## **Blood Management** System



SAGM - 100 ml for collection of k odběrul do pobranial kapasitel za skupljanjel za prikupijanje - 400 ml za skupljanjel za prikupijanje - 400 ml

2011-12

123456789

antina A @ ETERALE II

(E

REF

A

JMS

# Caring for your health

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

## About us

JMS started manufacturing blood bags in 1969 and have now over four decades of extensive and relevant expertise to meet the challenges presented in research, development and production of medical devices for blood transfusion applications.

Blood bags manufactured by JMS have a long and laudable reputation for reliability, superior product quality and assurance. Certified under EN ISO13485 Quality System, our fastidious production practices and high standards of quality control and measures in place 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 whole blood and its components to ensure more effective use of precious blood resources for better health care in today's transfusion medicine.





### JMS Complete Range of **Blood Management System**

Content **CPD-SAGM** System Whole Blood In-line Leuko-Filtration System Dockable Red Cell Leuko-Filtration System Autologous Bag Cellaid Serum Collection Bag

**Product Configurations** 

About JMS Safety Features T-BEXS (CPD-SAGM) 6

Whole Blood In-line Filter

**Enhanced Features** 

Cord Blood Bag Collection Set

- Platelet Storage Bag Blood Banking Accessories

16



### Safe and effective blood transfusion



**Safety First.** Our concern 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
- Option to have lid

## 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 injury

## **CPD-SAGM SYSTEM**

The system consists of a primary bag containing anticoagulant CPD solution and one satellite bag containing SAGM (saline-adenine-glucose-mannitol) red cell preservation solution. This additive solution maintains red blood cell (RBC) viability and lowers the hematocrit of the RBC unit. Consequently JMS CPD-SAGM system can store RBCs for 42 days while maintaining 80% of post transfusion RBC survival rate.

This additive-solution system also allows larger volume of plasma to be collected. The removal of buffy coat and preparation of platelet concentrates from the buffy coat are easily achieved using this system. JMS CPD -SAGM system includes a bag with high gas permeability which enables it to store viable platelets for up to 5 days.



## T-BEXS (CPD-SAGM)

JMS T-BEX (Top and Bottom Extraction) System provides greater efficacy in the separation of blood components after centrifugation process. It is common for blood banks to use automatic processing machines to standardize and save manual labour in the extraction of quality Red Blood Cell, Plasma and Platelets from collected Whole Blood.

This system focuses on the use of the primary bag with Top and Bottom outlet ports which are mounted on the extractor unit after centrifuge. Using a single press operation, the Platelet-Poor-Plasma is transferred to the upper transfer bag and the Red Cell Concentrate is pressed concurrently into the lower bag that contains SAGM solution for the preservation of red cells. The buffy coat is retained in the primary bag for subsequent preparation of Platelets and Leukocytes.



## WHOLE BLOOD IN-LINE LEUKO-FILTRATION SYSTEM

The world-wide demand for leuko-reduced whole blood has encouraged JMS to develop blood bag systems that meet the regulatory guidelines and strict requirements of blood banks especially in Europe and the US markets.

Reduction of leukocyte contamination in blood components is important to minimize various side effects such as non-hemolytic febrile transfusion reactions, transmission of leukocyte-borne virus and prevention of HLA alloimmunization and platelet refractoriness.

