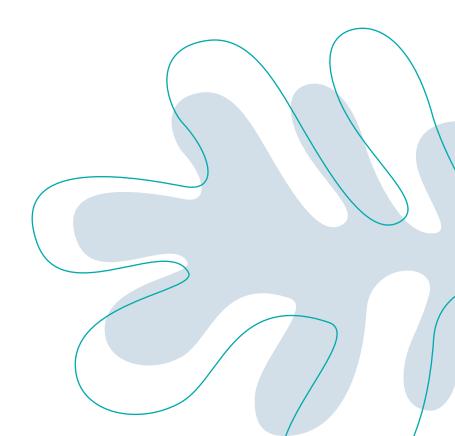




## THE EXTRAORDINARILY INNOVATIVE, INTUITIVE AND POWERFUL ATS SYSTEM



CARDIAC SURGERY SOLUTIONS

## AUTOTRANSFUSION

#### A KEY ROLE IN AN EFFECTIVE BLOOD MANAGEMENT STRATEGY

The risks and costs related to homologous blood transfusion and its constantly decreasing worldwide availability have been widely documented.

Many health care providers and hospitals are now developing a Blood Management Strategy, a multidisciplinary approach to optimize the use of blood products, aiming to reduce the need for homologous blood, improve patient outcome and contain costs.

One of the key elements for a complete blood management strategy is **autotransfusion**, involving the collection, processing, and reinfusion of the patient's own blood that is lost during the peri-operative period at the surgical site.

Autotransfusion drives:

#### MAXIMUM SAFETY

It significantly reduces the demand for homologous blood and prevents the risks involved in its transfusion:

- Mistransfusion
- Transfusion Related Acute Lung Injury (TRALI)
- Systemic Inflammatory Response Syndrome (SIRS)
- Transfusion Related Immunomodulation (TRIM)
- Immunosuppression

#### SIGNIFICANT COST REDUCTION FOR THE HOSPITAL

It provides fresh, autologous, vital RBCs to the patient eliminating the costs related to bank blood tranfusion:

- The average total cost of transfusing a unit of homologous RBCs is \$1,158\*
- No direct costs related to blood screening

Indirect long-term costs reduction: several studies show that the reinfusion of RBC's recovered with autotransfusion improves post-operative outcome, and decreases hospital stay and additional medical treatments

\* Shander, Aryeh, Hofmann Axel Et al. The true cost of red blood cell transfusions in surgical patients. 2008: Presented at the 50th Annual American Society of Hernatology Meeting, The Moscone Center Poster Board III-127



# THE COMPLETE SOLUTION FOR BLOOD SALVAGE

For over 30 years, Sorin Group has treated more than 6.5 million patients with its ATS products. The experience and dedication towards research of innovative solutions allows **Sorin Group** to be recognized as a **world leader in autotransfusion**.

**Sorin XTRA** is the latest extraordinarily innovative, intuitive and powerful ATS system.

It is a compact, ergonomic and robust **ATS device** with an attractive design, developed by the same designers of Sorin S5 and C5 heart lung machines. It inspires to BRAT 2 and Electa, combining and improving their best features, and introducing further innovation, through S5 and C5-like design, **graphic color touch screen user interface** and advanced **data management** capabilities.



Sorin Xtra is the eXtraordinarily innovative, intuitive and powerful ATS system at your fingertips



Follow the symbol to discover the eXtraordinary Features



## INNOVATIVE

#### SORIN GROUP FAMILY DESIGN

With design characteristics similar to the worldleading heart lung machines Sorin S5 and C5, Sorin XTRA perfectly blends into the Sorin Group product portfolio assuring **high reliability and durability**.



#### THE FIRST GRAPHIC COLOR TOUCH SCREEN USER INTERFACE

The full-color LCD, TFT (8.4") with a large view area (172x130 mm) and the innovative touch screen technology allow optimal visibility of the information displayed and total control at your fingertips.

Taking inspiration from our world leading HLM machines S5 and C5, the XTRA user interface displays all the information you need by means of **modular displets** that can be opened or closed at your desire and offers **complete control** of the system throughout extremely **intuitive and easy-to-navigate** menu pages.



#### Advanced Data Management

Experience complete control over your data. From the tally screen you will be able to visualize case information at anytime, print a report, or download multiple cases on a USB memory stick.

