#### Institute For Stem Cell Biology and Regenerative Medicine

Autonomous institute of the Department of Biotechnology, Government Of India



Ref: INS/L-5838/2019-2020(Y) Date: 20/01/2020

#### **ENQUIRY**

Dear Sirs.

Please let us have your lowest Quotation for the following:

SI.No	Cat.No	Item Description	Make/Model	Item Qty	UOM
1		Cryostat (Specifications Attached)		1.00	No.

Remarks: 2 PART TENDER: The Technical and Financial / Price Bids shall be submitted simultaneously in two (2) cover (sealed) system. The proposals shall be evaluated in two stages: (1) Technical and (2) Price / Financial. Technical evaluation will be carried out and those Vendors who score minimum 75% will qualify for Price Bid opening. Thereafter, Financial Proposal shall be evaluated. The Commercially LOWEST BIDDER shall be the first preferred Vendor for award of Order.

1.	The	bids	shall	be	enclosed	in	an	envelope	,	and	due	date	sealed	duly	marked	"Tender	for
				_" R	ef No :							Th	e bids s	hould	be address	ssed and to	o be
ma	iled to	"TH	E HE	AD-I	PURCHA	SE"	. Th	e bids are l	iab	le to	be rej	ected i	f the sea	aled er	velope is	not addre	ssed
to	"THE	HEA	D-PU	RCF	HASE'' w	ith T	end	er Ref No	and	d Iten	n Desc	criptio	n and d	ue date	e. The bid	s delivere	ed in
pei	son sl	nall be	e dropp	oed i	n Purchas	se Se	ectio	n. If the b	ids	are s	sent th	irough	courie	or m	ail, it sh	ould reach	h by
sul	omissi	on Da	te and	Time	e and inSte	em v	vill n	ot be respo	ons	ible f	or the	delay.					

#### 2. DUE DATE FOR SUBMISSION OF QUOTATION AGAINST THIS ENQUIRY IS

#### 27/01/2020 till 2.30 p.m.

- 3. QUOTATIONS RECEIVED AFTER THE DUE DATE SHALL BE REJECTED.
- 4. The Validity of your quotation should be for 60 days from the date.
- 5.All duties,taxes,surcharge and cess as currently applicable must be sated in your quotation,seperately. Otherwise your quote is liable to be rejected.
- 6. Your quotation should indicate delivery period & Warranty period.
- 7.Delivery to be made to our Stores.Please indicate charges,if any extra.Transit Insurance should be done upto inStem Stores.
- 8.If you are unable to supply the quality, specifications or brand as mentioned in our enquiry, Please state so and then offer alternative to quality/Specifications.
- 9. Payment: within one month after delivery & acceptance/satisfactory installation.
- 10.Please ensure that the enquiry number and the due date is superscribed on the envelope failing which your quotation is liable to be rejected.
- 11. Since we are a public funded research institution, we are exempted from paying Customs Duty(Except advolerum duty of 5% + 2% cess and CVD @4% vide Notification No.51/96 with latest amendments) and excise duty vide Notification No.10/97 CENTRAL EXCISE dated 01-03-1997 for all scientific equipments, technical instruments, equipments (including computers), their accessories, spares, consumables and software. Hence, please offer your prices taking this option into consideration.



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## 12.If the item is covered under DGS&D rate contract, please quote the rate as per the DGS&D rate contract with xerox copy of the DGS&D order.

13. Any dispute or differences that may arise between the parties shall be referred to the sole arbitration of the Centre Director or his nominees. The decision of the arbitrator shall be final and binding on the parties. The venue for arbitration shall be Bangalore. The provisions of the Arbitration and Concillation Act, 1996 as amended from time to time shall apply. The Courts in Bangalore shall have exclusive jurisdiction to deal with any or all disputes between the parties.

Yours faithfully For and on behalf of Insitute For Stem Cell Biology and Regenerative Medicine

GKVK, Bellary Road, Bangalore-560065,INDIA

Phone No.:

91-80-23666343/344/345/346

Email Id: purchase@ncbs.res.in

91-80-23636662

Fax:

Website: www.ncbs.res.in





#### 2 PART TENDER FOR Cryostat -Qty 01 No.

P.O. No: INS/L-5838/2019-2020(Y)

