ 5ml • cm-2 • min-1@120 mmHg.Coated polyester fabric Cross-linked Type I bovine collagen. sizes 24,26,28,30,32,35		364.01

365	**Endoscopic Vessel Harvesting System**	The Endoscopic Harvesting System should be designed for use in conjunction with the 7mm Endoscope. Harvesting Cannula should have four lumens to house the Endoscope, C-Ring, Distal Lens Washer Tube & BiSECTOR Bipolar Ligating Forceps for ligation & division of vessel branches.C-Ring/Distal lens washer should be independently controlled by a C-BiSECTOR can be extended/retracted through the main cannula by inserting it into the Tool Adapter Port, and rotated independently.Bipolar coagulation should be achieved using electrosurgical energy.Short Port Blunt Tip Trocar (BTT) should be provided which is used to provide a port of access for insertion of endoscopic instruments into an incision site.syringe should be provided for inflation/deflation of the Balloon.		365.01
366	**7mm Extended Length Endoscope vasio view Hemopro-2**	The 7 mm Endoscope (Zero Angle) should be a reusable product, which consist of a stainless steel Shaft housing optical and illumination components.proximal end should have an Eyepiece for camera adapter attachment,7 mm Endoscope should be designed to be used in conjunction with the removable Dissection Tip for blunt dissection of tissue and isolation of structures in the cavity.		366.01
367	**Plastic Bulldog**	All sizes, Curved or streight, one piece design		367.01
368	**PiCCO Catheter**	PiCCO technology is based on two principles namely, trans pulmonary thermodilution and pulse Global End Diastolic Functioncontour analysis.Stroke Volume Variation(SVV).Pulse Pressure Variation(PPV),Global Ejection Fraction(GEF),Extravascular Lung water index (ELWI)Pulmonary Vascular Permiability Index (PVPI). Systemic Vascular Resistance index(SVRI)Temperature sensor at the catheter tip for trans pulmonary thermodilution		368.01
369	**Pericardial Patch**	Cardiac and great-vessel reconstruction and repair and pericardial closure.soft, pliable tissue conforms to uneven surfaces and minimizes suture hole leaks for more reliable repairs.Glutaraldehyde and EnCap™ anti-calcification technology,promote host endothelialization . bovine pericardium resists shrinkage and aneurysm formation. Rinse less Preparation, Ready to use.Thinner patch		369.01
370	**Mechnical Heart Valves Rotatable**	Mechanical Heart Valves for both Aortic and Mitral Heart position available in sizes 17 mm to 31mm. Bi-leaflet and rotatable. protrusion of leaflets from the housing is 3.4mm.wall clearance – 6.6mm 85°. U.S FDA approved.Pyrolytic carbon. Patented butterfly upstream pivot design		370.01

371	**AGFN-756 (Regent Flex cuff)- Aortic Mechanical heart valve**	Mechanical Heart Valves for Aortic position.Individually sterilized and ready for use in individual patients.Five years from the date of manufacturing. Bi-leaflet and rotatable. Supra-annular placement. Maximum protrusion of leaflets from the housing is 3.4mm.84% orifice to annulus ratio. 85 degrees.Significantly larger EOA's than other mechanical heart valves.Significant reduction in LV mass. Pyrolytic carbon. Patented butterfly upstream pivot design . U.S FDA approved. MRI conditional.sizes 17 mm to 29mm.The Flex Cuff is flanged and more pliable than the standard cuff.		371.01
372	**Conduit**	Double-velour woven fabric offers excellent sealing handling and healing characteristics.Collagen impregnation provides uniform tissue in-growth and biocompatibility. Rotatable valve attached. Cuff Configuration. US. FDA approved.sizes: 19mm to 33 mm		372.01
373	**Aortic Tissue Heart Valve**	Biological tissue heart valves for Aortic Heart position available in sizes 19mm-27mm. Triple composite porcine valves. Anti-calcification treatment. U.S FDA approved.Low Pressure glutarldehyde fixation		373.01
374	**Mitral Tissue Heart Valve**	Biological tissue heart valves for Mitral Heart position available in sizes 25mm-33mm. Triple composite porcine valves. Anti-calcification treatment. U.S FDA approved.Low Pressure glutarldehyde fixation		374.01
375	**Valve Annuloplasty Rings - Tricuspid**	Available in sizes 25mm to 35mm. tricuspid and mitral repair. double velour cuff . Full flexible ring can be tailored.Posterior support.Flexible design.Secure ergonomic holder and handle.Open holder facilitates.US. FDA approved		375.01
376	**Repair options for Heart Valves (Rigid)**	Repair solutions available in both flexible as well as rigid forms. rigid ring is a full 3D ring which creates natural saddle shape. titanium alloy core.polyester cuff..unique triangular core.U.S FDA approved rings.sizes 22mm to 34mm.		376.01
377	**SEMI-RIGID SEGUIN RING**	Semi-rigid ring has three-dimensional Flexibility. preserve the physiologic movement of the valve annulus.Sewing ring fabric: Polyester Double Velour.Core: Polyethylene.sizes 24mm-40mm. Secure ergonomic holder and handle quickly attach and detach to save time during implant.Solid, one-piece inner core resists needle penetration and reduces the potential for suturing through the core.USFDA		377.01
378	**Trifecta GT**	valve is bovine pericardial bioprosthesis for the aortic position called the next generation Trifecta™ valve designed for improved ease of placement.FDA approved.leaflets made from a single strip of pericardiumexternally mounted over a titanium stent and this allows complete opening of the leaflets and aids in proper coaptation.polyester sewing cuff with a scalloped shape , without a silicone insert; and there is the presence of 3 suture markers.Minimizes suture drag and parachuting forces- Hence the valve ' GLIDES' onto the annulus with ease.annulus shape. Conical, streamlined.A Pericardial cover on the stent helps in mitigating the tissue abrasion with tissue to tissue contact.sizes 19mm, 21mm,23mm,25mm,27mm and 29mmA propriety fixation procedure aids in proper leaflet shaping for proper leaflet coaptation.		378.01

379	**Titanium clip**	Metal ligation clip 1.91 mm width and 2.24 closed length with 30% smaller than small clips, USFD and CE approved,heart shapped wire with inner locking grooves f chevron shape for more vessel engulfing,Transverse Grooves, Micro white Cartidge of 6 Clip		379.01
380	**Titanium clip**	Metal ligation clip with 1.98 mm width and 3.63 closed length, USFD and CE approved,heart shapped wire with inner locking grooves , chevron shape for more vessel engulfing,Transverse Grooves,Lateral Clip-restraining springs, small yellow Cartidge of 24 Clip		380.01
381	**Titanium clip**	Metal ligation clip with 2.08 mm width and 3.63 closed length, USFD and CE approved,heart shapped wire with inner locking grooves , chevron shape for more vessel engulfing,Transverse Grooves,Lateral Clip-restraining springs, small wide Red Cartidge of 24 Clip		381.01
382	**Titanium clip**	etal ligation clip with 3.02 mm width and 5.89 closed length, USFD and CE approved,heart shapped wire with inner locking grooves , chevron shape for more vessel engulfing,Transverse Grooves,Lateral Clip-restraining springs, medium blue Cartidge of 24 Clip		382.01
383	**Titanium Clip Applier**	High quality stainless steel applier,compatible only with Weck Horizon clips, opens at box lock for cleaning purpose,jaws alignment to avoid clip fallout Angle shape and Straight shape		383.01
384	Advance IV Kit for positive patient.	Peripheral IV line kit consisting of 1 pc of reinforced IV dressing advance size 7cm x 8.5cm, 1 pc of 2% w/v Chlorhexidine gluconate and 70% v/v isopropyl alcohol skin prep swab, 1 pc of Latex free disposable tourniquet and 1 pc of sterile gauze swab / 1 ml Sting Barrier Film. 20 Pcs in Pkt. It should be comfortable for positive patient.		384.01
385	Peripheral IV dressing for neonates.	Polyurethane film peripheral IV dressing for neonates reinforced with soft cloth border and notch with pattern coated acrylic adhesive. It has a picture frame delivery system with 3 extra sterile tape strips for additional secure and complies with ISO-10993 standards for biocompatibility. Size: 3.8cm x 4.5cm. It Should be approved by HRIPT and HCIPT Test		385.01
386	Peripheral IV dressing for pediatric.	Polyurethane film peripheral IV dressing for pediatric reinforced with soft cloth border and notch with pattern coated acrylic adhesive. It has a picture frame delivery system with 3 extra sterile tape strips for additional secure and complies with ISO-10993 standards for biocompatibility. Size: Size: 5cm x 5.7cm. It Should be approved by HRIPT and HCIPT Test		386.01
387	Transparent Film Dressing Frame.	Dressings are made with a thin, semi-permeable film that enables long wear time and full site visibility to minimize unnecessary dressing changes. Size 4 inch x 10 inch (10 cm x 25 cm)		387.01
388	Antimicrobial Incise Drape With Pouch.	Antimicrobial Incise Drapes effectively help prevent wound contamination, Size - 87 cm x 74 cm, Incise area 30 cm x 30 cm		388.01
389	Antimicrobial Incise Drape With Pouch.	Antimicrobial Incise Drapes effectively help prevent wound contamination, Size - 74 cm x 87 cm, Incise area 42 cm x 52 cm.		389.01

390	Canister 500 ML	501 ml Canister with Gel Company Should be having manufacturing or import License It should be DCGI and FDA & CE Certified Shoul be compatible to burst abdominal vac dressing veraflow and Abthera		390.01
391	Vac Dressing Granufoam	NPWT Dressing kits containing Small Polyurethane foam Dressing (10 x 7.5 x 3.2cm) with drape, ruler, trac tubing and 1-ltr canister for exudate collection.It should be DCGI and FDA & CE Certified & company having manufactutring or import license		391.01
392	Vac Dressing Granufoam	NPWT Dressing kits containing Medium Polyurethane foam Dressing (18 x 12.5 x 3.2cm) with with drape, ruler, trac tubing and 1-ltr canister for exudate collection.It should be DCGI and FDA & CE Certified & company having manufactutring or import license		392.01
393	Vac Dressing Granufoam	NPWT Dressing kits containing Large Polyurethane foam Dressing (26 cm x 15 cm x 3.2cm) with drape, ruler, trac tubing and 1-ltr canister for exudate collection.It should be DCGI and FDA & CE Certified & company having manufactutring or import license		393.01
394	Pressure Garment	Custom made Pressure Garment below Knee stockings Pair.		394.01
395	Pressure Garment	Custom made Pressure Garment Full Knee stockings Pair.		395.01
396	Pressure Garment	Custom made Pressure Garment Fore arm		396.01
397	Pressure Garment	Custom made Pressure Garment Full arm		397.01
398	Pressure Garment	Custom made Pressure Garment Fore arm with Guantlet		398.01
399	Pressure Garment	Custom made Pressure Garment Full arm with guantlet		399.01
400	Membrane Oxygenator Efficient Heat Exchanger **with Surface coating** with Hardshell Venous Reservoir, Cardiotomy Filter and Integrated **Arterial Filter.** 7 Ltr	Recommended Max Blood flow rate: 5001 to 8000 ml/min, Static priming vol: 180 to 350 ml, Maximum Hardshell Reservoir Capacity: 4000 to 4500 ml, Minimum Hardshell Reservoir Capacity: 200 to 300ml, Venous Reservoir filter: 20 to 47 µ, Suction inlet No.: minimum 4, Filtered quick prime No.: minimum 1, Filter luer No.: minimum 2, Venous blood flow: 7000 to 8000 ml/min, Membrane Surface area: 1.8 to 2.5 m^2. Specifications of Arterial Filter: Maximum Blood flow rate: 6 to 8 lit/min, Low Priming Volume, Inlet and Outlet 3/8 For Adult		400.01
401	Membrane Oxygenator Efficient Heat Exchanger **with Surface coating. Small Adult 5 Ltr**	Cardiotomy filter and integreated arterial filterRecommended Max Blood flow rate: 4000 to 5000 ml/min, Static priming vol: 120 to 175 ml, Maximum Hardshell Venous Reservoir Capacity: 3000 to 4200 ml, Minimum Hardshell Reservoir Capacity: 70 to 150 ml, Venous Reservoir filter: 20 to 47 µ, Suction inlet No.: minimum 4, Filtered quick prime No.: minimum 1, Filter luer No.: minimum 2, Venous blood flow: 4000 to 5000 ml/min, Membrane Surface area: 1.0 to 1.5 m^2. Specifications of Arterial Filter: Maximum Blood flow rate: upto 5 lit/min, Low Priming Volume, Inlet and Outlet 3/8 For Small Adult CE Approved		401.01

