### **Global Market Leader**

with worldwide distribution network

JMS Singapore is a global-oriented world class manufacturing plant, providing state-of-arts health care products in Blood Management, Infusion Therapy, Dialysis System, Equipment and Accessories.



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IMS

Sepacell"

50186

Blood Management System

www.JMSS.COM.SG

## Caring for your Health

JMS designs up-to-date blood management products with our patients and donors in mind.

JMS's spirit of "Patient Comes First" aims to deliver quality products that offer better solutions to medical treatment. Our continuous innovation with expanding product development and high quality bridge our path to high standard of satisfaction.

Blood bag manufactured by JMS has a long and laudable reputation for reliability, superior product quality and assurance. Certified under EN ISO 13485 Quality System, our fastidious production practices and high standards of quality control are driven to ensure that our products meet the stringent requirements of blood banks and transfusion services which provide lifelines services to hospitals, patients and donors.

At JMS we believe in total quality commitment and care. This is our responsible management of blood products to ensure more effective use of precious blood resources for better health care in today's transfusion medicine.

### JMS Complete Range of Products For Blood Management System

### Contents

About JMS Contents	02 03	
Safety Features CPD-SAGM System Top & Bottom Extraction System ole Blood In-Line Leuko-Filtration System	04 05 07 08	
Red Cell In-Line Leuko-Filtration System Transfer Bag Cord Blood Collection Set Cellaid Serum Collection Bag	09 10 11 12	
Deep Freezing Storage Bag (EVA) Apheresis Needles Transfusion Therapy Transfusion Chairs	13 14 17 18	
Hemoscale Monitor HemoPress Hemosealer Blood Tubing Stripper	19 20 22 23	
Component Extractor Blood Bags Catalogue Accessories Decoding	24 25 26	

Good Health Care ,

# Safe & Effective Blood Transfusion

### Safety Comes First

Safety First. Our aim is not only to guarantee high quality of the blood components but also to provide maximum safety during blood donation and sample collection.

### Convenience

- JMS Integrated Blood Sampling Port
- Closed system & reusable blood sampling with vacuum tube

### Reliability

- JMS Blood Sampling Bag
- Storage container for convenient and contamination free sampling
- Volume of diverted blood could be used for laboratory testing

### Safety

JMS Needle Protector

• Anti-stick device to provide healthcare workers and end-users maximum protection from needle stick injuries.

# **CPD-SAGM** System

## The **Benefits**

Superior red blood cell viability for 42 days storage with low hemolysis

**Compatible** with most component extractors

Increases plasma yield

Platelet concentrate storage up to 5 days

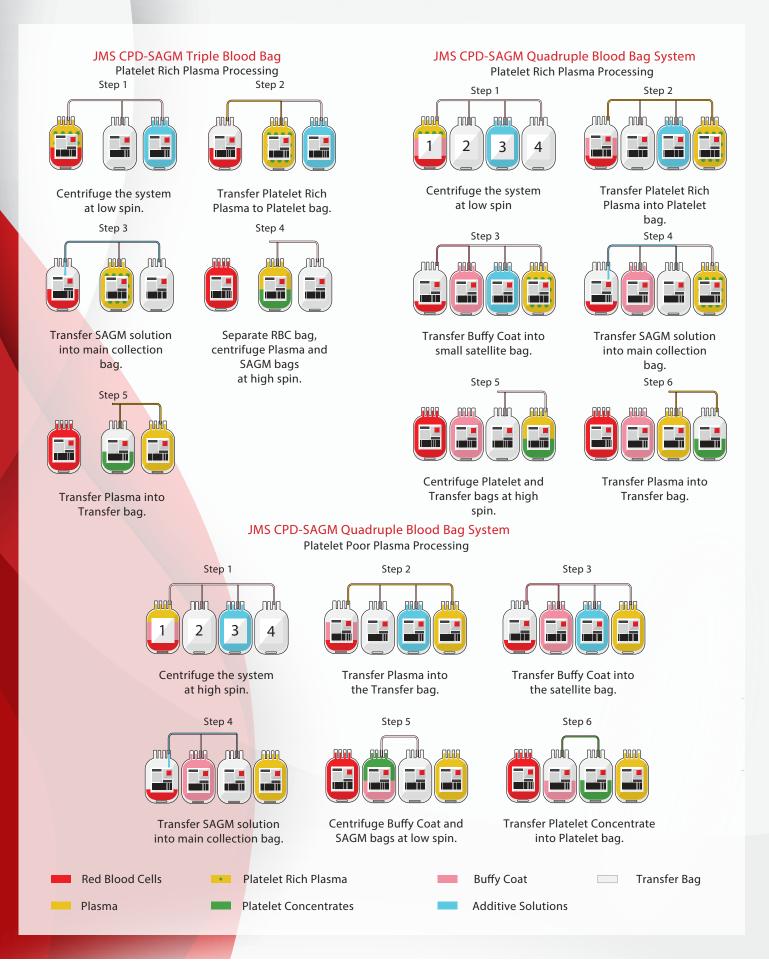


OAD.