#### Tender Specification for Cryostat -Qty 01 No.

- 230 V/50 Hz with cryochamber and specimen cooling, deactivable specimen retraction, certified UVC disinfection
- · AgProtect nanosilver coating, disposable blade holder CE
- · Instrument features:
- · Freestanding cryostat with encapsulated, splash-proof microtome.
- · Spacious, stainless-steel cryochamber, with antiglare illumination.
- · Easy to clean and disinfect.
- · Heated, removable sliding window. Stable, self-contained cryocabinet
- Collection container for condensing water at front of instrument.
- Outer surfaces and controls of instrument coated with AgProtect nanosilver coating to reduce risk of infection.
- · Handwheel manually lockable in two positions.
- · Easy-to-handle and stable clamping system for clamping the specimen discs. 8 ° XY specimen orientation with zero point reference. Specimen retraction for manual mode of operation, (20 pm), can be switched off. Certified UVC disinfection: 30- and 180-minute cycles can be selected.
- · Automatic safety cut-off of disinfection cycle when sliding window is opened.
- Twin compressor cooling system for cryochamber and specimen head. Cooling system with safety pressure control. Specimen temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from 0 °C to 35 °C, +-5K, adjustable in 1K increments at ambient temperature of 20 °C.
- · Easy to clean, actively cooled specimen preparation zone with quick-freezing shelf for up to 15 specimens (temperature selection down to -42 °C) plus 2 Peltier element freezing stations (temperatures down to -52 °C) with manual defrost cycle.
- · Cryochamber defrosted via automatic hot-gas defrosting once every 24 hours, programmable in 15-minute increments. Defrost cycle: 12 minutes.
- · Manual defrosting of cryochamber, quick-freezing shelf with integrated Peltier elements and specimen head with acoustic warning signal to prevent unintentional defrosting.
- · Manual defrost cycle for Chamber and quick- freezing shelf with Peltier elements: 12 minutes; for specimen head: 15 minutes. Low-maintenance microtome with cross roller guides. Reproducible high-quality thin sections via stepper motor specimen feed.
- · Section thickness selection from outside the cryochamber.
- Section thickness selection: Trimming thickness range: selectable via key combination when instrument is being switched on. For clinical applications: 4 trimming thickness settings: 10, 20, 30 and 40 pm. For research applications: 1-600 pm. selectable in 1 pm steps from 1-10 pm; selectable in 2 pm steps from 10-20 pm, selectable in 5 pm steps from 20-50 pm; selectable in 10 pm steps from 50-100 pm; selectable in 50 pm steps from 100-600 pm. Sectioning thickness range: 1-100 pm, selectable in 0.5 pm steps from 1-5pm; selectable in 1 pm steps from 5-20 pm; selectable in 5 pm steps from 20-60 gm; selectable in 10 pm steps from 60-100 pm.
- Total vertical specimen stroke: 59 mm Total horizontal specimen feed: 25 mm
- · Motorized coarse feed in 2 speeds: 300 Rm/s or 900 pm/s.0 Step function: 20 gm each time the key is pressed at slow coarse feed speed.
- LED-display for cryochamber and specimen head temperature, actual time, defrost time.
- · Visual indication of specimen stop positions (front/home).
- · Blade holder base with segment arc for blade holder CE for high- and low-profile disposable blades. Blade holder CE for high- and low-profile blades with lateral adjustment, clearance angle adjustment and integrated knife guard with blade ejection lever.
- · Manufactured in compliance with c-CSA-US and CE standards. CFC-free.
- Technical data:
- · Mains power supply: 230 V/50 Hz (European version)
- · Admissions: c\_CSA\_US, CE





#### Institute for Stem Cell Biology and Regenerative Medicine

- · Dimensions (WxDxH): 700 (with handwheel 835) x 850 x 1215 mm 27.55 (with handwheel: 32.87) x 33.46 x 47.84 inches
- Weight: 175 kg / 385.46 lbs
- · All specifications related to temperature should be valid for a room temperature up to 20 °C and a relative air humidity of 60%.
- · Operating temperature range: +18 °C to 35 °C
- · Inclusions:
- · 1 Basic instrument
- · 1 Handwheel, assy. manual
- · 5 Specimen discs, of various sizes
- · 1 Section waste tray
- 1 Retaining device for quick-freezing shelf, 1 Cover for quick-freezing shelf
- · 1 Tool set, 1 Brush, fine, 1 brush with magnet,
- 1 Allen key with handle, size 5, 1 Allen key, size 2.5, 1 Allen key, size 3.0,
- · 1 Allen key, size 4.0, 1 Allen key, size 5.0
- 3 years' onsite warranty. Bangalore based technical service staff to repair any issue within 48 working hours.