402	Membrane Oxygenator Efficient Heat Exchanger **with Surface coating. Ped. 4 Ltr**	Cardiotomy filter Recommended Max Blood flow rate: 2000 to 3000 ml/min, Static priming vol: 90 to 145 ml, Maximum Hardshell Reservoir Capacity: 1600 to 3000 ml, Minimum Hardshell Reservoir Capacity: 15 to 70 ml, Venous Reservoir filter: 20 to 47 µ, Suction inlet No.: minimum 4, Filtered quick prime No.: minimum 1, Filter luer No.: minimum 2, Venous blood flow: 2000 to 3000 ml/min, Membrane Surface area: 0.6 to 1.5 m^2.Specifications of Arterial Filter: Maximum Blood flow rate: 3.2 to 5 lit/min, Low Priming Volume, Inlet and Outlet 3/8 For Paediatric CE Approved		402.01
403	Membrane Oxygenator Efficient Heat Exchanger **with Surface coating** with Hardshell Venous Reservoir, Cardiotomy Filter and Integrated **Arterial Filter. Neonatal 1.5 Ltr**	Recommended Max Blood flow rate: 800 to 2000 ml/min, Static priming vol: 35 to 70 ml, Maximum Hardshell Reservoir Capacity: 700 to 1500 ml, Minimum Hardshell Reservoir Capacity: 15 to 30 ml, Venous Reservoir filter: 20 to 47 µ, Suction inlet No.: minimum 4, Filtered quick prime No.: minimum 1, Filter luer No.: minimum 2, Venous blood flow: 800 to 2000 ml/min, Membrane Surface area: 0.3 to 0.7 m^2. Specifications of Arterial Filter: Maximum Blood flow rate: 0.7 to 2.5 lit/min, Low Priming Volume, Inlet and Outlet 1/4 For Infant and Neonatal CE Approved		403.01
404	Tissue Stabilizer With Canister Tubing Set (For Off pump CABG) - Metallic	Titan Flex and Titan Stabilizers provide optimal positioning, stabilization and coronary artery isolation durning beating heart. USFDA Approved		404.01
405	Arm forTissue Stabilizer With Canister Tubing Set (For Off pump CABG) - Metallic	Arm Titan Flex and Titan Stabilizers provide optimal positioning, stabilization and coronary artery isolation durning beating heart. USFDA Approved		405.01
406	Dacron Graft Straight Tube	dilatation resistant ,gelatin sealed , Koper knitted polyester vascular graft 40 cm 6,7,8,10,12 mm		406.01
407	Dacron Graft Straight Tube	dilatation resistant ,gelatin sealed , Koper knitted polyester vascular graft 70 cm 6,7,8,10,12 mm		407.01
408	Dacron Graft Silver coated Straight tube	41 CM 6,,7,,8 mm		408.01
409	Dacron Bifurcated Graft	dilatation resistant ,gelatin sealed , Koper knitted polyester vascular graft 6X12, 7X14, 8X16, 9X19		409.01
410	Hemofilter Adult .8 m square			410.01
411	Hemofilter Ped. .3m square			411.01
412	Coronary Shunt All sizes			412.01
413	Custom Tubing Pack Adult	Made from non-toxic medical grade PVC tubing . It is used exclusively in combination with heart lung machine and other devices of the system such as oxygenator and blood cardioplegia delivery system. Options of clear or colorful stripes tubing i.e. RED/BLUE/YELLOW/GREEN and with arterial line filter and withour filter is available.		413.01
414	Custom Tubing Pack Semi Adult	Made from non-toxic medical grade PVC tubing . It is used exclusively in combination with heart lung machine and other devices of the system such as oxygenator and blood cardioplegia delivery system. Options of clear or colorful stripes tubing i.e.		414.01

		RED/BLUE/YELLOW/GREEN and with arterial line filter and withour filter is available.		
415	Custom Tubing Pack Paediatric	Made from non-toxic medical grade PVC tubing . It is used exclusively in combination with heart lung machine and other devices of the system such as oxygenator and blood cardioplegia delivery system. Options of clear or colorful stripes tubing i.e. RED/BLUE/YELLOW/GREEN and with arterial line filter and withour filter is available.		415.01
416	Custom Tubing Pack Neonatal	Made from non-toxic medical grade PVC tubing . It is used exclusively in combination with heart lung machine and other devices of the system such as oxygenator and blood cardioplegia delivery system. Options of clear or colorful stripes tubing i.e. RED/BLUE/YELLOW/GREEN and with arterial line filter and withour filter is available.		416.01
417	Blood Cardiolplegia Delivery Set Adult	Adult and Paediatric Delivery system configurations Flow engineer with Axial, non turbulent, eddy free design prevents bubble formation and eliminates need for downstream filters Shortest blood flow path over smooth surfaces, yet best cooling efficiency Core flow without thinning of blood , reduces stress Priming Volume is just 40 ML, Mixing propositions of blood and cardioplegia 1:1,2:1 and 4:1		417.01
418	Blood Cardiolplegia Delivery Set Paediatric	Adult and Paediatric Delivery system configurations Flow engineer with Axial, non turbulent, eddy free design prevents bubble formation and eliminates need for downstream filters Shortest blood flow path over smooth surfaces, yet best cooling efficiency Core flow without thinning of blood , reduces stress Priming Volume is just 40 ML, Mixing propositions of blood and cardioplegia 1:1,2:1 and 4:1		418.01
419	Hemofilter Adult	Surface Area (Sq.m): 0.8 Priming Volume (cb.m) : 58 Max. Trans pre (mm/Hg) : 500 Max. Flow (ml/min) : 150 Blood Inlet & Outlet: 1/4"		419.01
420	Hemofilter Paediatric	Surface Area (Sq.m): 0.4 Priming Volume (cb.m) : 58 Max. Trans pre (mm/Hg) : 500 Max. Flow (ml/min) : 150 Blood Inlet & Outlet: 1/4"		420.01

421	Pressure Transducer Kit Double	Consists of high pressure monitoring lines , transducer domes with built in flushing device and three way stop cock. Close system design reduces the risk of leakage and infection to operators. Consistent and accurate reading during monitoring.		421.01
422	Aortic Cannula Reinforced straight and Angled	One piece body with straight or curved tip available with vented or non-vented connector. An adjustable or xed depth ring together with tip and depth line permits precise position of all cannula. Size 12, 14,16,18,20,22,24		422.01
423	Aortic Cannula non-reinforced St.	One piece body with straight or curved tip available with vented or non-vented connector. An adjustable or xed depth ring together with tip and depth line permits precise position of all cannula. Size 12, 14,16,18,20,22,25		423.01
424	Aortic Cannula non-reinforced Curved Plastic Tip	One piece body with straight or curved tip available with vented or non-vented connector. An adjustable or xed depth ring together with tip and depth line permits precise position of all cannula. Size 12, 14,16,18,20,22,26		424.01
425	Aortic Cannula non-reinforced Curved Metal Tip	One piece body with straight or curved tip available with vented or non-vented connector. An adjustable or xed depth ring together with tip and depth line permits precise position of all cannula. Size 12, 14,16,18,20,22,27		425.01
426	Venous Cannula straight	One piece body with wire reinforced walls and MULTIPORT LIGHTHOUSE TIP. Sizes available: 12 FR-38 FR.		426.01
427	Venous Cannula angled metal tip	Venous cannula with right angled metal tip features kink resistant wire reinforced bodies. with beveled angled metal tip. This construction allows for higher flow rates with minimum pressure di erential. Metal tip orientation permits precise positioning of the cannula. Sizes 12-38 Fr		427.01
428	Two Stage Venous Cannula	These cannulae feature multiport tips with atrial baskets and kink-resistant, wirewound bodies with depth markings. The oval body presents a lower profile in the surgical field. All Sizes		428.01
429	Arterial Line Filter	Filter : 40 micron. Flow : 7 LPM. Priming : 179 ml. Port: 3/8"		429.01
430	Arterial Line Filter	Filter : 40 micron. Flow : 5 LPM. Priming : 90 ml. Port: 3/8"		430.01
431	Arterial Line Filter	Filter : 40 micron. Flow : 3.2 LPM. Priming : 35 ml. Port: 1/4"		431.01
432	Aortic root Cannula / Antegrade	These cannulae feature radiopaque tips attached to clear bodies with separate vent lines. Additional features available with these cannulae. include aortic root pressure monitoring and left heart venting. All cannulae are supplied with a stainless steel introducer needle. Sizes 12,14,16,19		432.01
433	Cardiac Sump with steel tube tip	This sump features a weighted perforated pool tip to minimize the possibility of tissue occlusion while maintaining an opportunity for drainage. The perforated steel tube tip is inside the tubing that terminates with a 1/4 inch (0.64 cm) connector. Adult, Paed. Infant		433.01
434	L. V. Vent with stylet	These vent catheters are for direct and indirect venting of the left ventricle and feature perforated tips. Catheter material is PVC, along with straight, preformed, or malleable bodies with depth markings. These vents are available in pediatric and adult sizes. Straight body models come with a malleable or stiff guidewire style introducer for easy insertion and placement. All vent catheters terminate with a vented or		434.01