- Internal memory capable of storing thousands of past cases
- USB ports for simultaneous download of multiple cases to be imported in Sorin ATS Data Board
- Integrated ink printer, producing a permanent case printouts, ensuring complete traceability
- RS232 ports for external PC connection
- Functional integration with S5 and C5 thanks to Sorin Connect

#### ATS DATA BOARD

Sorin ATS Data Board is the new PC based data management software that allows to store case files downloaded from Sorin XTRA autotransfusion system, easily consult and track case data and create user defined reports.

ATS Data Board offers a series of easy and intuitive software solutions to trace autotransfusion patient's case data, measure performance and use of autologous blood products, and help monitor the implementation of your blood management strategy.

F٨	TS Data	Board **			Data Boo					Reportin			
-le-	Attractor	New Jan Street	teriori, Berrose Al	Mars 120mm Help	About sitting								
-	1.84.549	14+144-103	1.0 m Tuber 411	Metter	dear tools	torright New	Linese Factor						
	-		and the second										ł
						m * Amapril 7 A							
	2010/021	273638			409		1008	18.	1028	1007		708	
	1440104	1470-40			5484		Case Li	-44	1000				
										4	(4)		
	same	Marya .			- 198		30		100	1993			
	HONE	10-11-62		1.4	2842		.40	1.84	1985	5878	- 84	186	
	1008	storate.			and a	18.0	- 46	141	1015	847		108.1	
	210146	0.0004			1007				1411	4412		100	
	210638	262798			7996	+	248	38.	1913	1075		1.1	
	1409/01	sapate			1994	34	100	(28)	1404	4798	1		
	1107.00	10.0762		1.1	540		387		100	388.1		1.1	
	100704	100708		11	140		- 85		100	2008 1		1.0	
	14/040	14054L		1.1	1946		44	(#C)	1481	3476		146	
	262240	2015A		. A.	2940	. A. 1	80	- 27	101	3479	198	1(86)	
	262547	38/547		1.4	- 260		.405	187.1	THE .	5410		(198)	
	140431	2116234 ·		- 4			0.04	.45	FLPN	4967	-0.		
	3227.84	ARAN BA			540		- 407	14	189	1010	(a)		
	3,2101-04	Arythin:			140		- 400		100	20125			
	142940	same.			1945		80	(at 1)	200	3478	100	385.	
	120803	1817418		100	2111	100	254	1.88	1000	4134		1.18	
	1.207.68	100764			1.149		441		3486	19409	(A)		
	140034	140046			5188	B.,	100	44	1241	3493	4		
	1440.94	147644			1986	(8).	30)	48	1.045	2455			
	Landslag.	Lancer.		1	Line.	1.0	1000	40	10%	2401	14	14	
	144834	14044		A	1.000	(#)	(441)	- 40	100	1000		1.1	
	2440.00	patrone -		1.4	146				1201	3863	18	- 3	
	144834	101004		- 8	100	1822	(49)		1198)	2452	18		
	344034	Lineas		18	100		-88	-	1345	3463	14		
	348834	1476.88			245		342	140	1991	2488			
	1440.14	147648		14	5488				1011	.3450	4		
	14(0)0	3429448		1.1	5.86		188	48	1241	Canally Color		1.0	
	144010.04	10102-00			1000		- 600	-40	1000	2000			

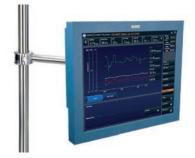




## SORIN CONNECT

**Sorin CONNECT** is an innovative and intuitive **Perfusion charting system** focused on real time and retrospective calculations and trending tools to assist with data management during and after CPB.

**Sorin XTRA** can electronically link to **Connect** to integrate all Perfusion data into one case report.



#### **DUAL SENSOR TECHNOLOGY**

■ The Dual RBC detector technology in Sorin Xtra is composed of two optical sensors allowing a high filling of the bowl and thus an excellent supernatant washout and high outlet haematocrit

The Hct sensor is an integrated, non-invasive, optical sensor providing information on RBC concentration of the inlet blood during Fill phase and outlet blood during the Empty phase

The waste line color indicator is an optical sensor providing on-screen information at-a-glance on the wash quality by a visual indicator









Hct sensor

Dual RBC detector

# SORIN XTRA

10

Waste Bag

1 Touch

RBC's

a Popi

Waste line color indicator



## INTUITIVE





#### **ERGONOMICS**

Special care was put in the **design** of the system ergonomics in order to improve interaction throughout all working phases and situations.