The most comprehensive system comprises of CPD anticoagulant solution and SAGM (saline-adenine-glucose-mannitol) additive solution. It has the flexibility to yield high quality blood and blood components such as platelet concentrates, plasma and red blood cells.

The system can extend high quality red blood cells up to 42 days while achieving more than 80% of post-transfusion RBC survival rate.

# **CPD-SAGM** System



# Top & Bottom Extraction System

### (T-BEXS) with CPD-SAGM

JMS T-BEXS provides great efficiency and producivity in preparing blood components. The system reduces manual labour and increases yield while maintaining high quality blood components prepared from whole blood.



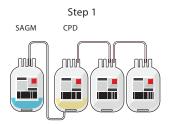
## The **Benefits**

Compatible with most commercial automatic extractors

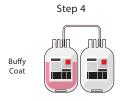
Reduces labour and increases productivity

### High efficiency

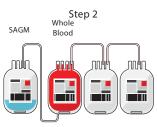
component preparation



JMS Top & Bottom Blood Bag System



Buffy Coat rich in Platelet and Leukocytes is left in main collection bag.

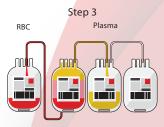


JMS Top & Bottom Quadruple Blood Bag System

Whole blood is collected into main collection bag

Step 5 WBC

Platelet Concentrate is transferred into Platelet storage bag With remaining RBC and leukocytes left in main collection bag.



After a high spin, Platelet Poor Plasma is transferred into Transfer Bag while RBC is collected in SAGM bag.

- Red Blood Cells
- Plasma
- Platelet Rich Plasma
- Platelet Concentrates
- Buffy Coat
- Additive Solutions
  - Transfer Bag

## Whole Blood In-Line Leukocyte Reduction System



## The **Benefits**

High Efficiency Safe and consistent

### Ease of Use

Collection, filtration and storage processes

### **Excellent Quality**

Meets International requirements

### **Clinically Proven**

Filtration performance with good efficacy

### **Clinical Performance**

SN	PARAMETERS	WHOLE BLOOD HOLDING (2 – 24HRS)	WHOLE BLOOD HOLDING (UP TO 18HRS)		
1	Storage Prior to Filtration	20 - 24°C	2 - 6°C		
2	Filtration Time	Less than 30 mins	Less than 1 hour		
3	Residual Leukocyte (per unit)	< 1.0 X 10 <sup>6</sup>	< 1.0 X 10 <sup>6</sup>		
4	Hemolysis (after 42 days)	< 0.8%	< 0.8%		
5	Hemoglobin (per unit)	≥ 43g	≥ 43g		

Leukocyte reduction in blood component is important to reduce transfusion reactions such as non-hemolytic febrile transfusion reactions, transmission of leukocyte-borne virus, prevention of HLA alloimmunization and platelet refractoriness. Our complete blood bag system for whole blood filtration meets the EU standards and requirements for quality with efficient handling.

Note: Sepacell® is the trademark of Asahi Kasei Medical Co., Ltd.

## Red Cell In-Line Leukocyte Reduction System

### The Benefits

High Efficiency Safe & Consistent

**Excellent Performance** Compatible with various processing methods and connecting devices

### **Soft Housing Filter**

Low breakage of blood bag and ease of handling for centrifugation



Sepacell" R-S11 ARANI KAREL MEDICAL DOLLIN Q55--501861

### **Clinical Performance**

SN	PARAMETERS	WHOLE BLOOD HOLDING (2 – 24HRS)			
1	Storage Prior to Filtration	20 - 24°C			
2	Filtration Time	Less than 45 mins			
3	Residual Leukocyte (per unit)	< 1.0 X 10 <sup>6</sup>			
4	Hemolysis (after 42 days)	< 0.8%			
5	Hemoglobin (per unit)	≥ 40g			

In addition to Whole Blood In-Line Leukocyte Reduction System, the Red Cell In-Line Leukocyte Reduction System provides a safe, effective and convenient preparation of platelets, plasma and red cells. The system is coupled with high efficient leukocyte filtration that meets EU standards.