		non-vented 1/4 inch (0.64 cm) connector. 12, 14, 17, 18, 20 Fr		
435	Femoral Aortic Cannula	Features an introducer with blunt tip configuration that allows safe insertion for additional arterial access sites such as the aorta, axillary and subclavian A lock feature reduces push-back of the introducer during insertion Vent cap reduces back-bleed when no guidewire is used in the procedure Depth markings aid in placement 8 to 24 Fr		435.01
436	Femoral Venous Cannula single stage	Venous femoral cannulae, designed to drain from superior and inferior vena cava, available in given sizes , with full flow drainage capability. A high quality soft introducer features a smooth transition to the cannula to improve insertion and reduce vascular damage. Available for percutaneous insertion via Seldinger technique. 16 to 30 FR		436.01
437	Femoral Venous Cannula Dual stage	Dual Stage Femoral Venous cannulae, designed to drain from superior and inferior vena cava, available in given sizes , with full flow drainage capability. A high quality soft introducer features a smooth transition to the cannula to improve insertion and reduce vascular damage. Available for percutaneous insertion via Seldinger technique. 16 TO 30 Fr		437.01
438	Femoral Venous Cannula three stage	Multiple Stage Femoral Venous cannulae, designed to drain from superior and inferior vena cava, available in given sizes , with full flow drainage capability. A high quality soft introducer features a smooth transition to the cannula to improve insertion and reduce vascular damage. Available for percutaneous insertion via Seldinger technique. 16,18,24,26,28 Fr		438.01
439	**CVC Tripple Lumen chlorhexidine and silver sulfadiazine-Antimicrobial Adult**	Radiopaque Polyurethane with Blue FlexTip.Raulerson Spring-Wire Introduction Syringe.Size 7Fr X 16CM		439.01
440	**CVC Four Lumen chlorhexidine and silver sulfadiazine-Antimicrobial Adult**	Radiopaque Polyurethane with Blue FlexTip.Raulerson Spring-Wire Introduction Syringe.Size 7Fr X 16CM		440.01
441	**CVC Tripple Lumen chlorhexidine and silver sulfadiazine-Antimicrobial Ped.**	Radiopaque Polyurethane with Blue FlexTip.Raulerson Spring-Wire Introduction Syringe.Size 4Fr X 8CM		441.01
442	**CVC Tripple Lumen chlorhexidine and silver sulfadiazine-Antimicrobial Ped.**	Radiopaque Polyurethane with Blue FlexTip.Raulerson Spring-Wire Introduction Syringe.Size 5.5Fr X 8CM		442.01
443	**Bain circuit Adult**			443.01
444	**Bain Circuit Ped.**			444.01
445	**Ventilator circuit Plain**			445.01
446	**Ventilator circuit 1 WATER TRAP**			446.01

447	**Ventilator circuit Double water Trap**			447.01
448	**Cytokine Adsorber**	Maximum Blood Flow Rate: 700 mL/min Minimum BloodFlow Rate: 100 mL/min Blood Priming Volume: 150 mL Adsorbent Material should ideally be crosslinked Divinylbenzene or polyvinylpyrrolidone. Should be compatible with CRRT, VV and VA ECMO Should be FDA approved.		448.01
449	**Suture Organiser**	Valve suture to VSD sutures can be easily organised. In nontramatic. Way.		449.01
450	**Powder dressing(Altrazeal)**	Should be non resorbable. Should be oxygen permeable Impenetrable to exogenous bacteria and toxins Should be long lasting (>3 weeks)		450.01
451	Semi Rigid Annuloplasty Rings Mitral All Sizes: 3D Ring 24mm, 26mm, 28mm, 30mm, 32mm, 34mm, 36mm & 38mm	1)The exclusive alloy core cell design is a laser-cut one-piece structure that enables annular dynamics mimicking those of a physiological annulus 2)Superelastic alloy core “remembers” its prefixed shape, meaning it returns to its original form even after being flexed back and forth 3)semi-rigid annuloplasty ring has been engineered to give the stability needed to support the annulus while ensuring flexibility of movement. 4) Should have Ease of implant with good visibility, placement, and attachment to ensure proper annular fit 5) Should have either US FDA/CE Mark Approval		451.01
452	Total Supra Annular Bileaflet Rotatable Mechanical Heart Valve Aortic All Sizes	1)Pyrolytic carbon coated leaflets2) Pyrolytic carbon housing 3)To further enhance structural stability, the housing is reinforced by a titanium stiffening band which makes it stronger than a valve without a stiffening element, minimizing the risk of deformation and, consequently, the risk of leaflet dislodgement or lockup. 4)The opening angle and travel arc of the should be between 70°-90° and 50°-60° respectively. 5) 100% Orifice to Annulus Ration, Sizes: 19mm, 21mm, 23mm, 25mm & 29mm 6) Should have either US FDA/CE Mark/DCGI approvals		452.01
453	Bileaflet Rotatable Mechanical Heart Valve Aortic All Sizes	1)Pyrolytic carbon coated leaflets2) Pyrolytic carbon housing 3)To further enhance structural stability, the housing is reinforced by a titanium stiffening band 4)The opening angle and travel arc of the should be between 70°-90° and 50°-60° respectively 5) Sizes 19mm,21mm, 23mm, 25mm & 29mm 6) Should have either US FDA/CE Mark/DCGI Approvals		453.01

454	Bileaflet Rotatable Mechanical Heart Valve Aortic with Curved Leaflet All Sizes	1) A unique valve featuring a Titanium housing coated with Unique Coating for better Hemo and Biocompatibility . 2) A unique mechanical heart valve featuring curved leaflets specifically engineered to achieve an even flow distribution downstream 3) The opening angle and travel arc of the should be between 70°-90° and 50°-60° respectively 4) The unique two-open-chimney design ensures an effective passive washing of the hinges even when the valve is closed, avoiding blood stasis and hemolysis at the same time. 5) All available Sizes 6) Should have either US FDA/CE Mark/ DCGI		454.01
455	Bileaflet Rotatable Mechanical Heart Valve Mitral with Curved Leaflet All Sizes	1) A unique valve featuring a Titanium housing coated with Unique Coating for better Hemo and Biocompatibilty . 2) A unique mechanical heart valve featuring curved leaflets specifically engineered to achieve an even flow distribution downstream 3)The opening angle and travel arc of the should be between 70°-90° and 50°-60° respectively 4) The unique two-open-chimney design ensures an effective passive washing of the hinges even when the valve is closed, avoiding blood stasis and hemolysis at the same time. 5) All available Sizes 6) Should have either US FDA/ CE Mark/ DCGI Approvals		455.01
456	Bileaflet Rotatable Mechanical Heart Valve Mitral All Sizes	1)Pyrolytic carbon coated leaflets2) Pyrolytic carbon housing 3)To further enhance structural stability, the housing is reinforced by a titanium stiffening band which makes it stronger than a valve without a stiffening element, minimizing the risk of deformation and, consequently, the risk of leaflet dislodgement or lockup. 4)The opening angle and travel arc of the should be between 70°-90° and 50°-60° respectively.5) A unique mitral prosthesis with versatile positioning to approach even challenging situations. Should have flexible, generous symmetrical sewing cuff 6) Mitral - Sizes: 23mm, 25mm, 27mm, 29mm, 31mm & 33mm 7) Should have either US FDA/CE Mark/DCGI Approvals		456.01
457	Mitral Annuloplastry Rings -Semi-Rigid with Chrodae Measurement Technology , for Ischemic MR - All Sizes : 24mm, 26mm, 28mm, 30mm, 32mm, 34mm, 36mm & 38mm	1)The exclusive alloy core cell design is a laser-cut one-piece structure that enables annular dynamics mimicking those of a physiological annulus 2)superelastic alloy core “remembers” its prefixed shape, meaning it returns to its original form even after being flexed back and forth 3)semi-rigid annuloplasty ring has been engineered to give the stability needed to support the annulus while ensuring flexibility of movement. 4)Ease of implant with good visibility, placement, and attachment to ensure proper annular fit 5) Should Chordal Measurement Loops 6) Should have either US FDA/CE Mark/DCGI Approval		457.01

458	Flexible Band Tricuspid Annuloplasty Rings Rigid or Flexible	1) THE FLEXIBLE DESIGN OF THE CARBOMEDICS ANNULOPLASTY SYSTEM PROVIDES IMPLANT VERSATILITY TO ACCOMMODATE SURGEON PREFERENCE AND VARIOUS CLINICAL INDICATIONS. 2)Three-in-one prosthesis easily converts from mitral ring to mitral band or tricuspid band, thanks to two suture cut points. 3) Reduces hospital inventory. 4)Full flexibility delivers three-dimensional compliance that mirrors natural valve dynamics. 4) Ring constructed with internal size suture along with four knots, designed to reduce post-implantation dilatation.5) • Barium-impregnated silicone facilitates radiographic visualizatio 6) All Available Sizes 7) Should have either US FDA/CE Mark/DCGI Approvals		458.01
459	Pericardial Bioprosthetic Stented Heart Valve(Mitral), All Sizes: - 25mm, 27mm, 29mm, 31mm & 33mm	1) Should have Proven clinical performance 2)Should have Low profile scalloped stent 3) Should have Soft, compliant sewing cuff 4)Should have Anti-looping protection 5) Ready for use, no rinsing required 6)Should Have Anti Calcification treatment 7) Should have either US FDA/CE Mark/DCGI Approvals		459.01
460	Pericardial Bioprosthetic Stented Heart Valve(Aortic), All Sizes: - 19mm, 21mm, 23mm, 25mm	1)Should have Proven clinical performance 2) Should have Low profile 3) Should have Slim, Elastic sewing cuff 4) Single Bovine Pericardium outer layer 6) Should have an AC treatment 7) Should have Either US FDA/CE Mark/DCGI Approval		460.01
461	Sutureless Aortic Valve Aortic Valve For Enhanced Hemodynamic and Small Aortic Annulus	1)MAXIMIZED VISIBILITY When collapsed, the valve should allows the surgeon better visibility of the annulus and the anatomical structures during implantation.2) PRECISE POSITIONING Three guiding sutures are used to position the valve in the aortic root which, together with the enhanced visibility, allow for precise and easy positioning 3) is designed to provide favorable hemodynamics thanks to: • the absence of sewing cuff providing less obstruction to blood flow • the elastic stent able to adapt to the aortic root movement during the cardiac cycle 4) Should have advanced Anti-Calcification Treatment 5) Should comes in Glutaraldehyde Free Storage Solution 6) Should have either US FDA/CE Mark/DCGI Approval		461.01
462	Pacing wire 2-0 18 mm	19 mm ½ Circle Taper Cut & 63 mm Straight Cutting Edge, Breakway Needle.Electrode Blue 60 cm Pacing Wire		462.01
463	Pacing wire 2-0 26 mm	27 mm ½ Circle Taper Cut & 63 mm Straight Cutting Edge, Breakway Needle. Electrode Blue 60 cm Pacing Wire		463.01
464	Surgical steel 4 no cutting 48mm	317 L Monofilament Stainless Steel. 1/2 Circle Conventional Cutting. 4 x 45 cm		464.01
465	Surgical steel 4 no Blunt point R.B. 45MM	318 L Monofilament Stainless Steel. 1/2 Circle Blunt Point Round Bodied. 4 x 45 cm		465.01
466	Surgical steel 5 no cutting 48 mm	317 L Monofilament Stainless Steel. 1/2 Circle Conventional Cutting. 4 x 45 cm		466.01
467	Surgical steel 5 no Blunt point R.B. 45 mm	318 L Monofilament Stainless Steel. 1/2 Circle Blunt Point Round Bodied. 4 x 45 cm		467.01
468	Surgical steel 6 no cutting 48 mm	317 L Monofilament Stainless Steel. 1/2 Circle Conventional Cutting. 4 x 45 cm		468.01