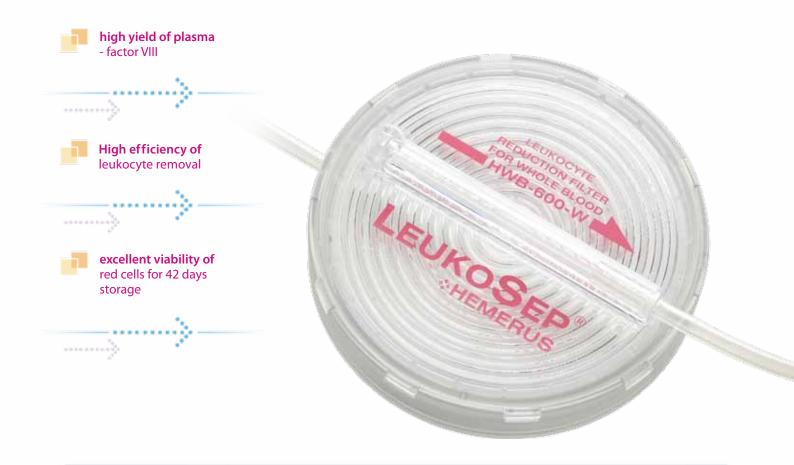
In line with our commitment to continuous improvement and safe patient care, we have designed a complete blood bag system for whole blood filtration that facilitates the handling in whole blood filtration to meet the EU Standards and AABB requirements regarding safe and efficient handling.



## **WHOLE BLOOD IN-LINE FILTER**

Rigorous and advanced tests in our JMS research and development institutes as well as in practical use of blood banks have shown that the LEUKOSEP<sup>®</sup> In-line Filter for whole blood combined with our well-established blood bag systems provide a high yield of plasma. This includes a yield of Factor VIII, excellent viability of red cells and removal efficiency of leukocytes.

Our certified production system includes strict quality assurance, guaranteed with a continuous high and consistent quality level. The steam sterilization of the complete system and efficient coiling of the bag, filter and tubes assure high integrity of the filter, which provides ease in handling for the donation team.



### Filter Performance

- < 1 x 10<sup>6</sup> leukocytes <a></a> < 0.8% hemolysis per unit
- > 85% red cell recovery
- Residual hold up < < 30 min filtration time</p>

of 40 g per unit

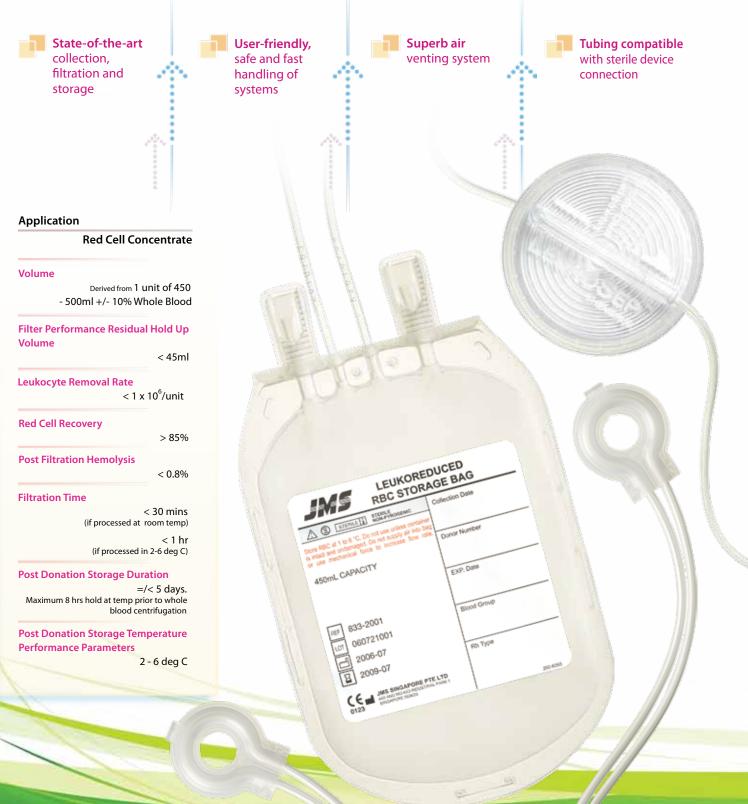
minimum haemoglobin content

- \* Meeting the guidelines in the Council of Europe
- The multi layered ceramic based micrco-fibres have proven in tests as well as in practise excellent performance in filtration of whole blood.

volume < 45ml

## **DOCKABLE RED CELL LEUKO-FILTRATION** SYSTEM

JMS Leukoreduction and Storage Set for Red Cells is a sterile disposable device intended for reducing leukocytes from a unit of red blood cell. This design provides a safe, effective and convenient collection of red cells coupled with high efficiency leukocyte filtration processing.