#### **Terms and Conditions:**

- 1. The Technical and Financial / Price Bids shall be submitted simultaneously in two (2) cover (sealed) system. The proposals shall be evaluated in two stages: (1) Technical and (2) Price / Financial. Technical evaluation will be carried out and those Vendors who score minimum 75% will qualify for Price Bid opening. Thereafter, Financial Proposal shall be evaluated. The Commercially LOWEST BIDDER shall be the first preferred Vendor for award of Order.
- 2. <u>first sealed cover Cover I</u>, and super scribed as <u>"Techno-commercial Bid"</u> and should contain Complete Technical details of the Instrument offered (Specifications, Technical Parameters, Advantages, etc.,)
- 3. The <u>second sealed cover</u> Cover II super scribed <u>'Price Bid'</u> should contain **only rates** (should be duly signed with seal and filled with date wherever necessary)
- 4. THESE TWO COVERS SHALL BE AGAIN PUT INTO A SINGLE WAX SEALED COVER super scribed "Cryostat -Qty 01 No." and should reach INSTEM on or before 27/01/2020 before 2.30 p.m. ". This should be addressed to the Purchase Officer, inStem, NCBS, GKVK Post, Bellary Road, Bangalore 65.
- 5. The tender to be quoted in foreign currencies & any other currencies approved/traded by RBI-USD/Euro/JPY/GBP/SGD/CAD/INR.
- 6. If the items as per specifications in our P.O. is not supplied (shipped) within the specified delivery schedule, then liquidated damages (not in terms of penalty) will be imposed automatically and shall be deducted from the bill at the rate of 0.5% per week subject to a maximum of 10% of the order value.
- 7. Original Equipment Manufacturer or Authorised Dealers should provide Authorized Distribution Certificate along with the Quotation.