469	Surgical steel 6 no Blunt point 45 mm	318 L Monofilament Stainless Steel. 1/2 Circle Blunt Point Round Bodied. 4 x 45 cm		469.01
470	Polyester 2-0 10x75cm 17.5 mm	6 Green and 5 White Braided Coated Polyester. 1/2 Circle Taper Cut. Double Armed		470.01
471	Polyester 2-0 10x75cm 17.5 mm 3x3x1.0 pledget	6 Green and 5 White Braided Coated Polyester. . 1/2 Circle Taper Cut. Double Armed. Pledget 3 mm x 3 mm x 1.0 mm		471.01
472	Polyester 2-0 10x75cm 26mm	6 Green and 5 White Braided Coated Polyester. 1/2 Circle Taper Cut. Double Armed		472.01
473	Polyester 2-0 10x75cm 26mm 6x3x1.0 Pledget	7 Green and 5 White Braided Coated Polyester. 1/2 Circle Taper Cut. Double Armed. Pledget 6 mm x 3 mm x 1.0 mm		473.01
474	Polyester 2-0 10x75cm 26mm 3x3x1.5 Pledget	8 Green and 5 White Braided Coated Polyester. 1/2 Circle Taper Cut. Double Armed. Pledget 3 mm x 3 mm x 1.5 mm		474.01
475	Polyester 2-0 10x75cm 26mm 3x3x1.0 Pledget	9 Green and 5 White Braided Coated Polyester. 1/2 Circle Taper Cut. Double Armed. Pledget 3 mm x 3 mm x 1.0 mm		475.01
476	Polyproplyne 2-0 17.5 mm D.A. 90 CM	1/2 Circle Taper Cut. Double Armed 150 cm		476.01
477	Polyproplyne 2-0 26 mm D.A. 90 CM	1/2 Circle Taper Cut. Double Armed 150 cm		477.01
478	Polyproplyne 3-0 17.5 mm D.A. 90 CM	1/2 Circle Taper Cut. Double Armed 150 cm		478.01
479	Polyproplyne 3-0 25 mm D.A. 90 CM	1/2 Circle Taper Cut. Double Armed 150 cm		479.01
480	Polyproplyne 3-0 26 MM D.A. 90 cm	1/2 Circle Taper Cut. Double Armed 150 cm		480.01
481	Polyglecaprone 2-0			481.01
482	Polyproplyne 4-0 13 MM D.A. 60 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene		482.01
483	Polyproplyne 4-0 16 MM D.A. 90 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene		483.01
484	Polyproplyne 4-0 17.5 mm D.A. 90 cm	1/2 Circle Taper cut . Double Armed. Blue Monofilament Polypropylene		484.01
485	Polyproplyne 4-0 20 mm D.A. 90 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene		485.01
486	Polyproplyne 4-0 26 mm D.A. 90 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene		486.01
487	Polyproplyne 5-0 10 mm D.A. 60 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene Pledget 3x3x.51		487.01
488	Polyproplyne 5-0 10 mm D.A. 60 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene Pledget 3x3x.1.6		488.01
489	Polyproplyne 5-0 10 mm D.A. 75 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene. Pledget 3x3x.51		489.01
490	Polyproplyne 5-0 10 mm D.A. 75 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene. Pledget 3x3x.1.6		490.01
491	Polyproplyne 5-0 13 MM D.A. 60 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene. Pledget 3x3x.51		491.01

492	Polyproplyne 5-0 13 MM D.A. 60 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene. Pledget 3x3x.1.6		492.01
493	Polyproplyne 5-0 13 MM D.A. 75 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene. pledget 3x3x0.6		493.01
494	Polyproplyne 5-0 13 MM D.A. 75 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene. pledget 3x3x1.6		494.01
495	Polyproplyne 5-0 13 MM D.A. 75 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene		495.01
496	Polyproplyne 5-0 16 MM D.A. 90 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene		496.01
497	Polyproplyne 5-0 16 MM D.A. 90 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene. Pledget 3x3x1.6		497.01
498	Polyproplyne 5-0 20 MM D.A. 90 cm	1/2 Circle Taper Point . Double Armed. Blue Monofilament Polypropylene		498.01
499	Polyproplyne 6-0 10 MM D.A. 60 cm	3/8 Circle Taper Point. Taper Point. pledget 3x3x0.6		499.01
500	Polyproplyne 6-0 10 MM D.A. 75 cm	3/8 Circle Taper Point. Taper Point. pledget 3x3x1.6		500.01
501	Polyproplyne 6-0 13 MM D.A. 60 cm	3/8 Circle Taper Point. Taper Point. pledget 3x3x0.5 Black needle		501.01
502	Polyproplyne 6-0 13 MM D.A. 75 cm	3/8 Circle Taper Point. Taper Point. pledget 3x3x1.5		502.01
503	Polyproplyne 6-0 11 MM D.A. 75 cm	3/8 Circle Taper Point. Taper Point. pledget 3x3x1.5		503.01
504	Polyproplyne 6-0 9 MM D.A. 60 cm	3/8 Circle Taper Point. Taper Point. pledget 3x3x0.6		504.01
505	Polyproplyne 6-0 9 MM D.A. 75cm	3/8 Circle Taper Point. Taper Point. pledget 3x3x1.6		505.01
506	Polyproplyne 7-0 9MM D.A. 60cm	3/8 Circle Taper Point. Double Armed. Black Needle		506.01
507	Polyproplyne 7-0 9MM D.A. 60cm	3/8 Circle Taper Point. Double Armed. PV Black Needle		507.01
508	Polyproplyne 7-0 9MM D.A. 60cm	3/8 Circle Taper Point. Double Armed. CC Black Needle		508.01
509	Polyproplyne 7-0 8MM D.A. 60cm	3/8 Circle Taper Point. Double Armed. Black Needle		509.01
510	Polyproplyne 7-0 8MM D.A. 60cm	3/8 Circle Taper Point. Double Armed. PV Black Needle		510.01
511	Polyproplyne 7-0 6MM D.A. 60cm	3/8 Circle Taper Point. Double Armed. CC Black Needle		511.01
512	Multienzyme Solution	Anionic multienzyme solution with sodium tetraborate decahydrate, should be Biodegradable and free from ethylene glycol . Can be used manually and can also be used in AER. Effective in 3 minutes. pack of 3.8 liter		512.01
513	Triclosen Tablet	Effervescent 50% troclosene Sodium tablet 5g each tablet. PACK SIZE : 50 Tab/bt.		513.01
514	Cidex Trays	Disinfectant trays made of glass filled polypropylene which can be steam sterilize and CE approved	13x7x5	514.01
			20x7x5	514.02

			29x8x5	514.03
			19 Dia	514.04
			23x15x5	514.05
515	Disinfactant solution	Solution containing Benzotriazole, N-(hydroxyethyl) - ethylenediaminetriacetic acid (HEDTA),Dipotassium hydrogen phosphate, Potassium Dihydrogen Phosphate and 0.55% w/v Ortho-Phthalaldehyde . 510k Cleared and effective against Human Corona Virus and cytomegalo virus . It should be endorsed by minimum five MDM's: Karl Storz, Pentax, Stryker, Richard wolf , Olympus for their – Rigid & Flexible Telescopes, Fiber optic cables, Also should be endorsed by AER manufacturers.Should also have test strip which consists of sodium sulfite and dyes impregnated and dried on filter paper . PACK SIZE= 5 Litre		515.01
516	Tyvek Roll	Plasma Sterilizer Roll made of Tyvek, Mylar with STERRAD Chemical Indicator Printed .Have 4057 B Grade with process indicator [ISO: 11140:-1: 2005]. Maintain sterility Sterilization in Plasma sterilizer for 12 Months . certified by 510K] . ISO 9001:2015 Certified, US FDA Approved. Supplier/ Importer should be CPCB, India registered .	500mm x70 mtr	516.01
			100mmx70 mtr	516.02
			150mmx70 mtr	516.03
			200mmx70 mtr	516.04
			250mmx70 mtr	516.05
			350mmx70 mtr	516.06
			420mmx70 mtr	516.07
517	Sterilization Roll	The rolls for ETO Sterilizer should be made of material TYVEK, MYLAR and ETO CHEMICAL INDICATOR PRINTED . ISO 9001: 2015 CERTIFIED, US FDA/CE APPROVED.	75mmx100 mtr	517.01
			150mmx100 mtr	517.02
			250mmx100 mtr	517.03
			300mmx100 mtr	517.04
518	Thrombosuction Catheter	Pnumbra Catheter for Thrombosuction compatible to Pnumbra machine CAT7		518.01
519	Thrombosuction Catheter	Pnumbra Catheter for Thrombosuction clotting compatible to Pnumbra machine CAT9		519.01
520	Seprator	Seprator for Thrombosuction clotting compatible to CAT 6 catheter and Pnumbra machine		520.01
521	Spereator	Seprator for Thrombosuction clotting compatible to CAT 8 catheter and Pnumbra machine		521.01
522	Cainester	Canister for Thrombosuction cloting Exudate compatible to Pnumbra machine 1000 ML		522.01
523	Tubing	Tubing for Thrombosuction clotting compatible to Pnumbra machine		523.01
524	Arterial catheter	PUR Catheter 16G Length 15 and 20 CM with Guide wire 0.9x400mm Introducing Needle		524.01
525	Collagen Sheet	Sterile Collagen sheets in Wet & meshed form. Pure Type 1&3 triple helical Membrane Bovine Origin preserved in a mixture of Iso Propyl alcohol and water Gamma sterilized	10x10	525.01
			10x20	525.02

		and supplied in double sterile pouches. Biocompatible as per ISO 9001/ ISO13485 n		
526	Collagen Sheet	Sterile Collagen sheets in Dry form. Pure Type 1&3 triple helical Membrane Bovine Origin Gamma sterilized and supplied in double sterile pouches. Biocompatible as per ISO 9001/ ISO13485 n 10x11	10x10	526.01
			10x20	526.02
527	Porus collagen sheet	Sterile Porus Collagen Sheet in Dry form (Fish Origin)	10X10	527.01
			8X12	527.01
528	Silicone sheet	Silicone sheet Pure Poly Siloxane based silicone scar management product in sheet form. 10x11		528.01
529	Biofil	Biofil AB Sterils medicated collegan Particles 5 ML	5 ML	529.01
			10 ML	529.02
530	Lipido Colloid	Lipido-Colloid contact layer impregnated with silver salts Urgotul AG Silver Sterile non-occulusive wound contact layer consists of silver healing Matrix made of polyester mesh impregnated with hydrocolloid particles(CMC) ,petroleum jelly, polymers and silver salts with demonstrated in vitro antibacterial activity upto 7 days, using patented Lipido- colloid technology	10x12	530.01
			15x20	530.02
			13x13	530.03
			15x20	530.04
			20x20	530.05
531	PTFE Graft		Size 6x76	531.01
532	PTFE Graft		Size 6x41	532.01
533	Filters		5 Micron	533.01
			10 Micron	533.02
534	Disposable Cell Saver Kit	Competible with Frescinius Kabi Machine		534.01
535	Disposable Cell Saver Reservior and tubings	Competible with Frescinius Kabi Machine		535.01
536	Skin Stapler	36 w		536.01
537	Disposable, Adhesive, External Pads for Philips Defrillator	Adult size		537.01
538	Disposable, Adhesive, External Pads for Philips Defrillator	Pediatric Size		538.01
539	Red Rubber Catheter	Size 4, 6, 8, 11		539.01
540	Chest Binder		Small	540.01
			Medium	540.02
			Large	540.03
541	DISPOSABLE SURGICAL DRAPE	> MATERIAL : NONWOVEN FABRIC WITH FENESTRATION 8*10CM > COLOUR : BLUE > GSM : 40 > SIZE : LENGTH 80CM , WIDTH 100CM > ADDITIONAL SPECIFICATION : REINFORCED + ABSORBENT FABRIC, > ETO STERILIZED > LOW-LINTING, NON-BREATHABLE		541.01