- XTRA has a small footprint that allows the machine to fit in narrow spaces
- The four pivoting wheels coupled with the front and rear handles ensure high maneuverability of the system
- The robust and transparent centrifuge lid protects the machine from any fluid spillage, helps reduce noise and allows complete visibility into the centrifuge
- The huge storage capacity of the machine allows transportation for all the necessary disposable to start the procedure. The cart was designed to transport more than 6 liters of fluids and maintain stability\*

Eg: 5 l of saline bags + 1 l of anticoagulant bags + 1 Bowl Set (or Reservoir)

The IV poles offer several hooks for bags and also a compartment for storage of caps or pens

(\*= with Xvac mounted)





#### FAST AND INTUITIVE SETUP

Experience the easy, fast and safe disposable setup. The newly designed  $X_{TRA}$  top panel and disposables allow error proof setup, in a blink of an eye.

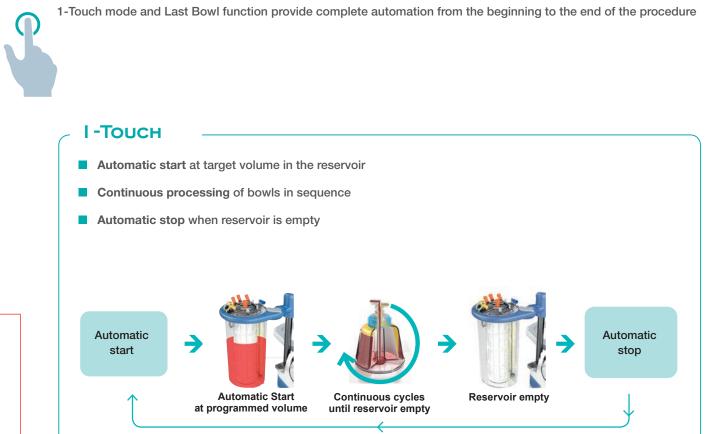
- The XTRA BOWL and the new patented centrifuge plate ensure easy 360° mounting
- The new centrifuge arm allow one-hand arm locking/ unlocking
- The new cartridge and tubing design guarantees a straightforward setup, with lid-driven tubing positioning into the air sensor seat



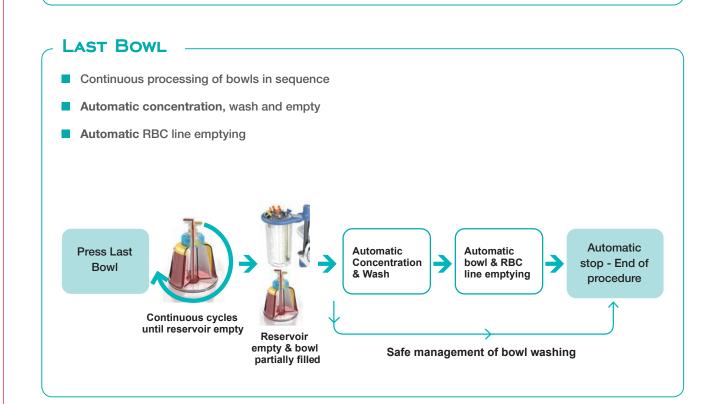




#### FULLY AUTOMATED PROCESSING



#### No user intervention required



### **OPERATING PROTOCOLS**

#### **INTRA-OPERATIVE FACTORY PROTOCOLS**

#### POPT

Designed to obtain:

- Very high Hct, independently from inlet Hct\*
- Excellent supernatant removal\*\*
- Good processing speed\*\*

Achieved by:

- Two step filling at different flow rates and automated stand-by
- Dual RBC detector technology for optimal bowl filling (active for XTRA BOWL 55 and XTRA BOWL 225)

rvoir

rvoir

rvoir

#### **PSTD**

Designed to obtain:

- High processing speed (with XTRA BOWL 225)\*\*
- Good hematocrit\*\*
- Good wash quality\*\* -

Achieved by:

- One-step automatic filling -
- Possibility to adjust flows (filling, washing, emptying)
- High wash and empty flows

#### PFAT

Designed to obtain:

- Removal of fat particles
- Excellent supernatant removal
- **Good Hematocrit**
- Achieved by:
- Newly designed fat removal phase
- High wash flows

#### **POST-OPERATIVE FACTORY PROTOCOL**

#### **POST-OP**

Designed to obtain:

A configuration suitable for post-op applications

Achieved by:

- Activating the same settings of the Popt protocol
- Automatically switching to gentle aspiration with the XVAC post-op mode

#### Sources:

"Clinical evaluation of the new Sorin XTRA Autotransfusion System" - E.P. Overdevest, H.Feron, J.W.H. van Hees, P.Lanen, M.Sahin - 10th ECOPEAT Geneve - Switzerland, 2010

\*\* In vitro performance evaluation study with human blood 25% Hct with XTRA Bowl 225. The result are consistent also with the other bowl sizes. Data on file at Sorin Group.