#### **INFORMATION TO TENDERERS**

The Tender shall be evaluated under 2 (Two) Bid System

I Technical Bid

II Financial Bid

# TECHNICAL SPECIFICATIONS & EVALUATION CRITERIA WITH MARKS FOR 2 PART TENDER FOR "Cryostat -Qty 01 No.

Cryochamber defrosted via automatic hot-gas defrosting once every 24 hours, programmable in 15-minute increments. Defrost cycle: 12 minutes.  Manual defrosting of cryochamber, quick-freezing shelf with integrated Peltier elements — and specimen head with acoustic warning signal to prevent unintentional defrosting.  Manual defrost cycle for Chamber and quick- freezing shelf with Peltier elements: 12 minutes; for specimen head: 15 minutes. Low-maintenance microtome with cross roller guides. Reproducible high-quality thin sections via stepper motor specimen feed.  Section thickness selection: Trimming thickness range: selectable via key combination when instrument is being switched on. For clinical applications: 4 trimming thickness settings: 10, 20, 30 and 40 pm. For research applications: 1-600 pm. selectable in 1 pm steps from 1-10 pm; selectable in 2 pm steps from 10-20 pm, selectable in 5 pm steps from 20-50 pm; selectable in 10 pm steps from 50-100 pm; selectable in 50 pm steps from 100-600 pm. Sectioning thickness range: 1-100 pm, selectable in 0.5 pm steps from 60-100 pm.  Total vertical specimen stroke: 59 mm Total horizontal specimen feed: 25 mm  Motorized coarse feed in 2 speeds: 300 Rm/s or 900 pm/s.0 Step function: 20 gm each time the key is pressed at slow coarse feed speed.  LED-display for cryochamber and specimen head temperature, actual time, defrost time.  Visual indication of specimen stop positions (front/home).		Specification	Score		
Instrument features:  Freestanding cryostat with encapsulated, splash-proof microtome.  Spacious, stainless-steel cryochamber, with antiglare illumination.  Easy to clean and disinfect.  Heated, removable sliding window. Stable, self-contained cryocabinet  Collection container for condensing water at front of instrument.  Outer surfaces and controls of instrument coated with AgProtect nanosilver coating to reduce risk of infection.  Handwheel manually lockable in two positions.  Easy-to-handle and stable clamping system for clamping the specimen discs, 8 ° XY specimen orientation with zero point reference. Specimen retraction for manual mode of operation, (20 pm), can be switched off. Certified UVC disinfection: 30- and 180-minute cycles can be selected.  Automatic safety cut-off of disinfection cycle when sliding window is opened.  Twin compressor cooling system for cryochamber and specimen head. Cooling system with safety pressure control. Specimen temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable in -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable in 10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable in 15 °C in steps from -10 °C to -50 °C in 1 ° steps. Cryochamber qui	disinfection				
Freestanding cryostat with encapsulated, splash-proof microtome.  Spacious, stainless-steel cryochamber, with antiglare illumination.  Easy to clean and disinfect.  Heated, removable sliding window. Stable, self-contained cryocabinet  Collection container for condensing water at front of instrument.  Outer surfaces and controls of instrument coated with AgProtect nanosilver coating to reduce risk of infection.  Handwheel manually lockable in two positions.  Easy-to-handle and stable clamping system for clamping the specimen discs. 8 ° XY specimen orientation with 20 VC disinfection: 30- and 180-minute cycles can be selected.  Automatic safety cut-off of disinfection cycle when sliding window is opened.  Twin compressor cooling system for cryochamber and specimen head. Cooling system with safety pressure control. Specimen temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from 0 °C to 35° C, +-5K, adjustable in 1K increments at ambient temperature of 20 °C.  Easy to clean, actively cooled specimen preparation zone with quick-freezing shelf for up to 15 specimens (temperature selection down to -42 °C) plus 2 Peltier element freezing stations (temperatures down to -52 °C) with manual defrost cycle.  Cryochamber defrosted via automatic hot-gas defrosting once every 24 hours, programmable in 15-minute increments. Defrost cycle: 12 minutes.  Manual defrosting of cryochamber, quick-freezing shelf with integrated Peltier elements — and specimen head with acoustic warning signal to prevent unintentional defrosting.  Manual defrost cycle for Chamber and quick-freezing shelf with heltier elements: 12 minutes; for specimen head: 15 minutes, Low-maintenance microtome with cross roller guides. Reproducible high-quality thin sections via stepper motor specimen feed.  Section thickness selection: Trimming thickness range: selectable via key combination when instrument is being switched on. For clinical applications: 4 trimming thickness range: selectable in 10 pm steps from 10-20 pm,		le blade holder CE			
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Handwheel manually lockable in two positions.  Easy-to-handle and stable clamping system for clamping the specimen discs. 8 ° XY specimen orientation with zero point reference. Specimen retraction for manual mode of operation, (20 pm), can be switched off. Certified UVC disinfection: 30- and 180-minute cycles can be selected.  Automatic safety cut-off of disinfection cycle when sliding window is opened.  Twin compressor cooling system for cryochamber and specimen head. Cooling system with safety pressure control. Specimen temperature selectable from -10 °C to -50 °C in 1° steps. Cryochamber temperature selectable from 0 °C to 35 °C, +5K, adjustable in 1K increments at ambient temperature of 20 °C.  Easy to clean, actively cooled specimen preparation zone with quick-freezing shelf for up to 15 specimens (temperature selection down to -42 °C) plus 2 Peltier element freezing stations (temperatures down to -52 °C) with manual defrost cycle.  Cryochamber defrosted via automatic hot-gas defrosting once every 24 hours, programmable in 15-minute increments. Defrost cycle: 12 minutes.  Manual defrosting of cryochamber, quick-freezing shelf with integrated Peltier elements — and specimen head with acoustic warning signal to prevent unintentional defrosting.  Manual defrost cycle for Chamber and quick- freezing shelf with Peltier elements: 12 minutes; for specimen head: 15 minutes. Low-maintenance microtome with cross roller guides. Reproducible high-quality thin sections via stepper motor specimen feed.  Section thickness selection: Trimming thickness range: selectable via key combination when instrument is being switched on. For clinical applications: 4 trimming thickness settings: 10, 20, 30 and 40 pm. For research applications: 1-600 pm. selectable in 10 pm steps from 1-10 pm; selectable in 2 pm steps from 10-20 pm, selectable in 5 pm steps from 10-60 pm. Sectioning thickness range: 1-100 pm, selectable in 10 pm steps from 1-5pm; selectable in 1 pm steps from 5-20 pm; selectable in 5 pm steps from 20-60 gm; selectable	· Collection container for condensing wa	ter at front of instrument.			