542	CABG DRAPE PACK	> 4 SELF ADHESIVE CAUTERY BAGS(40CMX40CM), - SMS > 3 OP TAPES(10CMX55CM), - SMS WITH ADHESIVE RELEAS > 4 LINT FREE HAND TOWELS(30CMX30CM), - ABSORBENT > 4 SIDE SHEET WITH ABSORBENT(75CMX100CM), - ABSORBENT LAMINATION > 1 BOTTOM SHEET WITH ABSORBENT(160CMX180CM), - SMS + ABSORBENT > 1 TOP SHEET WITH ABSORBENT(160CMX250CM),- SMS + ABSORBENT > 1 INSTRUMENT TABLE DRAPE(150CMX200CM),- REINFORCEMENT > 1 LARGE INSTRUMENT TABLE COVER WITH ABSORBENT(240CMX240CM),- REINFORCEMENT + ABSORBENT > 1 BILATERAL SPLIT DRAPE WITH ABSORBENT(180CMX200CM), - SMS + ABSORBENT > 2 TRIANGULAR SHEET - SMS > ETO STERILIZED		542.01
543	DISPOSABLE CAMERA SLEEVE	> MATERIAL : PLASTIC > COLOUR : TRANSPARENT > GSM : 40-50 > SIZE : LENGTH 250CM , WIDTH 15CM > ETO STERILIZED		543.01
544	SINGLE LUMEN CATHETER (ARTERIAL CATHATER)	• SHOULD BE POLYURETHANE SINGLE LUMEN CATHETER WITH J GUIDE-WIRE NON KINKING KIT SHOULD BE RADIO OPAQUE WITH FIXATION WING & INTEGRAL EXTENSION TUBE WITH FLEXIBLE & TRANSPARENT EXTENSION TUBE (PUR) • SIZE – CATHETER 14-20G, • LENGTHS- 10CM-20CM		544.01
545	PA CATHETER SHEATH :	• PERCUTANEOUS SHEATH INTRODUCER SET SHOULD HAVE BONDED HEMOSTASIS VALVE & SIDE PORT ALONG WITH .035 X 45 CM STRAIGHT & “J” TIP GUIDE WIRE FOR INTRODUCING 7.5 FR& 8.0 FR PA CATHETER. • IT SHOULD HAVE SHEATH DIAMETER OF 8.5 F & SHEATH LENGTH OF ≈11 CM. IT SHOULD BE MADE OF RADIOPAQUE POLYURETHANE & SHOULD HAVE A COATING OF HEPARIN AS WELL AS ANTIMICROBIAL MATERIAL (BENZALKONIUM CHLORIDE) ON ENTIRE SHEATH SURFACE. • IT SHOULD COME WITH 1 CATHETER CONTAMINATION SHIELD, ≈80 CM IN LENGTH. • IT SHOULD HAVE ONE 4-WAYSTOPCOCK, ONE VESSEL DILATOR & FOUR 4X 4GAUZE PADS.0NE DISPOSABLE SCALPEL, # 11 BLADE & ONE 18 GA X 2 ½ THIN WALL NEEDLE.		545.01

546	P A CATHATER	• FLOW DIRECTED 5-LUMEN BALLOON TIPPED PULMONARY ARTERY CATHETER. 7.5 FR IN DIAMETER &≈110 CM IN LENGTH• IT SHOULD HAVE A COATING OF HEPARIN AS WELL AS ANTIMICROBIAL MATERIAL (BENZALKONIUM CHLORIDE) ON ENTIRE CATHETER SURFACE.• SHOULD BE ABLE TO GIVE CARDIAC OUTPUT USING THERMO DILUTION METHOD• SHOULD BE ABLE TO GIVE PA PRESSURE, PAWP & RA PRESSURE WHEN CONNECTED TO TRASDUCER.• SHOULD HAVE PROXIMAL INFUSION & PROXIMAL INJECTATEPORTS AT ≈31 CM &≈30 CMRESPECTIVELY.• IT SHOULD COME WITH ONE VOLUME-LIMITING SYRINGE OF 1.5CC FOR BALLOON INFLATION		546.01
547	SPIRAL (POLYETHYLENE) TUB	• SHOULD BE SPIRALLY COILED TUBING (POLYETHYLENE) FOR DRUG INFUSION (DRUG COMPATIBLE). • SIZE – 100,150,200,300 & 400CM. • SHOULD BE US FDA /CE APPROVED		547.01
548	POLYETHYLENE PRESSURE EXTENSION TUBE	• SHOULD BE POLYETHYLENE HIGH PRESSURE EXTENSION TUBE (DRUG COMPATIBLE) • SIZE – 11, 30,50,100,150& 200CM. • SH0ULD BE US FDA/CE APPROVED.		548.01
549	EXTENSION LINE FOR LIGHT SENSITIVE DRUGS	• SHOULD BE POLYETHYLENE HIGH PRESSURE EXTENSION TUBE (DRUG COMPATIBLE) • SIZE – 11, 30,50,100,150& 200CM. • SH0ULD BE US FDA/CE APPROVED.		549.01
550	MIST BLOWER	• SHOULD HAVE SPECIALIZED NOZZLE UTILIZING A MICRO ORIFICE FOR FLUID DELIVERY AND A SEPARATE ORIFICE FOR GAS DELIVERY. SHOULD HAVE THE MALLEABLE SHAFT AND ON/OFFCONTROL ON THE HAND PIECE.		550.01
551	LV VENT:	• LEFT VENTRICULAR VENT SHOULD CONSIST OF ROUND TIPPED DUAL LUMEN TUBE WITH LATERAL EYES, SUTURE COLLARS & PROXIMAL FUNNEL CONNECTORS USED FOR EMPTYING THE LEFT VENTRICLE FOR CLEARER VIEW DURING SURGERY. ALL SIZES.		551.01
552	AORTIC ROOT CANNULA	• CARDIOPLEGIA CANNULA SHOULD BE MADE OF SOFT 100% SILICONE - SHOULD BE TAPERED CONDUIT WITH DISTAL OPEN TIP HAVING ADJACENT LATERAL EYES, FOLLOWED BY A FLANGE FOR SECURE POSITIONING. IT SHOULD HAVE PROXIMAL LUER LOCK & A SS NEEDLE WITH HUB. SIZE: 12-16FR		552.01
553	AXILLARY ARTERY ONE PIECE CANNULA WITH CENTRAL ARTERIAL PRESSURE MEASUREMENT	SIZES 18 FR.-24FR.SHOULD HAVE ELONGATED ONE PIECE WIRE WOUND BODY WITH RADIOPAQUE SUTURE RING AND DILATOR WITH DEPTH MARKINGS. SHOULD HAVE INTEGRATED PRESSURE MONITORING PORT AT TIP		553.01
554	ONE PIECE PEDIATRIC AORTICCANNULA SIZE 8FR-16 FR VENTED	SHOULD BE BEVELED WITH THIN WALL TIPS AND SHOULD BE ELONGATED ONE PIECE.		554.01

555	STRAIGHT TIP ARCH CANNULA SIZES 8FR-24 FR VENTED AND NON VENTED; PEDIATRIC AND ADULT	• SHOULD BE BEVELED THIN WALL TIPS ATTACHED TO TAPERED CANNULA BODIES. SHOULD BE AVAILABLE IN PEDIATRIC AND ADULT SIZES.		555.01
556	ANGLED TIP ARTERIAL CANNULA SIZED 8 FR - 24 FR	• SHOULD BE BEVELED THIN WALL TIPS ATTACHED TO TAPERED CANNULA BODIES. SHOULD HAVE KINK RESISTANT WIRE WOUND BODIES.		556.01
557	ARTERIAL CANNULA ANGLED WITH DIFFUSED FLOW TIP SIZES 18 FR-24FR	• SHOULD BE ONE PIECE WIRE WOUND BODY WITH INTEGRATED FLUTES FOR DIFFUSED FLOW.		557.01
558	FEMORAL ONE PIECE ARTERIAL AND VENOUS CANNULA KIT	• SIZES 8-21 FR. ARTERIAL AND 8-29 FR. VENOUS CANNULA • SHOULD BE ONE PIECE WIRE WOUND BODY.		558.01
559	FEMORAL MULTISTAGE VENOUS CANNULA SINGLE STAGE VENOUS CANNULA WITH METAL TIP SIZES 12-31 FR	• SIZES: 29/29/29 FR AND 29/46/37 FR • SHOULD BE ONE PIECE WIRE WOUND MULTIPLE SIDE HOLES BODY WITH PERCUTANEOUS KIT. • SHOULD HAVE KINK RESISTANT WIRE WOUND TAPER BODY WITH BEVELED METAL TIP.		559.01
560	SINGLE STAGE VENOUS CANNULA WITH RIGHT ANGLE SIZES 12-40 FR	• SHOULD HAVE KINK RESISTANT WIRE WOUND TAPER BODY WITH TAPERED MULTIPORT TIPS. BE RIGHT ANGLED WITH PLASTIC TIP.		560.01
561	SINGLE STAGE STRAIGHT VENOUS	SHOULD HAVE KINK RESISTANT MALLEABLE WIRE WOUND TAPER BODY WITH		561.01
562	CANNULA MALLEABLE SIZES	TAPERED MULTIPORT TIPS		562.01
563	DOUBLE-STAGE VENOUS CANNULA ROUND AND OVAL SHAPE SIZES 28/36,36/46,32/46, 36/51, 32/40, 36/46 FR.	• SHOULD BE TWO-STAGE CANNULA WITH OVAL BODY IN VARIOUS SIZES. SHOULD BE TWO-STAGE CANNULA WITH ROUND BODY IN VARIOUS SIZES. SHOULD HAVE CANNULA BODY WITH THIN WALLED WITH DEPTH MARKINGS.		563.01
564	THREE STAGE VENOUS CANNULA SIZES 29/29/29 FR 29/46/37 FR	SHOULD BE THREE STAGE VENOUS CANNULA FOR VACUUMASSISTED VENOUS DRAINAGE(VAVD)/KINETIC ASSISTED VENOUS DRAINAGE(KAVD)		564.01
565	MULTIPLE STAGE VENOUS CANNULA SIZES 23 FR AND 29 FR	SHOULD HAVE POLYURETHANE WIRE WOUND BODY WITH RADIOPAQUE MARKERS AND MULTIPLE HOLES AT DISTAL END.		565.01
566	AORTIC ROOT CANNULA SIZES 4 FR-11 FR	• SHOULD HAVE RADIOPAQUE TIPS ATTACHED TO CLEAR PVC BODIES. ADDITIONAL FEATURES: AORTIC ROOT PRESSURE MONITORING AND LEFT HEART VENTING. CAN BE USED TO ASPIRATE AIR EMBOLI AS WELL ADMINISTER CARDIOPLEGIA.		566.01
567	AORTIC ROOT CANNULA WITH VENT LINE SIZES 5 FR-11 FR	• SHOULD HAVE RADIOPAQUE TIPS ATTACHED TO CLEAR BODIES WITH SEPARATE VENT LINE.		567.01