## **CORD BLOOD BAG** COLLECTION SET

Cord Blood Bags are designed to collect the umbilical cord blood (also known as placental blood) after the birth of the baby, within the shortest time and minimal risk of contamination. The clinical use of the cord blood is allergenic transplantation in patients suffering from severe blood diseases such as leukemia, lymphoma, etc.



## **AUTOLOGOUS BAG**

Auto-Transfusion is a process where patient receives his or her own blood instead of donor blood. This is a common pratice for joint replacement surgeries and can be performed before, during or after surgeries.

During autologous blood donation patient donates his or her blood for own use, this process can commence up to 5 weeks before surgery, which will be stored and reinfused as needed during or after the surgery. As own blood is receptive to the body, it is an extremely safe way to help the patient in the recovery process.

JMS Autologous Bag is specially designed and used to store patient's own blood donation for such purpose.





#### **Needle Bevel**

The oval slit is profiled to tip's geometry that has much smaller step for minimal tissue shaving and blood seepage during needle insertion.

#### Bag Label

Designed with polymeric tamper proof label, registered in ICCBBA and licensed to use ISBT 128 Bar Code for systematic identification.

#### Non-Stick Tubing

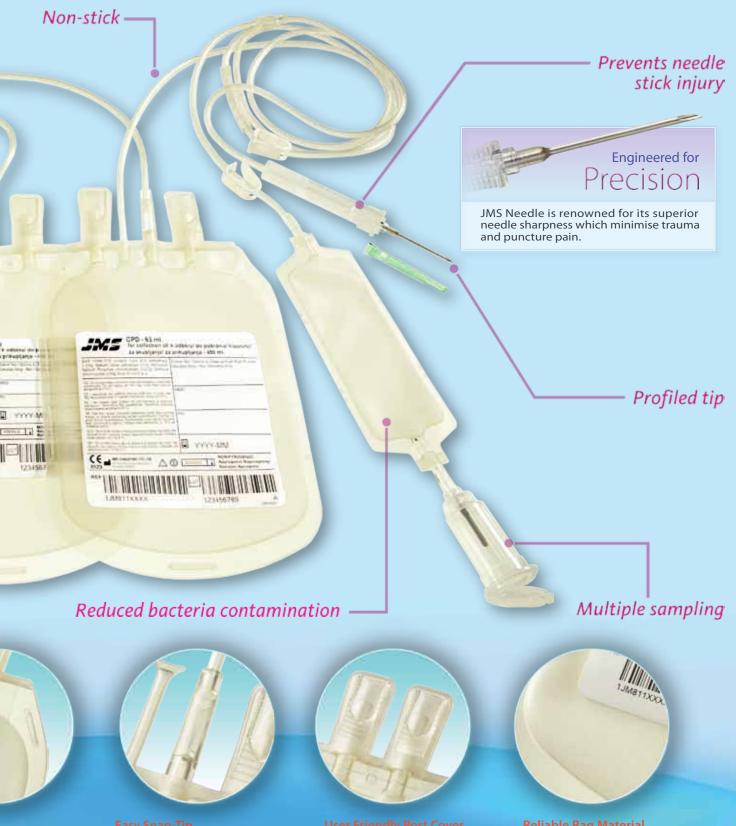
Compatible with universal tube sealer & sterile connecting device. Unique printed segment number for each unit.

#### Bag Profile

Rounded corners avoid friction, sm of blood comp separation & tra

### our primary concern.

ommitment to quality, reliability for our end users, maximum usage and tured to the highest quality standards for optimum blood management ervation and transfusion.



are designed to oother transfer onents during nsfusion. Easy Snap-Tip Snap-tip enables ease of transferring blood components to satellite bags. **User Friendly Port Cover** Port cover can be pulled open with one hand, avoiding direct contact with the port itself. Reliable Bag Material Specially formulated and compounded in-house to meet required standards for elution, chemical and biological safety.