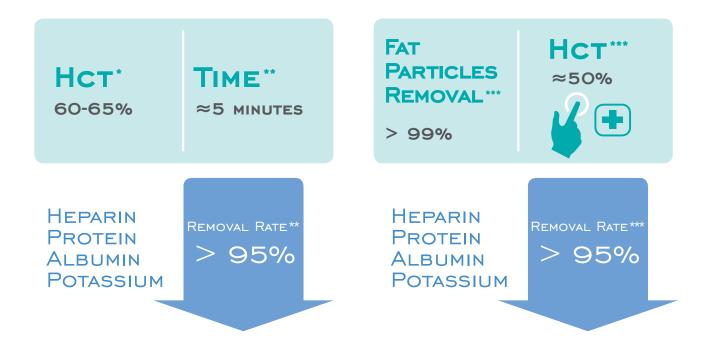
## EXTRAORDINARILY POWERFUL

#### HIGH RBC HCT AND WASH QUALITY WITH POPT

The innovative RBC detector technology, combined with the new Popt factory protocol and disposable design.

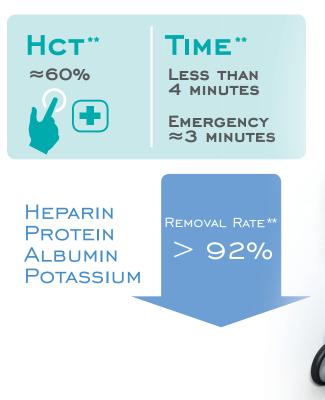
#### COMPLETE FAT REMOVAL WITH THE NEW PFAT PROTOCOL\*\*\*

The newly developed Pfat protocol will effectively remove fat particles



#### FAST HIGH VOLUME PROCESSING WITH PSTD

Ready to meet your high volume challenges: fast processing with the Pstd standard protocol, turning into emergency protocol with only one touch.



#### Sources:

- \* "Clinical evaluation of the new Sorin XTRA Autotransfusion System" E.P. Overdevest, H.Feron, J.W.H. van Hees, P.Lanen, M.Sahin 10th ECOPEAT Geneve Switzerland, 2010
- \*\* In vitro performance evaluation study with human blood 25% Hct with XTRA Bowl 225. The result are consistent also with the other bowl sizes. Data on file at Sorin Group.
- \*\*\* "Fat removal during cell salvage An optimized program in the XTRA® autotransfusion device" Timo Seyfried, MD, Michael Gruber, MD; Lilith Haas; Ernil Hansen, PhD, MD 13th ECOPEAT Vienna - Austria 2013

<u>ب</u>

POWERFUL



### QUIET, POWERFUL VACUUM

XvAC is a modular vacuum pump, designed to be extremely quiet and to deliver top performance and maximum flexibility by working as a standalone unit or fully integrated into the XTRA system.

When seated in its housing and connected to the system, Sorin XvAc can be activated and operated from a dedicated displet on the XTRA user interface. When used standalone, the vacuum pump can be controlled from the XvAc panel.





**Sorin XvAC** guarantees uncomparable flexibility functioning in two operative modes, **Intra** and **Post** delivering an optimized solution for perioperative blood recovery. Moreover, XvAC can be activated right after power-on, reacting promptly to critical emergency situations.