568	AORTIC ROOT CANNULA PEDIATRIC Neonatal Sizes 4 Fr	• SHOULD BE ABLE TO ASPIRATE AIR FROM AORTA, SHOULD HAVE RADIOPAQUE TIP AND STANDARD 50.5 IN LENGTH OR A SHORTENED 2.5 IN.		568.01
569	Cardiopleiga needles: Neonatal, Pediatric and Adult Sizes. 5Fr and 8 Fr	• SHOULD HAVE STAINLESS STEEL TIP WITH PLASTIC DEPTH STOP, NEEDLE SHOULD BE ATTACHED TO FLEXIBLE PVC TUBING WHICH SHOULD INCLUDE A DRAPE CLAMP AND FEMALE LUER.		569.01
570	SILICON OSTIAL CANNULA FOR CONTINUOUS PERFUSION SIZES 15 FR,17FR AND 20 FR	• SHOULD HAVE A SILICON BODY WITH SOFT BULB SHAPED TIPS, SHOULD HAVE A FEMALE LUER CONNECTION SITE.		570.01
571	OSTIAL PERFUSION CANNULA WITH BASKET TIP AND SOFT CONVEX TIP SIZES 10 FR, 12 FR AND 14 FR.	• SHOULD HAVE FLANGED, RADIOPAQUE BASKET TIPS/SOFT TIPS ATTACHED TO MALLEABLE STAINLESS STEEL SHAFTS.		571.01
572	Minimally invasive Aortic root cannula with length more than 30 cm	• SHOULD HAVE MORE THAN 30 CM LONG BODY TO ALLOW IN		572.01
573	MULTIPLE PERFUSION SET	• SHOULD HAVE SILICON/ PVC BODIES WITH AUTO INFLATABLE CUFF AND PRESSURE MONITORING LINES; SHOULD HAVE MULTIPORT TIP/ INTEGRAL STOPCOCK.		573.01
574	LEFT HEART VENT CATHETERS SIZES ADULT AND PEAD	SHOULD BE OF PVC OR SILICON, COULD BE USED FOR DIRECT AND INDIRECT VENTING, SHOULD HAVE PERFORATED TIP, MALLEABLE BODIES WITH DEPTH MARK. SHOULD HAVE A CHOICE OF EITHER PVC OR SILICONE ALONG WITH STRAIGHT BODY WITH DEPTH MARKING.		574.01
575	PERICARDIAL SUMPS SIZES 20 FR	SHOULD FEATURE A FLUTED TIP, SHOULD BE ENCASED IN A STAINLESS STEEL SPRING AND SHOULD HAVE WEIGHT AT THE END.		575.01
576	INTRA-CARDIAC SUMP SIZE 20 FR	• SHOULD FEATURE A PERFORATED POOL TIP TO MAXIMIZE SUCTION AND MINIMIZE TISSUE TRAUMA. THE TIP DESIGN SHOULD BE IDEAL FOR ATRAUMATIC SUCTION WITHIN THE HEART CHAMBERS.		576.01
577	VESSEL CANNULA	SHOULD HAVE CLEAR AND RADIOPAQUE BODIES. THESE SHOULD TERMINATE WITH A FEMALE LUER. SHOULD HAVE TIPS IN VARIOUS SIZES AND SHAPES.		577.01
578	RAPID PRIMING SET	THESE SHOULD FACILITATE THE TRANSFER OF FLUID DURING THE PRIMING OF THE CIRCUIT. SHOULD HAVE LARGE BORE SPIKES ATTACHED TO FLEXIBLE TUBING WITH A CLAMP. SHOULD TERMINATE WITH EITHER AN OPEN END TUBE OR A MALE LUER.		578.01

579	SPECIFICATION FOR PEDAITRIC HEMOCONCENTRATOR	IT SHOULD HAVE PRIMING VOLUME APPROX 35ML. • EFFECTIVE SURFACE AREA OF THE FIBERS SHOULD BE APPROX 0.5M 2 . • BLOOD PORT SHOULD BE ¼WITH LUER LOCKS. • FILTRATE PORT SHOULD BE ½. • MAXIMUM TRANS-MEMBRANE PRESSURE SHOULD BE 500MM HG. • IT SHOULD HAVE TUBING LINES ALONG WITH RESERVOIR BAG.		579.01
580	SPECIFICATION FOR ADULT HEMOCONCENTRATOR	• IT SHOULD HAVE TUBING LINES ALONG WITH RESERVOIR BAG. THE PRIMING VOLUME SHOULD BE 70 ML • EFFECTIVE SURFACE AREA OF THE FIBERS SHOULD BE ≈1M 2 . • BLOOD PORT SHOULD BE ¼ WITH LUER LOCKS • FILTRATE PORT SHOULD BE ½ (1/4ADAPTER). • BLOOD FLOW RANGE SHOULD BE 100-500ML. • MAXIMUM TRANS-MEMBRANE PRESSURE SHOULD NOT BE MORE THAN 500MM HG. • IT SHOULD HAVE TUBING WITH RESERVOIR BAG.		580.01
581	SPECIFICATION FOR NEONATAL HEMOCONCENTRATOR	IT SHOULD HAVE PRIMING VOLUME LESS THAN 20 ML. • MEMBRANE SURFACE AREA SHOULD BE ≈0.2M 2 . • MAX MEMBRANE PRESSURE SHOULD NOT BE MORE THAN 600MM HG. • CAPILLARY WALL THICKNESS SHOULD BE ≈50UM.		581.01
582	TITANIUM LIGATING CLIPS “SIZE – SMALL”	• WIRE OF THE CLIP IS ‘ HEART SHAPED/V SHAPED FOR A FIRM GRIP ON VESSELS • CLIPS ARE OF ‘CHEVRON’ SHAPE FOR BETTER CLOSURE • CARTRIDGE HAVE ADHESIVE BACKING FOR BETTER CONTROL WHILE LOADING. • CLIPS ARE EASY TO LAD WITH SOFT LOADING TECHNIQUE. • CLIP CARTRIDGES ARE COLOR CODED FOR BETTER IDENTIFICATION. • CLIPS QUOTED ARE REGISTERED IN INDIA FOR SELLING. • SHOULD HAVE ALL REQURIED DOCUMENTATIONS LIKE CE/ISO • USFDA /CE APPROVED WITH CLINIC DATA BACKING FOR THE SAME		582.01
583	TITANIUM LIGATING CLIP “ SIZE MEDIUM	• WIRE OF THE CLIP IS ‘ HEART SHAPED/V SHAPED FOR A FIRM GRIP ON VESSELS • CLIPS ARE OF ‘CHEVRON’ SHAPE FOR BETTER CLOSURE • CARTRIDGE HAVE ADHESIVE BACKING FOR BETTER CONTROL WHILE LOADING. • CLIPS ARE EASY TO LAD WITH SOFT LOADING TECHNIQUE. • CLIP CARTRIDGES ARE COLOR CODED FOR BETTER IDENTIFICATION. • CLIPS QUOTED ARE REGISTERED IN INDIA FOR SELLING. • SHOULD HAVE ALL REQURIED DOCUMENTATIONS LIKE CE/ISO • USFDA /CE APPROVED WITH CLINIC DATA BACKING FOR THE SAME		583.01

584	TITANIUM LIGATING CLIPS"SIZE- MEDIUM LARGE"	• WIRE OF THE CLIP IS ' HEART SHAPED/V SHAPED FOR A FIRM GRIP ON VESSELS • CLIPS ARE OF 'CHEVRON' SHAPE FOR BETTER CLOSURE • CARTRIDGE HAVE ADHESIVE BACKING FOR BETTER CONTROL WHILE LOADING. • CLIPS ARE EASY TO LAD WITH SOFT LOADING TECHNIQUE. • CLIP CARTRIDGES ARE COLOR CODED FOR BETTER IDENTIFICATION. • CLIPS QUOTED ARE REGISTERED IN INDIA FOR SELLING. • SHOULD HAVE ALL REQURIED DOCUMENTATIONS LIKE CE/ISO • USFDA /CE APPROVED WITH CLINIC DATA BACKING FOR THE SAME		584.01
585	TITANIUM LIGATING CLIPS" SIZE-LARGE	• WIRE OF THE CLIP IS ' HEART SHAPED/V SHAPED FOR A FIRM GRIP ON VESSELS • CLIPS ARE OF 'CHEVRON' SHAPE FOR BETTER CLOSURE • CARTRIDGE HAVE ADHESIVE BACKING FOR BETTER CONTROL WHILE LOADING. • CLIPS ARE EASY TO LAD WITH SOFT LOADING TECHNIQUE. • CLIP CARTRIDGES ARE COLOR CODED FOR BETTER IDENTIFICATION. • CLIPS QUOTED ARE REGISTERED IN INDIA FOR SELLING. • SHOULD HAVE ALL REQURIED DOCUMENTATIONS LIKE CE/ISO • USFDA /CE APPROVED WITH CLINIC DATA BACKING FOR THE SAME		585.01
586	APPLICATOR FOR TITANIUM CLIPS (SMALL, MEDIUM, LARGE)	SHOULD BE AVAILABLE IN SHAPE : ANGLED ON TIP • DEVICE COMPATIBLE FOR TITANIUM CLIPS		586.01
587	CLIPS MICRO	TITANIUM CLIPS MICRO, WHITE, ONE CARTRIDGE 10 CLIPS, 2.6MM		587.01
588	CLIPS SMALL	TITANIUM CLIPS SMALL, RED, ONE CARTRIDGE 10 CLIPS, 3.6MM		588.01
589	CLIPS MEDIUM	TITANIUM CLIPS MEDIUM, BLUE, ONE CARTRIDGE 10 CLIPS, 5.6MM		589.01
590	CLIPS MEDIUM LARGE	TITANIUM CLIPS MEDIUM LARGE , GREEN, ONE CARTRIDGE 10 CLIPS, 9.0MM		590.01
591	CLIPS LARGE	TITANIUM CLIPS LARGE, ORANGE,ONE CARTRIDGE 10 CLIPS, 12.3MM		591.01
592	APPLICATOR FOR TITANIUM CLIPS (SMALL, MEDIUM, LARGE)	APPLICATOR MICRO, SMALL, MEDIUM, MEDIUM LARGE, LARGE WITH VARIOUS LENGTH AND ANGLES AT TIP		592.01
593	TITANIUM CLIP	METAL LIGATION CLIP 1.91 MM WIDTH AND 2.24 CLOSED LENGTH WITH 30% SMALLER THAN SMALL CLIPS, CE APPROVED, HEART SHAPPED WIRE WITH INNER LOCKING GROOVES F CHEVRON SHAPE FOR MORE VESSEL ENGULFING, TRANSVERSE GROOVES, MICRO WHITE CARTIDGE OF 6 CLIPS		593.01
594	TITANIUM CLIP	METAL LIGATION CLIP WITH 1.98 MM WIDTH AND 3.63 CLOSED LENGTH, CE APPROVED,HEART SHAPPED WIRE WITH INNER LOCKING GROOVES , CHEVRON SHAPE FOR MORE VESSEL ENGULFING, TRANSVERSE GROOVES, LATERAL CLIP-RESTRAINING SPRINGS, SMALL RED CARTIDGE OF 6 CLIPS		594.01