# **Transfer Bag**

## The **Benefits**

**Compatible with** sterile connecting devices

Different bag sizes and volumes

ISO Compliance design and performance Provides convenience of transferring blood or blood components into multiple units. JMS Transfer Bag can be easily use for separation or distribution of blood components and compatible with most sterile connecting devices.

JMS Transfer Bag is designed to meet ISO requirements with optimum blood components storage efficiency. It comes in various bag sizes that allows small to big volumes transfer for intended clinical use.

## Cord Blood Collection Set

### The Benefits

**Compatible with** sterile connecting device

Efficient Volume Specially tailored volume

Maximise Collection Single or double needles

Injection Port Ease of injecting solution

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JMS Cord Blood Bag is designed for collection of umbilical cord blood for subsequent processing and harvesting of stem cells. The cord blood bag system provides the quality and efficient ways of collection.

JMS Cord Blood Bag is easy to use and equips with basic or optional accessories to suit the needs of end users. 16G sampling needle ensures a good flow for smooth collection.

# Cellaid Serum Collection Bag

The serum collection bag is for preparation of high quality growth factors from whole blood. The system contains platelet activation beads that helps the release of growth factors suitable for human cells growth.

### **Clinical Performance**

GROWTH FACTOR	PDGF-BB	TGF-β1	HGF
Serum	100%	100%	100%
Plasma	2.9%	7.4%	61.9%

### The Benefits

#### Safe Design

Serum is prepared in a closed system

### **Rich in Growth Factors**

Platelet activation beads accelerate whole blood coagulation and releases growth factors from platelets

#### **Quick Preparation**

Growth factors can be prepared within 1 hour from fresh whole blood

# Deep Freezing Storage Bag (EVA)

Special material used for storage of stem cells from cord blood. It is designed with material suitable to withstand ultra-low temperature when kept in liquid nitrogen.



Convenient Single and double compartment system

Ease of Sampling Individual sampling port reduces contamination

#### Long Storage

Special material for ultra-low temperature storage

# Apheresis Needle

**Common Needles** 



Superior cannula design Ultra-sharp needle reduces pain

Non-slip wing grip

### High quality ISO manufacturing facility and biocompatible silicone coating

Apheresis Needle with Sampling Holder

> JMS Apheresis needle is easy to use with emphasis of donor's comfort in mind. The state-of-art cannula provides a smooth and painless needle insertion during apheresis and reduces injury to donor.

> Soft and positive locks wing offer great and precise gripping control and prevent accidental rotation during needle insertion. Rotating hub extends the flexibility to re-orientate the needle angle without disturbing the wing or increase the discomfort to donor.



## Apheresis Needle Safety Needles



Risk of acquired blood borne infections can be prevented with proper disposal of contaminated devices by adequate training. JMS aims for human safety by introducing safety devices that further reduce the risk of possible injury from the use of medical device.

JMS SysLoc<sup>™</sup> and WingEater<sup>™</sup> apheresis needles combine innovative engineering with high quality standard and economic balance bring upon an easy to use to achieve a peace of mind for both patient and healthcare worker.

### Apheresis Needle Common & Safety Needles

of needlestick injury in the workplace.

JMS Apheresis Needle is designed with donors' comfort in mind and incorporating safety in workplace for healthcare worker. Each needle is coated with biocompatible silicone

fluid to ensure a smooth cannulation. Safety device is available for mitigating possible risk

**Fixed Wing** 14G to 18G for donors' comfort **High quality** needle design  $\mathsf{SYSLOC}^{^{\mathsf{TM}}}$ **Safety Device** Integrated Safety Wing Activate by Retracting needle and lock in place Adjust needle position by easy rotation **Safety Device** WingEater **External Safety Guard** Activate by Folding wing and lock upon retraction **Reduces needlestick risk** with simple and easy steps

# Transfusion Therapy

The **Benefits** 

ISO 1135-4 compliance

ISO 80369-7 compliance ensures safe connection

**18G super-thin** wall needle reduces pain

**Double-drip chamber** provides ease of operation

Transfusion assemblies are essential devices for delivery of blood and blood components to patients via intravenous route. JMS Transfusion Set is compliance with ISO 1135-4 and ISO 80369-7 which ensures compatible with most blood bag system and provides secure connection.

Double drip chamber desig ensures effective filtration of possible clot and other particulate debris and also provides clear observation of deops at the lower chamber. The assembly is supplied with 18G super-thin wall vein needle which reduces patient discomfort yet delivers good flow rate.