The vacuum power ranges from:

- -50 to -300 mmHg (Intra-operative mode High vacuum capacity)
- -10 to -100 mmHg (Post-operative mode Gentle aspiration for wound drainage connection)



POWERFUL

## **TECHNICAL INFORMATION**

XTRA					
Unit Dimensions	Height = 660 mm (1055 mm*) - pole lowered				
	Height = 1585 mm (1980 mm*) - pole completely lifted				
	Height = 835 mm (1230 mm*) - display lifted				
	Width = 375 mm - (including the side hangers)				
	Width = 800 mm - with poles completely open				
* = with cart.	Depth = 500 mm - 680 mm including the front and rear handles				
Cart dimensions	Height = 500 mm				
	Width = 480 mm				
	Depth = 595 mm				
Unit Weight	37 Kg (81.4 LBS)				
Cart Weight	22,5 Kg (49.5 LBS)				
Display Type	Graphic color LCD TFT 8.4" 172 mm x 130 mm (screen)				
Main Voltage	230 V~ or 100-120 V				
(Power Supply)					
Frequency	50 - 60 Hz				
Fuse Ratings	2xT6.3 A				
Centrifuge Speed	1500 ÷ 5600 rpm (steps of 100 rpm)				
Pump Speed	25 - 1000 ml/min (adjustable)				
Xvac					
Unit Weight	15Kg (33 LBS)				
Functioning Range	-50 to -300 mmHg (-6.6 kPa to -40 kPa)				
	(steps of 10 mmHg [1.3 kPa]) – intra and pre-operatively				
	-10 to -100 mmHg (-1.3 to -13.3 kPa)				
	(steps of 10 mmHg [1.3 kPa]) – post-operatively				



## **DISPOSABLE OFFERING**







DISPOSABLE Offering

## COLLECTION & PROCESSING

#### XRES BLOOD COLLECTION RESERVOIR

The reservoir which sets the standards of blood **collection** to the highest levels

## HIGH CAPACITY AND FILTRATION QUALITY

- 4-liter capacity
- Advanced, multi-layer filtration system, with:
  - Internal defoaming polyurethane layer (30 ppi)
  - Intermediate woven, non-woven filter (40 μm)
  - External screen (120 μm)

#### EASY AND SAFE SETUP

- New locking mechanism to firmly secure the reservoir to the holder
- 360° reservoir rotation capability within the holder
- Separate holder available for use with IV pole and vacuum regulator

#### CLEAR ALL-AROUND VISIBILITY

- Transparent, flat body to allow constant monitoring of the collected blood
- Transparent, flat lid to allow visibility inside the inner filter



PROCESSING

ю

COLLECTION

## BROAD FLEXIBILITY

- Three 1/4" suction ports, for the collection of blood both intra-operatively and postoperatively: 45° angled, to prevent occlusion from debris produced during surgery
- One 3/8" suction port, for intra-operative procedures where a 3/8" aspiration and anticoagulation line is used
- One filtered and one non-filtered luer lock port, for blood transfer or drugs administration

#### SAFETY FEATURES

- Self regulated pressure relief valve
- Safe overflow level valve





#### **TWO CONFIGURATIONS AVAILABLE**

- XRES T Blood Collection Reservoir
- Top outlet connection to the bowl
- Quick reinfusion port for immediate transfusion of non-processed blood in case of extreme emergency
- XRES B Blood Collection Reservoir
- Bottom outlet connection to the bowl
  - Pre-connected outlet clamp
  - Also Available with 120µm gross filter

## COLLECTION & PROCESSING

## XTRA BOWL

The most complete range of processing bowl sizes to face all operational situations

#### BROAD FLEXIBILITY

XTRA BOWL 55 The smallest bowl for minimal bleeding	Minimal Bleeding Orthopedic Surgery Small Size Patients Pre-operative Sequestration (PPP/PRP)				
XTRA BOWL 125 The standard bowl for low bleeding	Orthopedic Surgery (Total Joint Replacement) Obstetric Surgery Pre-Operative Sequestration (PPP/PRP)				
XTRA BOWL 175 The intermediate bowl for medium bleeding	High Bleeding Orthopedic Surgery (Revisions) Low Bleeding Cardiac Surgery (Mini-Bypass) Cardiovascular Surgery				
XTRA BOWL 225 The largest bowl for high bleeding	Cardiovascular Surgery (Bypass, Abdominal Aortic Aneurysm) Emergency & Trauma Transplant				



#### EASY, FAST AND SAFE SETUP

- Innovative disposable design:
  - XTRA BOWL design for quick 360° snap-in mounting onto the centrifuge plate
  - One-hand mechanism for locking/unlocking the bowl to/from the centrifuge arm
  - Cartridge and tubing design, to ensure straightforward setup
  - Lid-guided tubing positioning into seat when closing the clamp lid
  - Automatic pump loading/unloading at the beginning/end of case

#### HIGH QUALITY WITH THE OPTIMIZED PROTOCOL

Optimized protocol (Popt), to achieve high hematocrit, red blood cell recovery rate and waste contaminants removal rate with the XTRA BOWL 55 or XTRA BOWL 225