595	TITANIUM CLIP	METAL LIGATION CLIP WITH 2.08 MM WIDTH AND 3.63 CLOSED LENGTH, CE APPROVED, HEART SHAPPED WIRE WITH INNER LOCKING GROOVES, CHEVRON SHAPE FOR MORE VESSEL ENGULFING, TRANSVERSE GROOVES, LATERAL CLIP-RESTRAINING SPRINGS, SMALL WIDE RED CARTIDGE OF 10 CLIPS		595.01
596	TITANIUM CLIP	METAL LIGATION CLIP WITH 3.02 MM WIDTH AND 5.89 CLOSED LENGTH, CE APPROVED, HEART SHAPPED WIRE WITH INNER LOCKING GROOVES, CHEVRON SHAPE FOR MORE VESSEL ENGULFING, TRANSVERSE GROOVES, LATERAL CLIP-RESTRAINING SPRINGS, MEDIUM BLUE CARTIDGE OF 6 CLIP		596.01
597	APPLIER	HIGH QUALITY STAINLESS STEEL APPLIER, OPENS AT BOX LOCK FOR CLEANING PURPOSE, JAWS ALIGNMENT TO AVOID CLIP FALLOUT ANGLE SHAPE AND STRAIGHT SHAPE		597.01
598	Veriset™ hemostatic patch - box of 6	Synthetic Oxidized re-generated cellulose double layered with PEG and Trilysine	2*4 cm	598.01
			5*5 cm	598.02
			5*10 cm	598.03
599	Curved Leaflets Bileaflet Prosthetic Heart Valve with (Aortic & Mitral)	Should be Curved Pyrolytic Carbon LeafletsAerofoil Housing ProfileInnovative Hinge MechanismTitanium Housing coated with CarbofilmSoft Carbofilm coated swing ringShould have an opening angle of 80 Degree.Should be US FDA/CE approvedShould be in use universally for atleast 15 years.Size 23-33mm in mitral & Size 17-27mm in aortic		599.01
600	Moulded Pivot Bileaflet Prosthetic Heart Valve (Aortic & Mitral)	Should be Pyrolytic Carbon Leaflets. Should Have Biolite carbon coated Dacron sewing cuff for biocompatibility. Rotatable Valve. Should Have pyrolite Housing with Titanium stiffening ring. Should have an opening angle of 78 Degree. Should be US FDA approved. Should have suture markers on sewing ring for better positioning of valve. Size 19-25mm in aortic & Size 23-33mm in mitral.		600.01
601	Truly Supra Annular Bileaflet Prosthetic Heart Valve (Aortic)	Should be Pyrolytic Carbon Leaflets. Should be pivot ear design. Should Have Biolite carbon coated Dacron sewing cuff for biocompatibility. Rotatable Valve. Should Have pyrolite Housing with Titanium stiffening ring. Should have an opening angle of 78 Degree. Should be US FDA approved. Should have suture markers on sewing ring for better positioning of valve. Size 19-25mm.		601.01

602	Conduit Prosthetic Heart Valve with Pivot Ear Design	Valve Should be Pyrolytic Carbon Leaflets. Should Have coated Dacron sewing cuff for biocompatibility. Rotatable Valve. Should Have pyrolite Housing with Titanium stiffening ring. Should have an opening angle of 78 Degree. Should be US FDA approved. Graft should be pliable ,woven polyster that does not require pre-clotting. It should be ultra low porosity fabric that results in less leakage , weeping and blushing. Orientation reference lines should be there which helps in suture placement and graft-graft anastomosis. size 21-29mm		602.01
603	Sutureless Aortic tissue heart valve	The valve should be Bovine pericardium made of double sheet structure of Pericardium. The valve should be fixed on a self expanding Nitinol Alloy stent to expand itself in Valsalva. The stent should be coated with Carbofilm to improve hemo-compatibilty. The valve should be completely sutureless and should have only guiding sutures for implantation of valve. The tissue should be fixed with Glutraldehyde and then neutralized with Homocystic acid. It should be stored in a paraben solution and should not require rinsing of the valve. Should have a clinical data of 5 years. Sizes S- 19-21 M- 21-23 L- 23-25 XL- 25-27	S- 19-21 M- 21-23 L- 23-25 XL- 25-27	603.01 603.02 603.03 603.04
604	Pericardium Heart Valve with Carbofilm coated sewing cuff (MITRAL)	The valve should be Bovine pericardium made of double sheet structure of Pericardium. The Leaflet of valve should be fixed on a flexible polymeric stent can tolerate under back pressure of 2.000mmHg The sweing cuff should be coated with Carbofilm to improve hemo-compatibilty. The tissue should be fixed with Glutraldehyde and then neutralized with Homocystic acid. It should be stored in a paraben solution and should not require rinsing of the valve. Size 25 to 31mm		604.01
605	BOVINE PERICARDIAL STENTED AORTIC TISSUE VALVE WITH RESILIA TISSUE	Aortic bovine pericardial bioprosthetic surgical valve with a three-stage integrity preservation treatment that enables aldehyde-free dry storage, Resilia tissue (V-fit) technology, an expandable Co-Cr band and fluoroscopically visible size markers. Sizes – 19 to 25mm		605.01

606	BOVINE PERICARDIAL STENTED MITRAL TISSUE VALVE WITH RESILIA TISSUE	Should be biomechanically engineered tissue valve with three leaflets of identical thickness, and identical flexibility. Should be a mitral specific supra-annular valve. Should be a low profile with asymmetrical saddle shaped swing ring with posterior flexibility & anterior rigidity for optimal conformity at Mitral position. Should have LVOT markers for correct orientation, preventing any LVOT obstruction, with convenient Deployment system to prevent suture looping and ease of deployment. Should have preserve sub valvular apparatus and prevent LV impingement. Resilia tissue technology. Should have multi staged tissue treatment to Irreversibly extract calcium binding sites, Phospholipids and residual glutaraldehyde. Should be stored dry without any kind of solution. Should be available in Size 25, 27, 29, 31, and 33mm. Should have US FDA/CE approved.		606.01
607	Bovine Pericardium Heart Valve with Crown Design (Aortic)	1. The Leaflet of valve should be fixed on a flexible polymeric stent can tolerate under back pressure of 2.000mmHg 2. Low Profile Height 3. Sweing Cuff Diameter should be less 4.The tissue anti calcification treatment should be fixed with Octanediol solution 5. The tissue Used in the valve should be 100% Bovine Pericardium only. Size 19-29mm		607.01
608	3D ANNULOPLASTY RING, SEMI FLEXIBLE FOR MITRAL VALVE	3-Dimensional design to Suit the annulus normal of the mitral valve. Semi Flexible in Nature. Rigid in Anterior for remodeling and flexible in posterior for preservation of cardiac motion. Anatomical markers on the anterior and posterior commissures and the center of the posterior portion help in correct placement. Suture Zone Offers 40% improvement in sewing margin. Double saddle shape. Wide range of sizes 24mm to 34mm.		608.01
609	Membrane Oxygenator for Paediatric (Plasma Resistant Fiber)	1.Static Priming Volume: 105ml2.Max Blood Flow: 2300ml/min3.Membrane type: Micorporous Polypropylene Blue Monofilament4.Heat Exchanger type: Stainless Steel5.Venous inlet: 1/4"5/16"6.Arterial outlet: 1/4"5/16"7.Membrane Surface Area: 0,64 m28.Heat Exchanger Surface Area: 0,02 m29.Heat Exchanger Performance Factor: 0,48 at 2,3 L/m Should be US FDA Approved.Should be supplied with Appropriate stands Demo compulsory.		609.01

610	Membrane Oxygenator for Neonatal (Plasma Resistant Fiber)	1.Max blood flow: 800ml/min 2.Membrane Surface Area: 0,34 m2 3.Heat Exchanger Surface Area: 0,02 m2 4.Heat Exchanger Performance factor (h): 0,72 (at 0,8 l/min), 5.Static Priming Volume: 60ml 6.Membrane Type: Microporous Polypropylene Blue Monofilament 7.Heat Exchanger Type: Stainless Steel 8.Oxygenating module connections: 9.Venous inlet: 3/16" x ¼" 10.Arterial inlet: 3/16"x ¼" OPEN SYSTEM 1.Hardshell venous reservoir volume max.: 675(425+250) ml 2.Reservoir minimum Operating level : 15 ml 3.Hardshell Connections: Venous return: 3/16"x ¼" 4.Venous reservoir outlet: 3/16"x ¼", 5.Aspiration lines: 4 x 3/16"x ¼", 6.Quick priming port: 3/16"x ¼", 7.Cardiotomy Inlets filtered: 3 x luer lock 8.Cardiotomy Inlets non filtered: 1 x luer lock.. Should be US FDA Approved. Supplied with Appropriate stands Demo compulsory		610.01
611	Adult Membrane Oxygenator 6 ltr. Phisio Coated with integrated arterial filter (Plasma resistant)	Should have the bundle design to give minimal priming volume and blood damage and better gas transfer It should have plasma resistant microspores Polypropylene Blue Monofilament hollow fibers to increase resistance to plasma break through. Should have surface area with surface area of 1.4 m2. It should have radial blood flows design to give efficient gas transfer. It should have quick priming inlet and vacuum assisted venous drainage. Oxygenator Should have self venting facility. Integrated arterial filter should be polyester/polycarbonate/equivalent material. Integrated arterial filter pore size should be less than 40 micron with the surface area of around 60-80cm2. Priming volume of around of less than 285ml visible path top to bottom should have maximum flow for large body surface area patient ranging from 0.5 to 6 L/M. Should have phosphoryl choline (PC) coating like phisio. Should be able to operate at venous reservoir level of minimum 150 ml Oxygenator reservoir should have polycarbonate/polyester/equivalent screen type venous filter with pore size less than 50 micron Should be US FDA Approved. Should be supplied with Appropriate stand. Demo compulsory.		611.01