## Transfusion Chair

for Blood Donation and Plasmapheresis

### The Benefits

Remote control to adjust the desired comfortable position

Motor driven mechanism

Shock position is activated by foot pedal, handsfree from any side

The top model with five motors allows individual adjustment for highest comfort. Modern design with a high standard of design and functionality. A detailed finishing of the upholstery as well as mechanical and electrical parts provides high quality of comfort and safety to the users.

The desired sitting or lying position can be easily achieved with a remote control. The base frame with a safe load of 180 - 240kg provides high stability and ensures the donor feels safe.

## Hemoscale For Quality Blood

Good quality whole blood collection can be further enhanced with accurate blood collection volume and with sufficient mixing during collection. JMS Hemoscale monitors continuos blood flow and assures good mixing of blood with anticoagulant. The accurate volume and continuous mixing ensures blood components' quality, reduces losses and improves productivity.

### **Technical Specification**

SPECIFICATIONS	MODEL				
Product	AB-20E	AB-30			
Power	100 – 240 VAC 100 – 240 VAC				
Consumption	Max 10 VA Max 10 VA				
Operating Hours on Battery	10 hours 12 hours				
Mixing	16 cycles / min	16 cycles / min			
Accuracy	< 1% of weight	< 1% of weight			
Measuring Range	Up to 999 ml	Up to 999 ml			
Data Connection & Storage	Not Available Available				
Compliance	EN 60601-1, EN 60601-1-2				
Dimension	290(L) x 253(W) x 185(H) mm	290(L) x 253(W) x 185(H) mm			
Weight	4.4 kg (with battery) 4.4 kg (with batter				

# HemoPress - Single

Automated Blood Component Extractor



### The Benefits

8" Colour LCD touch screen

IR Sensor for level detection

Snap tip auto-breaker

Stepper motor precise press

Data Management Software

The most efficient way of preparing blood components by reducing extensive manual labour and yield high quality blood components. Incorporates with a 8" color LCD touch screen for better control and visibility. High quality clamp designed to ensure tubes are in place during processing and reduces unnecessary errors. Slim profile with stepper motor driven press removes the need of compressor in conventional automated extractor. Strong support for data management via the connection of LAN or data retrieval from USB port.

# HemoPress - Twin

Automated Blood Component Extractor



### **Technical Specification**

SPECIFICATIONS	MODEL				
Product	HemoPress Single	HemoPress Twin			
Model	MEDHPS1	MEDHPT1			
Operating System	Windows	Windows			
Press System	Step Motor Drive	Step Motor Drive			
Display	8" Color LCD Touch Pad	8" Color LCD Touch Pad			
Load Cell	3	6			
Sensors in Array	8 (in 1 Array)	16 (in 2 Array)			
Tube Detection	All 5 Clamps	All 10 Clamps			
Snap Tip Auto Breaker	Main Bag and Additive Bag	Main Bag and Additive Bag (Both sides)			
Data Connection	LAN & USB	LAN & USB			
Data Management System	Available				
Compliance	IEC 60601-1, IEC 61010-1, IEC 60601-1-2, IEC 61326-1				
Dimension	350(L) x 465(W) x 483(H) mm 554(L) x 465(W) x 483(H) n				
Weight	26 kg 42 kg				

## Hemosealer



#### Heavy Duty Hemosealer – HS-03AA

- Heavy duty model
- Bench and ergonomic handle unit
- RF and auto time adjust sealing
- EN 60601 compliance



### Portable Hemosealer – HS-21AA

- Ergonomic sealing handle
- Portable battery unit
- Improves mobility
- Safe and secure sealing
- RF and auto time adjust sealing
- EN 60601 compliance

JMS provides portable and heavy-duty models to suit customers' complex needs. JMS Hemosealer is designed with maximum flexibility that provides an easy, safe and secure tube sealing.

Ergonomic sealing handle provides great comfort and auto-adjust sealing time ensures consistent quality and output. The microprocessor in the Power Unit checks the tubing surface in order to avoid sparks. In addition, the safe sealing makes a 3mm wide seal with perforation, which makes it easier to pull the tubes apart. Automatic sealing time adjustment ensures every seal is in good condition with expected result.

High frequency sealing technology ensures a good hermetical seal and complying with EN 60601 to meet high standard of safety.

# **Blood Tubing Stripper**

JMS has a strong focus in developing technological solutions for medical applications that includes designing and manufacturing of medical equipment. JMS HS-Series Blood Tubing Stripper offers a comprehensive range of performance with enhanced capabilities.

It is designed to strip, crimp and cut tubing for preparing blood segments blood bags. Tube segments can be prepared mechanically with the tube stripper and sealed with aluminum clip. The segments can be further separated by cutting between the seals with the aids of the side jaws of stripper.