#### FAST PROCESSING WITH THE STANDARD PROTOCOL

Standard protocol (Pstd), to achieve the fastest processing times (comparable to the Baylor Bowl 250ml) with the XTRA BOWL 225















## MODULAR & ALL IN ONE SOLUTIONS



#### **COLLECTION SET** (TX, TX CARDIO, BX OR BX CARDIO)

Provides XRES reservoir and related items to collect blood recovered from intra-operative field or post-operative drains

#### CONTENT

- XRES T Blood Collection Reservoir (or XRES B Blood Collection Reservoir)
- AAL Aspiration and Anticoagulation Line
- VEL Vacuum Extension Line
- Cardio Kit (only in Cardio configuration)

#### **ADVANTAGES**

- Modular solution where each item is packed and sterilized separately, allowing a cost effective stand-by strategy: collect first and process later
- Separate holder available to use XRES on IV pole and with vacuum regulator
- Available in standard and cardio configurations (with Cardio Kit)

#### INDICATIONS

- Standard configuration: orthopedic surgery, spinal surgery, other non-cardiac applications (e.g. cardiovascular, obstetrics, urology)
- Cardio configuration: cardiac applications

#### PROCEDURE SET (TX CARDIO OR BX) (55, 125, 175 OR 225)

Provides XRES reservoir, XTRA Bowl and all the necessary components to collect and process the blood recovered from the intra-operative field or post-operative drains

#### CONTENT

- Collection Set (TX Cardio or BX)
- Bowl Set X (55, 125, 175 or 225)

#### **ADVANTAGES**

- All-in-one solution for blood collection and processing
- Suitable for all surgical conditions with 4-liter reservoir and 4 bowl sizes
- Integrated solution to connect the oxygenator to the XRES reservoir with Cardio Kit (only available in Procedure Set TX)

#### INDICATIONS

- Cardiac surgery
- Abdominal/aortic aneurysm
- Emergency and trauma
- Transplant



#### BOWL SET X (55, 125, 175 or 225)

Provides XTRA BOWL and related items to process the blood recovered from the intra-operative field and post-operative drains or separate hemocomponents in pre-operative sequestration procedures

#### CONTENT

- XTRA BOWL with pre-connected color-coded tubing and cartridge
- Pre-connected BRB1 Blood Reinfusion Bag (1 liter)
- Waste Bag X (10 liters)

#### **ADVANTAGES**

- Flexibility with 4 bowl sizes suitable for minimal, small, medium and high bleeding
- New bowl, tubing and cartridge design for easy, fast and safe setup

#### INDICATIONS

- Intra-operative and postoperative processing
- Pre-operative sequestration



## MISCELLANEOUS COMPONENTS

#### CARDIOVASCULAR SURGERY

#### CARDIO KIT

Includes all the adaptors, components and lines to connect the oxygenator to the autotransfusion system to recover and process the blood during and post bypass

#### TANDEM RESERVOIR "Y"

Allows the connection of two XRES reservoirs to the XTRA system in procedures where large volumes of blood need to be recovered and processed

#### ORTHOPEDIC SURGERY

#### FLUID COLLECTION BAG FOR ORTHOPEDICS

Designed to collect the blood lost during orthopedic operations, such as hip replacement/revision, and transfer it to the XRES reservoir through a preconnected aspiration and anticoagulation line. The 45 cm long adhesive strip suits any kind of wound size

#### 4-WAY ADAPTERS\*

Connect patient drain tubes of various diameters to the aspiration & anticoagulation line during post-operative blood collection. Available with luer-locks or with multidiameter adapters

#### WOUND DRAINAGE "Y" CONNECTOR

Used to connect either one or two orthopedic wound drains (sizes 1/8", 3/16" or 1/4") to the suction assembly. Step-down "Y" connector with 1/4" capped connector. Available also with preconnected aspiration and anticoagulation line











#### **PRE-OPERATIVE SEQUESTRATION**

#### SEQUESTRATION SET X

Intended for pre-operative sequestration (PPP and PRP) with transfer bag technique. To be used in combination with a Bowl Set X

#### MISCELLANEOUS

#### AAL ASPIRATION AND ANTICOAGULATION LINE

Allows aspiration and anticoagulation of the blood coming from the operative site, collecting it into the XRES reservoir. A double woven non-woven layer protects the sterility when passing the line into the sterile field. Various diameters available: 1/4", 1/4" – 3/8", 3/8"