Easy-to-handle and stable clamping system for clamping the specimen discs. 8 ° XY specimen orientation with zero point reference. Specimen retraction for manual mode of operation, (20 pm), can be switched off. Certified UVC disinfection: 30- and 180-minute cycles can be selected.  Automatic safety cut-off of disinfection cycle when sliding window is opened.  Twin compressor cooling system for cryochamber and specimen head. Cooling system with safety pressure control. Specimen temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from 0 °C to 35 °C, +-5K, adjustable in 1K increments at ambient temperature of 20 °C.  Easy to clean, actively cooled specimen preparation zone with quick-freezing shelf for up to 15 specimens (temperature selection down to -42 °C) plus 2 Peltier element freezing stations (temperatures down to -52 °C) with manual defrost cycle.  Cryochamber defrosted via automatic hot-gas defrosting once every 24 hours, programmable in 15-minute increments. Defrost cycle: 12 minutes.  Manual defrosting of cryochamber, quick-freezing shelf with integrated Peltier elements — and specimen head with acoustic warning signal to prevent unintentional defrosting.  Manual defrost cycle for Chamber and quick- freezing shelf with Peltier elements: 12 minutes; for specimen head: 15 minutes. Low-maintenance microtome with cross roller guides. Reproducible high-quality thin sections via stepper motor specimen feed.  Section thickness selection: Trimming thickness range: selectable via key combination when instrument is being switched on. For clinical applications: 4 trimming thickness settings: 10, 20, 30 and 40 pm. For research applications: 1-600 pm. selectable in 1 pm steps from 50-100 pm; selectable in 50 pm steps from 100-600 pm. Sectioning thickness range: 1-100 pm, selectable in 50 pm steps from 10-20 pm, selectable in 50 pm steps from 50-100 pm;	· Outer surfaces and controls of instrume	nt coated with AgProtect nanosilver coating to reduce risk of infection.			
Easy-to-handle and stable clamping system for clamping the specimen discs. 8 ° XY specimen orientation with zero point reference. Specimen retraction for manual mode of operation, (20 pm), can be switched off. Certified UVC disinfection: 30- and 180-minute cycles can be selected.  Automatic safety cut-off of disinfection cycle when sliding window is opened.  Twin compressor cooling system for cryochamber and specimen head. Cooling system with safety pressure control. Specimen temperature selectable from -10 °C to -50 °C in 1° steps. Cryochamber temperature selectable from 0°C to 35 °C, +-5K, adjustable in 1K increments at ambient temperature of 20 °C.  Easy to clean, actively cooled specimen preparation zone with quick-freezing shelf for up to 15 specimens (temperature selection down to -42 °C) plus 2 Peltier element freezing stations (temperatures down to -52 °C) with manual defrost cycle: 12 minutes.  Cryochamber defrosted via automatic hot-gas defrosting once every 24 hours, programmable in 15-minute increments. Defrost cycle: 12 minutes.  Manual defrost cycle: 12 minutes.  Manual defrost cycle for Chamber and quick-freezing shelf with integrated Peltier elements: 12 minutes; for specimen head with acoustic warning signal to prevent unintentional defrosting.  Manual defrost cycle for Chamber and quick-freezing shelf with Peltier elements: 12 minutes; for specimen head: 15 minutes. Low-maintenance microtome with cross roller guides. Reproducible high-quality thin sections via stepper motor specimen feed.  Section thickness selection: Trimming thickness range: selectable via key combination when instrument is benefic switched on. For clinical applications: 4 trimming selectable in 2 pm steps from 10-20 pm, selectable in 5 pm steps from 20-50 pm; selectable in 10 pm steps from 50-100 pm. Sectioning thickness range: 1-100 pm, selectable in 10 pm steps from 50-100 pm. Sectioning thickness range: 1-100 pm, selectable in 10 pm steps from 60-100 pm.  Total vertical specimen stroke: 59 mm Total horizontal specimen fe	· Handwheel manually lockable in two p	ositions.			
Twin compressor cooling system for cryochamber and specimen head. Cooling system with safety pressure control. Specimen temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from 0 °C to 35 °C, +-5K, adjustable in 1K increments at ambient temperature of 20 °C.  Easy to clean, actively cooled specimen preparation zone with quick-freezing shelf for up to 15 specimens (temperature selection down to -42 °C) plus 2 Peltier element freezing stations (temperatures down to -52 °C) with manual defrost cycle.  Cryochamber defrosted via automatic hot-gas defrosting once every 24 hours, programmable in 15-minute increments. Defrost cycle: 12 minutes.  Manual defrosting of cryochamber, quick-freezing shelf with integrated Peltier elements — and specimen head with acoustic warning signal to prevent unintentional defrosting.  Manual defrost cycle for Chamber and quick- freezing shelf with Peltier elements: 12 minutes; for specimen head: 15 minutes. Low-maintenance microtome with cross roller guides. Reproducible high-quality thin sections via stepper motor specimen feed.  Section thickness selection: Trimming thickness range: selectable via key combination when instrument is being switched on. For clinical applications: 4 trimming thickness settings: 10, 20, 30 and 40 pm. For research applications: 1-600 pm. selectable in 10 pm steps from 10-20 pm, selectable in 5 pm steps from 10-20 pm, selectable in 50 pm steps from 10-20 pm, selectable in 50 pm steps from 10-20 pm, selectable in 50 pm steps from 20-60 gm; selectable in 10 pm steps from 60-100 pm.  Total vertical specimen stroke: 59 mm Total horizontal specimen feed: 25 mm  Motorized coarse feed in 2 speeds: 300 Rm/s or 900 pm/s.0 Step function: 20 gm each time the key is pressed at slow coarse feed speed.  LED-display for cryochamber and specimen head temperature, actual time, defrost time.  Visual indication of specimen stop positions (front/home).	zero point reference. Specimen retraction fo	r manual mode of operation, (20 pm), can be switched off. Certified	30		