612	Adult Membrane Oxygenator 6 ltr. Phisio Coated (Plasma resistant)	Should have the bundle design to give minimal priming volume and blood damage and better gas transfer It should have plasma resistant microspores Polypropylene Blue Monofilament hollow fibers to increase resistance to plasma break through. Should have surface area with surface area of 1.4m2 It should have radial blood flows design to give efficient gas transfer. It should have quick priming inlet and vacuum assisted venous drainage. Oxygenator Should have self venting facility. Priming volume of around of less than 200ml visible path top to bottom should have maximum flow for large body surface area patient ranging from 0.5 to 6 L/M. Should have phosphoryl choline (PC) coating like phisio. Should be able to operate at venous reservoir level of minimum 150 ml Oxygenator reservoir should have polycarbonate/polyester/equivalent screen type venous filter with pore size less than 50 micron Should be US FDA Approved. should be supplied with Appropriate stand Demo compulsory.		612.01
613	Disposable heart shell blood cardioplegia delivery system chamber (CPDS)	It Should having heating cooling in built, easy delivery system. Capacity 50 – 500 ml for pediatric use & 2000 ml or more for adult use with micro filter of 40 micron.		613.01
614	Blood Cardioplegia Delivery System	Adult Size (BCD)4:1 Priming Volume: 30 ml Suggested Max. Blood Flow: 250 ml/min Surface Area: 0.05m2 Blood Inlet and outlet: ¼“ Water Compartment: ½“ O.D.- Hansen type Outer Shell : Polycarbonate Should be US FDA Approved		614.01
615	Adult Hemoconcentrator	Should be US FDA Approved		615.01
616	Pediatric Hemoconcentrator	Surface: 0,68 m2 Max TMP KPa 66(0.7/9.6/500) Blood Port : Male Pos Lock Ultrafiltrate Port: ¼”-3/6” connector Priming: 50 ml Circuit Priming 32 /52/137/153 ml Should be US FDA Approved		616.01
617	Neonatal Hemoconcentator	Surface: 0,25 m2 Max TMP KPa 66(0.7/9.6/500) Blood Port : Male Pos Lock Ultrafiltrate Port: ¼”-3/6” connector Priming: 25 ml Circuit Priming 32 /52/137/153 ml Should be US FDA Approved		617.01
618	Adult Arterial Filter	Pore Size: 40 MicronPriming Volume: 195 mlsMax Blood Flow : 7 LPMFilter Surface Area: 655 cm2		618.01

619	Paediatric Arterial Filter	Pore Size: 27 Micron Priming Volume: 100 mls Max Blood Flow : 5 LPM Filter Surface Area: 300 cm2		619.01
620	Infant/Newborn Arterial Filter	Pore Size: 27 Micron Priming Volume: 40 mls Max Blood Flow : 2.5 LPM Filter Surface Area: 140 cm2		620.01
621	Sternum and ribs lock plate	Should be available in different sizes and shapes to be supplied with Applier (gun) Sample based selection should be US FDA approved		621.01
622	Sternum and ribs lock plate	2.4mm and 2.7mm diameter cancellous self drilling locking screws with applier. Should be available in different sizes Sample based selection should be US FDA approved		622.01
623	Bovine pericardial patch	Should be store in buffer solution Size 8 cm x 8 cm		623.01
624	Bovine pericardial patch	Should be store in buffer solution Size 6 cm x 6 cm		624.01
625	Bovine pericardial patch	Should be store in buffer solution Size 4 cm x 4 cm		625.01
626	ePTFE Grafts Straight with carbon coated with out ring	Size 3mm/3.5mm/4mm/5mm/6mm diameter x 10 cm length		626.01
627	ePTFE Grafts Straight with carbon coated with out ring	Size 6mm/7mm/8mm diameter x 20 cm length		627.01
628	ePTFE Grafts Straight with carbon coated with out ring	Size 5mm/6mm/7mm/8mm diameter x 40 cm length		628.01
629	ePTFE Grafts Straight with carbon coated with out ring	Size 6mm/7mm/8mm diameter x 50 cm length		629.01
630	ePTFE Grafts Straight with carbon coated with out ring	Size 6mm/7mm/8mm diameter x 60 cm length		630.01
631	ePTFE Grafts Straight with carbon coated with out ring	Size 6mm/7mm/8mm diameter x 70 cm length		631.01
632	ePTFE Grafts Straight with carbon coated with out ring	Size 6mm/7mm/8mm diameter x 90 cm length		632.01
633	ePTFE Grafts Straight with carbon coated with out ring	Size 13mm/16mm/19mm diameter x 35 cm length		633.01
634	ePTFE Grafts Straight with carbon coated with ring	Size 6mm/7mm/8mm diameter x 40 cm length		634.01
635	ePTFE Grafts Straight with carbon coated with ring	Size 6mm/7mm/8mm diameter x 50 cm length		635.01
636	ePTFE Grafts Straight with carbon coated with ring	Size 6mm/7mm/8mm diameter x 60 cm length		636.01
637	ePTFE Grafts Straight with carbon coated with ring	Size 6mm/7mm/8mm diameter x 70 cm length		637.01

638	ePTFE Grafts Straight with carbon coated with ring	Size 6mm/7mm/8mm diameter x 90 cm length		638.01
639	ePTFE Grafts Straight with carbon coated with ring	Size 13mm/16mm/19mm diameter x 35 cm length		639.01
640	Aortobifemoral graft - (Dacron)	Size - 7x14x40		640.01
641	Aortobifemoral graft - (Dacron)	Size - 6x12x40		641.01
642	Internal mammary artery Disposable bulldogs (Yellow)	small size of 1-2 cm with metallic spring action, good occluding capacity (Sample based selection to be decided after use) US FDA Approved.		642.01
643	Perfadex solution for Lung Transplant			643.01
644	Automated Fastener Cor-Knot System.			644.01
645	Crescent Knife Spatula with bilateral cutting with Handle inbuilt.			645.01
646	Coronary Knife with spatula configuration			646.01
647	Soft tissue retractor and protector with green and white rings			647.01
648	DACRON MARKING PATCH (Filamentous Fabric)	2 x 2		648.01
649	Thin Wall Patch of PTFE	1 cm x 9 cm		649.01
650	Thin Wall Patch of PTFE	2 cm x 9 cm		650.01
651	Thin Wall Patch of PTFE	3 cm x 6 cm		651.01
652	Regular Wall Patch of PTFE	3 cm x 3 cm		652.01
653	Regular Wall Patch of PTFE	5 cm x 7.5 cm		653.01
654	Regular Wall Patch of PTFE	2.5 cm x 15 cm		654.01
655	Regular Wall Patch of PTFE	10 cm x 15 cm		655.01
656	PTFE Hard (Thick) FELTS	4 x 4		656.01
657	PTFE Hard (Thick) FELTS	6 x 6		657.01
658	PTFE FELTS PLEDGETS	4.8 mm x 6 mm, Ractangle		658.01
659	PTFE FELTS PLEDGETS	9.5 x 4.8, Ractangle		659.01
660	PTFE FELTS PLEDGETS	6 mm x 6 mm, Square		660.01
661	PTFE FELTS PLEDGETS	4.8 mm x 6 mm, Oval		661.01
662	e-PTFE graft	10x10		662.01
663	e-PTFE graft	3x10		663.01
664	e-PTFE graft	3.5x10		664.01
665	e-PTFE graft	3x10 thinwall		665.01
666	e-PTFE graft	4x10		666.01
667	e-PTFE graft	4x10 thinwall		667.01
668	e-PTFE graft	4x10 thinwall carboflo		668.01
669	e-PTFE graft	5x10		669.01

670	e-PTFE graft	5x10 thinwall		670.01
671	e-PTFE graft	5x10 thinwall carboflo		671.01
672	e-PTFE graft	6x10		672.01
673	e-PTFE graft	6x10 thinwall		673.01
674	e-PTFE graft	6x10 thinwall carboflo		674.01
675	e-PTFE graft	7x10		675.01
676	e-PTFE graft	7x10 thinwall carboflo		676.01
677	e-PTFE graft	8x10		677.01
678	e-PTFE graft	8x10 thinwall		678.01
679	e-PTFE graft	8x10 thinwall carboflo		679.01
680	e-PTFE graft	10x10 thinwall carboflo		680.01
681	e-PTFE graft	6x20		681.01
682	e-PTFE graft	6x20 carboflo		682.01
683	e-PTFE graft	6x20 thinwall		683.01
684	e-PTFE graft	6x20 thinwall carboflo		684.01
685	e-PTFE graft	7x20 carboflo		685.01
686	e-PTFE graft	8x20		686.01
687	e-PTFE graft	8x20 carboflo		687.01
688	e-PTFE graft	8x20 thinwall		688.01
689	e-PTFE graft	6x30		689.01
690	e-PTFE graft	6x30 carboflo		690.01
691	e-PTFE graft	6x30 thinwall		691.01
692	e-PTFE graft	13x35		692.01
693	e-PTFE graft	16x35		693.01
694	e-PTFE graft	19x35		694.01
695	e-PTFE graft	3x40 thinwall		695.01
696	e-PTFE graft	3.5x40 thinwall		696.01
697	e-PTFE graft	4x40		697.01
698	e-PTFE graft	5x40		698.01
699	e-PTFE graft	5x40 carboflo		699.01
700	e-PTFE graft	6x40		700.01
701	e-PTFE graft	6x40 carboflo		701.01
702	e-PTFE graft	6x40 thinwall		702.01
703	e-PTFE graft	6x40 thinwall carbolflo		703.01
704	e-PTFE graft	7x40		704.01
705	e-PTFE graft	7x40 carboflo		705.01
706	e-PTFE graft	8x40		706.01
707	e-PTFE graft	8x40 carboflo		707.01
708	e-PTFE graft	8x40 thinwall		708.01
709	e-PTFE graft	8x40 thinwall carbolflo		709.01
710	e-PTFE graft	10x40		710.01
711	e-PTFE graft	10x40 thinwall		711.01
712	e-PTFE graft	4x50 carboflo		712.01

713	e-PTFE graft	4x50 thinwall carboflo		713.01
714	e-PTFE graft	5x50 carboflo		714.01
715	e-PTFE graft	5x50 thinwall		715.01
716	e-PTFE graft	5x50 thinwall carbolflo		716.01
717	e-PTFE graft	6x50		717.01
718	e-PTFE graft	6x50 carboflo		718.01
719	e-PTFE graft	6x50 thinwall		719.01