#### BRBI BLOOD REINFUSION BAG

Designed to collect 1 liter of concentrated RBCs during blood salvage procedures

#### WASTE BAG X

Used in connection with the Bowl Set X, it collects up to 10 liters of waste fluids during processing

#### **GOCCIA FILTERS\***

Designed to remove microaggregates and protect the patient pulmonary micro-circulation









MISCELLANEOUS

COMPONENTS



\*not available in US and Japan



## **CLINICAL APPLICATIONS**







CLINICAL APPLICATIONS

## **CLINICAL APPLICATIONS**

#### CARDIAC SURGERY

#### INTERVENTIONS

- Concentration of residual extracorporeal circulation volume during/ after bypass
- Mini Bypass
- Off-Pump
- Valve Replacement
- Surgical Repair of Great Vessels
- Suction Blood Washing

#### WHAT YOU NEED

- Procedure Set or Collection Set (TX Cardio or BX Cardio) + Bowl Set X
- 20/40µm Microaggregate Goccia Filter\*

\*not for US and Japan



- S5- and C5-like touch screen user interface, ensuring a straigthforward learning curve for all operators already familiar with Sorin Group heart-lung machines
- Functional integration with S5 and C5 through Sorin Connect Perfusion Charting System
- High quality or fast processing by simply selecting the appropriate protocol, either the optimized protocol (Popt) or the standard protocol (Pstd)
- Cardio Kit, for direct access to the oxygenator during and after bypass
- Broad spectrum of bowl sizes, to address different levels of bleeding

#### HIGH BLEEDING SURGERY / EMERGENCY

#### INTERVENTIONS

- Cardiovascular Surgery
- Organ Transplant
- Trauma Surgery
- Obstetric Surgery

#### WHAT YOU NEED

- Procedure Set or Collection Set (TX or BX) + Bowl Set X
- 20/40µm Microaggregate Goccia Filter\*
- Additional Components:
  - Tandem Reservoir "Y"
  - BRB1 Blood Reinfusion Bag
  - Waste Bag X

\*not for US and Japan



- Live on-screen indication of critical data: volume and hematocrit of the fluid collected from the field, as as well as of the red blood cells recovered after processing
- Powerful and silent blood aspiration with the integrated Xvac vacuum pump
- Immediate aspiration, independent from the Xtra system boot-up time, by powering Xvac on from the control panel
- Fast processing with the standard protocol (Pstd)
- Dedicated Emergency button available in all screens to face critical situations
- Bowl Set X/225, to meet high volume challenges

## **CLINICAL APPLICATIONS**

**ORTHOPEDIC SURGERY** 

#### **INTERVENTIONS:**

- Primary Hip and Knee Replacement
- Hip and Knee Revision
- Spine Surgery

# Ş

#### WHAT YOU NEED:

- Procedure Set or Collection Set (TX or BX) + Bowl Set X
- 20/40µm Microaggregate Goccia Filter\*
- Additional Components:
  - Intra-operatively: Fluid Collection Bag for Orthopedic
  - Post-operatively: 4-Way Adapter\* or Wound Drainage "Y" Connector

\*not for US and Japan



- Option to mount the Xres reservoir on an IV pole by means of the separate holder, and connect it to the Xvac vacuum pump used in stand-alone mode, to easily move between ICU beds when collecting blood from post-operative wound drains
- Reduced footprint, to allow processing of the blood collected post-operatively from wound drains also in the narrow spaces of the ICU
- Dedicated post-operative protocol (Post-Op), assuring the same high quality setting of Popt protocol and turning the Xvac into a gentle mode to be safely connected to wound drains
- Dedicated fat protocol (PFat) assuring complete removal of lipid particles
- Modular disposable solutions, to allow collection first and process when enough blood has been shed
- Small to intermediate bowl sizes, to face minimal bleeding orthopedic surgery as well as joint replacements and revisions

#### PRE-OPERATIVE SEQUESTRATION

#### **INTERVENTIONS:**

 All cases where bleeding may occur during the post-operative course

#### WHAT YOU NEED:

- Bowl Set X
- 20/40µm Microaggregate Goccia Filter\*
- Additional Components:
  - Sequestration Set X