control. Specimen temperature selectable from -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable from 0 °C to 35 °C, +-5K, adjustable in 1K increments at ambient temperature of 20 °C.  Easy to clean, actively cooled specimen preparation zone with quick-freezing shelf for up to 15 specimens (temperature selection down to -42 °C) plus 2 Peltier element freezing stations (temperatures down to -52 °C) with manual defrost cycle.  Cryochamber defrosted via automatic hot-gas defrosting once every 24 hours, programmable in 15-minute increments. Defrost cycle: 12 minutes.  Manual defrosting of cryochamber, quick-freezing shelf with integrated Peltier elements — and specimen head with acoustic warning signal to prevent unintentional defrosting.  Manual defrost cycle for Chamber and quick- freezing shelf with Peltier elements: 12 minutes; for specimen head: 15 minutes. Low-maintenance microtome with cross roller guides. Reproducible high-quality thin sections via stepper motor specimen feed.  Section thickness selection: Trimming thickness range: selectable via key combination when instrument is being switched on. For clinical applications: 4 trimming thickness settings: 10, 20, 30 and 40 pm. For research applications: 1-600 pm. selectable in 10 pm steps from 50-100 pm; selectable in 5 pm steps from 10-20 pm, selectable in 10 pm steps from 50-100 pm; selectable in 10 pm steps from 60-100 pm.  Total vertical specimen stroke: 59 mm Total horizontal specimen feed: 25 mm  Motorized coarse feed in 2 speeds: 300 Rm/s or 900 pm/s.0 Step function: 20 gm each time the key is pressed at slow coarse feed speed.  LED-display for cryochamber and specimen head temperature, actual time, defrost time.  Visual indication of specimen stop positions (front/home).	Automatic safety cut-off of disinfection	cycle when sliding window is opened.			
(temperature selection down to -42 °C) plus 2 Peltier element freezing stations (temperatures down to -52 °C) with manual defrost cycle.  Cryochamber defrosted via automatic hot-gas defrosting once every 24 hours, programmable in 15-minute increments. Defrost cycle: 12 minutes.  Manual defrosting of cryochamber, quick-freezing shelf with integrated Peltier elements — and specimen head with acoustic warning signal to prevent unintentional defrosting.  Manual defrost cycle for Chamber and quick- freezing shelf with Peltier elements: 12 minutes; for specimen head: 15 minutes. Low-maintenance microtome with cross roller guides. Reproducible high-quality thin sections via stepper motor specimen feed.  Section thickness selection: Trimming thickness range: selectable via key combination when instrument is being switched on. For clinical applications: 4 trimming thickness settings: 10, 20, 30 and 40 pm. For research applications: 1-600 pm. selectable in 1 pm steps from 1-10 pm; selectable in 2 pm steps from 10-20 pm, selectable in 5 pm steps from 20-50 pm; selectable in 10 pm steps from 5-100 pm; selectable in 5 pm steps from 20-60 gm; selectable in 10 pm steps from 60-100 pm.  Total vertical specimen stroke: 59 mm Total horizontal specimen feed: 25 mm  Motorized coarse feed in 2 speeds: 300 Rm/s or 900 pm/s.0 Step function: 20 gm each time the key is pressed at slow coarse feed speed.  LED-display for cryochamber and specimen head temperature, actual time, defrost time.  Visual indication of specimen stop positions (front/home).	control. Specimen temperature selectable from	om -10 °C to -50 °C in 1 ° steps. Cryochamber temperature selectable			
Manual defrosting of cryochamber, quick-freezing shelf with integrated Peltier elements — and specimen head with acoustic warning signal to prevent unintentional defrosting.  Manual defrost cycle for Chamber and quick- freezing shelf with Peltier elements: 12 minutes; for specimen head: 15 minutes. Low-maintenance microtome with cross roller guides. Reproducible high-quality thin sections via stepper motor specimen feed.  Section thickness selection: Trimming thickness range: selectable via key combination when instrument is being switched on. For clinical applications: 4 trimming thickness settings: 10, 20, 30 and 40 pm. For research applications: 1-600 pm. selectable in 1 pm steps from 1-10 pm; selectable in 2 pm steps from 10-20 pm, selectable in 5 pm steps from 20-50 pm; selectable in 10 pm steps from 50-100 pm; selectable in 50 pm steps from 100-600 pm. Sectioning thickness range: 1-100 pm, selectable in 10 pm steps from 60-100 pm.  Total vertical specimen stroke: 59 mm Total horizontal specimen feed: 25 mm  Motorized coarse feed in 2 speeds: 300 Rm/s or 900 pm/s.0 Step function: 20 gm each time the key is pressed at slow coarse feed speed.  LED-display for cryochamber and specimen head temperature, actual time, defrost time.  Visual indication of specimen stop positions (front/home).  Blade holder base with segment arc for blade holder CE for high- and low-profile disposable blades. Blade holder CE for high- and low-profile blades with lateral adjustment, clearance angle adjustment and integrated knife					
Manual defrosting of cryochamber, quick-freezing shelf with integrated Peltier elements — and specimen head with acoustic warning signal to prevent unintentional defrosting.  Manual defrost cycle for Chamber and quick- freezing shelf with Peltier elements: 12 minutes; for specimen head: 15 minutes. Low-maintenance microtome with cross roller guides. Reproducible high-quality thin sections via stepper motor specimen feed.  Section thickness selection from outside the cryochamber.  Section thickness selection: Trimming thickness range: selectable via key combination when instrument is being switched on. For clinical applications: 4 trimming thickness settings: 10, 20, 30 and 40 pm. For research applications: 1-600 pm. selectable in 1 pm steps from 1-10 pm; selectable in 2 pm steps from 10-20 pm, selectable in 5 pm steps from 20-50 pm; selectable in 10 pm steps from 50-100 pm; selectable in 50 pm steps from 100-600 pm. Sectioning thickness range: 1-100 pm, selectable in 0.5 pm steps from 1-5pm; selectable in 1 pm steps from 5-20 pm; selectable in 5 pm steps from 20-60 gm; selectable in 10 pm steps from 60-100 pm.  Total vertical specimen stroke: 59 mm Total horizontal specimen feed: 25 mm  Motorized coarse feed in 2 speeds: 300 Rm/s or 900 pm/s.0 Step function: 20 gm each time the key is pressed at slow coarse feed speed.  LED-display for cryochamber and specimen head temperature, actual time, defrost time.  Visual indication of specimen stop positions (front/home).  Blade holder base with segment arc for blade holder CE for high- and low-profile disposable blades. Blade holder CE for high- and low-profile disposable blades. Blade holder CE for high- and low-profile disposable blades. Blade holder CE for high- and low-profile disposable blades.		ot-gas defrosting once every 24 hours, programmable in 15-minute			