### **Blood Tubing Stripper – HS002**

- High Quality Aluminum Alloy
- Anti-rust, light weight and sturdy
- Ease of cleaning by wiping or soaking in IPA
- Ergonomic design for good grip and stripping
- Ease fatigue over prolong use
- Self-centering roller system keeps tubing in position
- Smooth traction for effective stripping of blood components
- Internal spring system keeps handles in open position
- Minimize entanglement with blood tubing.

# **Component Extractor**

JMS BCE Series Component Extractor is designed to provide an easy option for expressing blood components from blood collection bag. The manual extractor is designed with stainless steel and thick acrylic suitable for daily operation with minimum maintenance.

The main bag is placed between the fixed stainless steel and movable plates, where the power spring load provides uniform pressure to transfer fluid into designated satellite bag(s). It provides an economical solution to users while achieving good quality.

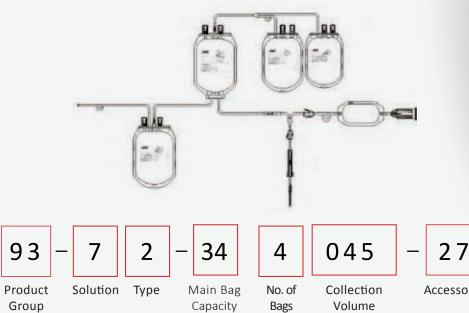
#### **Component Extractor – BCE001**

- Compatible with all makes of bags.
- Stainless Steel Construct
- Rust Free, Ease of Cleaning
- Thick Acrylic for Strength and Visibility
- Uniform Power Compression
- Constant Fluid Flow

## Catalogue No. For Blood Bags

### Example:

Blood Bag T&B CPD-SAGM(Q) 450+400MLX3 5DPC I BSP-NP-BSB-CLP 16G (DT)



Group

Volume Bags

Accessories

Category	Description	Code	
	Transfer Bag: Transfer Bag, w/5DPC, w/ 5DPC TOTM	80, 81, 82	
Due du et Cuerre	Blood Bag: Blood Bag, w/5DPC, w/5DPC TOTM	90, 93, 94	
Product Group	Filter: WBF, RCF, RCF w/5DPC, RCF w/5DPC TOTM	95, 92, 96, 97	
	Platelet Filter: w/TOTM, w/Non-DEHP	98, 99	
	No Solution	0	
Solution	CPD: CPD, CPD-MAP, CPD-SAGM, CPD-AS1	1, 3, 7, 8	
	CPDA-1	9	
	Т&Т, Т&В	1, 2	
Tuno	Autologous	3	
Туре	Cord Blood, Cord Blood w/Twin DN	4, 5	
	Plasmapheresis, Pediatric	6, 7	
Main Dag Canacity	250ML, 350ML, 400ML, 450ML, 500ML, 560ML	04, 08, 12, 16, 20, 26	
Main Bag Capacity	620ML, 630ML, 650ML, 700ML, 1,000ML, 1,300ML	34, 36, 40, 48, 60, 65	
No of Bags	Single – Decuple	1-0	
	150ML, 157ML	015, 016	
	200ML, 250ML	020, 025	
	300ML, 350ML	030, 035	
	400ML, 450ML, 475ML	040, 045, 047	
Collection Volume	500ML	050	
	600ML	060	
	800ML, 850ML	080, 085	
	1,000ML	100	
	2,000ML	200	
Accessories	Refer to Next Table	Table	

## **Accessories Decoding**

Ne	edles				Clamp	Dry Tube	Check Valve		Luer	
16G	17G	IBSP	BSB	NP	(CLP)	(DT)	(CV)	Spike	Lock	Accessory Code
										00
•										01
•					•					10
•				•						11
•				•	•					12
•		•	•	•		•				13
•		•								16
•		•			•					17
•		•		•						18
•		•		•	•					19
•		•		•	•	•				20
•		•	•							21
•		•	•			•				22
•		•	•		•					23
•		•	•		•	•				24
•		•	•	•						25
•		•	•	•	•					26
•		•	•	•	•	•				27
•		•	•	•	•	•	•			28
•		•	•	•	•	•	•		•	29
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	•	•	•	•	•	•	•			44
	•	•	•	-		-				45
	•	•		•	•	•				46
								1	•	54
								1		57
								2 7		58 61
								8		61
								8 10		62
•			•	•	•			10		65
	•		•	•	•					66
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Note: IBSP = Integrated Blood Sampling Port; BSB = Blood Sampling Bag; NP = Needle Protector