\*not for US and Japan

# -)-

- Full on-screen description of the actions to be performed, to guide the operator throughout the entire procedure
- Broad spectrum of pre-operative sequestration protocols:
  - PPP (for collection of platelet poor plasma in a single bag),
  - PRP1 (for collection of both platelets and plasma in a single bag)
  - PRP2 (for collection of platelet poor plasma in one bag and platelet rich plasma in a separate bag)
- Easy and quick conversion from pre-operative sequestration to intra-operative collection and processing by using the same Bowl Set X



ORDER GUIDE			
	CODE	DESCRIPTION	QUANTITY / BC
JENTIFICATION	75220	XTRA Equipment 230V 50Hz Version	QUANIIT / DC
TRA	75220	XTRA Equipment 110V 50Hz Version	1
	28020	Country Box "I"	1
		,	
	28021	Country Box "F"	1
TRA Country Box	28022	Country Box "E"	1
	28023	Country Box "D - A"	1
	28024	Country Box "GB - IRL"	1
	28025	Country Box "NL - B - CH"	1
VAC	75306	Xvac Vacuum Pump 220V Version	1
	75307	Xvac Vacuum Pump 110V Version	1
	65643	Printer Cartridge & Paper Roll Kit	1+4
	65696	Centrifuge Well Fluid Container	1
TRA Accessories	65666	Vinyl Cover For Xtra	1
	65714	Xvac Trap	1
	63056	XTRA USB Memory Stick	1
ſPE	Ітем	DESCRIPTION	QUANTITY / BO
	04254	Procedure Set Tx/55	3
	04255	Procedure Set Tx/125	3
	04256	Procedure Set Tx/175	3
rocedure Sets	04257	Procedure Set Tx/225	3
	04261	Procedure Set Bx/55	3
	04262	Procedure Set Bx/125	3
	04263	Procedure Set Bx/175	3
	04264	Procedure Set Bx/225	3
	04258	XRES T Blood Collection Reservoir	6
	04259	XRES B Blood Collection Reservoir	6
RES Blood Collection Reservoirs,	04260	Collection Set Tx	6
ollection Sets	04266	Collection Set Tx Cardio	6
Holders	04265	Collection Set Bx	6
	04267	Collection Set Bx Cardio	6
	04268	BRB1 Blood Reinfusion Bag X, 1 Liter	50
	04272	XRES Blood Collection Reservoir Holder Bowl Set X/55	6
	04250 04251	Bowl Set X/125	6
owl Sets	04252	Bowl Set X/125	6
	04253	Bowl Set X/225	6
equestration Sets	04015	Sequestration Set X	40
equestiation Sets	04013	Reservoir Outlet Clamp XRES B	12
lood Sampling Kits For Quality	04271	Reservoir outlet "Y" XRES B	12
ssurance	007016000	Blood access sampling adapter	25
	04128*	4-Way Multidiameter Adapter	20
	04059*	4-Way Adapter With Luer Lock	20
ound Drainage Kits	007115000	Wound Drainage "Y" Connector	25
	007116000	Wound Drainage "Y" Connector With Dual Lumen Suction Line	10
uction Assemblies	04137	AAL Aspiration And Anticoagulation Line 1/4"	10
	04196	AAL Aspiration And Anticoagulation Line 1/4"-3/8"	10
	04197	AAL Aspiration And Anticoagulation Line 3/8"	15
	04269	Waste Bag X	10
iscellaneous Processing	04133	Cardio Kit	60
omponents & Adapters	04028	VEL Vacuum Extension Line	50
-	04129	Bag Adapter	80
	04152	Fluid Collection Bag For Orthopedics	12
	04058	Tandem Reservoir "Y"	20
	09085	40Um Goccia Filter	12
	09086	20Um Goccia Filter	12
licroaggregate Filters*	09087	20Um Goccia Filter With Infusion Line	6
	09088	40Um Goccia Filter With Infusion Line	6

\*Not Available In US And J



The Sorin Group Italia Quality System complies with: EN ISO 13485:2003/AC:2007

CE 0123 According to Annex I (Full Quality System) of MDD 93/42/EEC as amended by directive 2007/47/EEC

MANDFACTORER: SORIN GROUP ITALIA S.R.L /ia Statale 12 Nord, 86 41037 Mirandola (MO) Italia fal: +39.0535.29811 Fax: +39.0535.25229 nfo.cardiacsurgery@sorin.com Sorin Group Deutschland GMBH indbergstrasse 25 )-80939 München Germany fel: +49.(0)89.32301.0 Fax: +49.(0)89.32301.555





www.sorin.com