## **CELLAID SERUM COLLECTION BAG**

The serum collection bag contains the platelet activation beads. When beads come into contact with the blood, they will absorb blood plasma proteins. The platelets will then adhere to the beads which will then be activated to release growth factors.



## **PLATELET STORAGE BAG**

JMS new platelet storage bag with UPX-80 intends to maintain large amount of platelets over 4.0 x 10<sup>11</sup> cells for at least 5 days. After 5 days storage in UPX-80, the indexes of platelets are kept in very good condition.

**High Gas Permeability** In order to maintain aerobic metabolism of platelet in the bag, high gas permeability is one of the most important factors for platelet storage bags. The newly developed material UPX-80 has much higher gas permeability than currently available platelet storage bags and it allows to maintain an optimum pH balance during storage.



-Electron micrograph- Platelets after 5 days storage (X4000)



### Product Configuration Blood Sampling System

#### CPDA-1 Solution JMS Single Blood Bag

For whole blood collection, preservation and transfusion. When blood component separation is needed, JMS Transfer Bag can be connected as required.

90-12-964-01	250ml	Super-Thin-Walled Ultra Sharp Needle Available in 16G or 17G		
90-13-964-01	350ml			
90-17-964-01	450ml			
90-15-964-01	500ml			
Optional Features				
*With or without accessories, T&T, BSB, NP, iBSP with or without lid				



### CPDA-1 Solution

JMS Double Blood Bag

For whole blood collection and separation of 2 different blood components (Red Blood Cell and Plasma) obtained through the process of centrifugation and extraction.

Catalog Number				
90-22-964-01	250ml			
90-23-964-01	350ml	Available in 150ml, 300ml, and 400ml	Available in 16G or 17G	
90-27-964-01	450ml			
90-25-964-01	500ml			
Optional Features				
*With or without accessories, T&T, BSB, NP, iBSP with or without lid				



#### CPDA-1 Solution JMS Triple Blood Bag

For whole blood collection and separation of 3 different blood components namely (Red Blood Cells, Plasma and a buffycoat that comprise of Leukocytes and Platelets), obtained through the process of centrifugation and extraction.

Catalog Number				
90-32-964-01	250ml		Available in 16G or 17G	
90-33-964-01	350ml	Available in 150ml, 300ml, and 400ml		
90-37-964-01	450ml			
90-35-964-01	500ml			
Optional Features				
*With or without accessories, T&T or T&B BSB, NP, iBSP with or without lid				



### Product Configuration Blood Sampling System

#### CPDA-1 Solution JMS Quadruple Blood Bag

For whole blood collection and separation of 4 different blood components (Red Blood Cells, Plasma, Leukocytes and Platelets), obtained through the process of centrifugation and extraction. A specially configured transfer bag by JMS is incorporated to ensure the conservation of Platelets for 5 days.

90-42-964-01	250ml		Available in 16G or 17G	
90-43-964-01	350ml	Available in 150ml, 300ml, and 400ml		
90-47-964-01	450ml			
90-45-964-01	500ml			
Optional Features				
*With or without accessories, T&T or T&B BSB, NP, iBSP with or without lid				



#### CPD-SAGM Solution JMS Triple Blood Bag

For whole blood collection and separation of 3 different blood components (Red Blood Cells, Plasma and a buffy-coat that comprise of Leukocytes and Platelets), obtained through the process of centrifugation and extraction. The primary bag contains anticoagulant CPD solution and one satellite bag with SAGM (Saline-Adenine-Glucose-Mannitol) solution for Red Blood Cell Preservation.