Manual defrost cycle for Chamber and quick- freezing shelf with Peltier elements: 12 minutes; for specimen head: 15 minutes. Low-maintenance microtome with cross roller guides. Reproducible high-quality thin sections via stepper motor specimen feed.  Section thickness selection from outside the cryochamber.  Section thickness selection: Trimming thickness range: selectable via key combination when instrument is being switched on. For clinical applications: 4 trimming thickness settings: 10, 20, 30 and 40 pm. For research applications: 1-600 pm. selectable in 1 pm steps from 1-10 pm; selectable in 2 pm steps from 10-20 pm, selectable in 5 pm steps from 20-50 pm; selectable in 10 pm steps from 50-100 pm; selectable in 10 pm steps from 10-600 pm. Sectioning thickness range: 1-100 pm, selectable in 0.5 pm steps from 60-100 pm.  Total vertical specimen stroke: 59 mm Total horizontal specimen feed: 25 mm  Motorized coarse feed in 2 speeds: 300 Rm/s or 900 pm/s.0 Step function: 20 gm each time the key is pressed at slow coarse feed speed.  LED-display for cryochamber and specimen head temperature, actual time, defrost time.  Visual indication of specimen stop positions (front/home).  Blade holder base with segment arc for blade holder CE for high- and low-profile disposable blades. Blade holder CE for high- and low-profile blades with lateral adjustment, clearance angle adjustment and integrated knife		ok-freezing shelf with integrated Peltier elements and specimen head			
Manual defrost cycle for Chamber and quick- freezing shelf with Peltier elements: 12 minutes; for specimen head: 15 minutes. Low-maintenance microtome with cross roller guides. Reproducible high-quality thin sections via stepper motor specimen feed.  Section thickness selection: Trimming thickness range: selectable via key combination when instrument is being switched on. For clinical applications: 4 trimming thickness settings: 10, 20, 30 and 40 pm. For research applications: 1-600 pm. selectable in 1 pm steps from 1-10 pm; selectable in 2 pm steps from 10-20 pm, selectable in 5 pm steps from 20-50 pm; selectable in 10 pm steps from 1-5pm; selectable in 1 pm steps from 5-20 pm; selectable in 5 pm steps from 20-60 gm; selectable in 10 pm steps from 60-100 pm.  Total vertical specimen stroke: 59 mm Total horizontal specimen feed: 25 mm  Motorized coarse feed in 2 speeds: 300 Rm/s or 900 pm/s.0 Step function: 20 gm each time the key is pressed at slow coarse feed speed.  LED-display for cryochamber and specimen head temperature, actual time, defrost time.  Visual indication of specimen stop positions (front/home).  Blade holder base with segment arc for blade holder CE for high- and low-profile disposable blades. Blade holder CE for high- and low-profile blades with lateral adjustment, clearance angle adjustment and integrated knife					
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being switched on. For clinical applications: 4 trimming thickness settings: 10, 20, 30 and 40 pm. For research applications: 1-600 pm. selectable in 1 pm steps from 1-10 pm; selectable in 2 pm steps from 10-20 pm, selectable in 5 pm steps from 20-50 pm; selectable in 10 pm steps from 50-100 pm; selectable in 50 pm steps from 100-600 pm. Sectioning thickness range: 1-100 pm, selectable in 0.5 pm steps from 1-5pm; selectable in 1 pm steps from 5-20 pm; selectable in 5 pm steps from 20-60 gm; selectable in 10 pm steps from 60-100 pm.  Total vertical specimen stroke: 59 mm Total horizontal specimen feed: 25 mm  Motorized coarse feed in 2 speeds: 300 Rm/s or 900 pm/s.0 Step function: 20 gm each time the key is pressed at slow coarse feed speed.  LED-display for cryochamber and specimen head temperature, actual time, defrost time.  Visual indication of specimen stop positions (front/home).  Blade holder base with segment arc for blade holder CE for high- and low-profile disposable blades. Blade holder CE for high- and low-profile blades with lateral adjustment, clearance angle adjustment and integrated knife	Section thickness selection from outside	e the cryochamber.			
Motorized coarse feed in 2 speeds: 300 Rm/s or 900 pm/s.0 Step function: 20 gm each time the key is pressed at slow coarse feed speed.  LED-display for cryochamber and specimen head temperature, actual time, defrost time.  Visual indication of specimen stop positions (front/home).  Blade holder base with segment arc for blade holder CE for high- and low-profile disposable blades. Blade holder CE for high- and low-profile blades with lateral adjustment, clearance angle adjustment and integrated knife	Section thickness selection: Trimming thickness range: selectable via key combination when instrument is being switched on. For clinical applications: 4 trimming thickness settings: 10, 20, 30 and 40 pm. For research applications: 1-600 pm. selectable in 1 pm steps from 1-10 pm; selectable in 2 pm steps from 10-20 pm, selectable in 5 pm steps from 20-50 pm; selectable in 10 pm steps from 50-100 pm; selectable in 50 pm steps from 100-600 pm. Sectioning thickness range: 1-100 pm, selectable in 0.5 pm steps from 1-5pm; selectable in 1 pm steps from 5-20 pm; selectable in 5 pm steps from 20-60 gm; selectable in 10 pm steps from 60-100 pm.				
at slow coarse feed speed.  LED-display for cryochamber and specimen head temperature, actual time, defrost time.  Visual indication of specimen stop positions (front/home).  Blade holder base with segment arc for blade holder CE for high- and low-profile disposable blades. Blade holder CE for high- and low-profile blades with lateral adjustment, clearance angle adjustment and integrated knife	Total vertical specimen stroke: 59 mm	Γotal horizontal specimen feed: 25 mm			
Visual indication of specimen stop positions (front/home).  Blade holder base with segment arc for blade holder CE for high- and low-profile disposable blades. Blade holder CE for high- and low-profile blades with lateral adjustment, clearance angle adjustment and integrated knife  25	· Motorized coarse feed in 2 speeds: 300 at slow coarse feed speed.	Rm/s or 900 pm/s.0 Step function: 20 gm each time the key is pressed			
Blade holder base with segment arc for blade holder CE for high- and low-profile disposable blades. Blade holder CE for high- and low-profile blades with lateral adjustment, clearance angle adjustment and integrated knife  25	LED-display for cryochamber and spec	imen head temperature, actual time, defrost time.			
holder CE for high- and low-profile blades with lateral adjustment, clearance angle adjustment and integrated knife 25	· Visual indication of specimen stop posi	tions (front/home).			
guard with diade ejection lever.			25		





### Institute for Stem Cell Biology and Regenerative Medicine

· Manufactured in compliance with c-CSA-US and CE standards. CFC-free.					
· Technical data:					
· Mains power supply: 230 V/50 Hz (European version)					
· Admissions: c_CSA_US, CE					
Dimensions (WxDxH): 700 (with handwheel 835) x 850 x 1215 mm 27.55 (with handwheel: 32.87) x 33.46 x 47.84 inches					
· Weight: 175 kg / 385.46 lbs					
· All specifications related to temperature should be valid for a room temperature up to 20 °C and a relative air humidity of 60%.					
Operating temperature range: +18 °C to 35 °C					
· Inclusions:					
· 1 Basic instrument					
· 1 Handwheel, assy. manual					
5 Specimen discs, of various sizes					
· 1 Section waste tray					
1 Retaining device for quick-freezing shelf, 1 Cover for quick-freezing shelf	20				
· 1 Tool set, 1 Brush, fine, 1 brush with magnet,					
1 Allen key with handle, size 5, 1 Allen key, size 2.5, 1 Allen key, size 3.0,					
1 Allen key, size 4.0, 1 Allen key, size 5.0					
3 years' onsite warranty. Bangalore based technical service staff to repair any issue within 48 working hours.					
Total	100				

Evaluation will be carried out and those Vendors who score minimum 75% will qualify for Price Bid opening. Thereafter, Financial proposal shall be evaluated. The Commercially LOWEST BIDDER shall be the first preferred Vendor for award of Order.