90-33-764-50	350ml	Available in	Available
90-37-764-50	450ml	150ml, 300ml,	in 16G or 17G
90-35-764-50	500ml	and 400ml	
*With or without acc	cessories, T&T or T&B	BSB, NP, iBSP with or	without lid

#### CPD-SAGM Solution JMS Quadruple Blood Bag

For whole blood collection and separation of 4 different blood components (Red Blood Cells, Plasma, Leukocytes and Platelets), obtained through the process of centrifugation and extraction. A specially configured bag by JMS is incorporated to ensure the conservation of Platelets for 5 days. The primary bag contains anticoagulant CPD solution and one satellite bag with SAGM (Saline-Adenine-Glucose-Mannitol) solution for Red Blood Cell Preservation.

Catalog Number				
90-43-764-50	350ml	N.A	Available	
90-47-764-50	450ml		in 16G or 17G	
90-45-764-50	500ml			
Optional Features				
*With or without accessories, T&T or T&B BSB, NP, iBSP with or without lid				

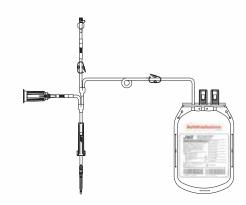


### Product Configuration Autologous Bag

#### CPDA-1 Solution JMS Single Blood Bag

For whole blood collection and storage. This bag is designed to be re-used for transfusion by the same patient.

Catalog Number	Primary Bag Capacity	Satellite Bag Capacity	Donor Needle Gauge Size	
90-13-964-55	350ml	Available in	Available in	
90-13-964-50	450ml	150ml	16G	
Optional Features				
*With or without accessories, T&T or T&B BSB, NP, iBSP with or without lid				



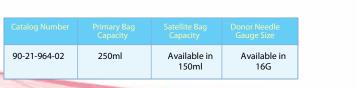
## Cord Blood Bag

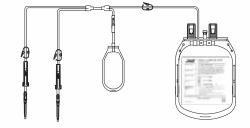
JMS Single Cord Blood Bag For Cord Blood Collection.

Catalog Number			
90-11-964-02	150ml	Available in	Available in
90-12-964-02	250ml	150ml	16G

#### JMS Double Cord Blood Processing Bag

For Cord Blood Processing.







### Product Configuration T-Bex System

#### JMS Triple Blood Bag

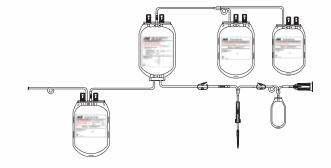
For whole blood collection and separation of 3 different blood components (Red Blood Cells, Plasma and a buffy-coat that comprise of Leukocytes and Platelets), obtained through the process of centrifugation and extraction. JMS T-Bex System comprise of a specially configured primary bag containing anticoagulant CPD solution and one satellite bag with SAGM (Saline-Adenine-Glucose-Mannitol) solution for Red Blood Cell preservation.

92-33-764-50	350ml	Available in	Available	
90-37-764-50	450ml	150ml, 300ml, and 400ml	in 16G or 17G	
90-35-764-50	500ml			
Optional Features				
*With or without accessories, T&T or T&B BSB, NP, iBSP with or without lid				

#### JMS Quadruple Blood Bag

For whole blood collection and separation of 4 different blood components (Red Blood Cells, Plasma, Leukocytes and Platelets), obtained through the process of centrifugation and extraction. JMS T-Bex System comprise of a specially configured primary bag containing anticoagulant CPD solution and one satellite bag with SAGM (Saline-Adenine-Glucose-Mannitol) solution for Red Blood Cell preservation. A transfer bag for platelets conservation for 5 days is incorporated.

Catalog Number	Primary Bag Capacity	Satellite Bag Capacity	Donor Needle Gauge Size	
92-43-764-50	350ml	Available in	Available	
90-47-764-50	450ml	150ml, 300ml,	in 16G or 17G	
90-45-764-50	500ml	and 400ml		
Optional Features				
*With or without accessories T&T or T&B RSB NP iBSP with or without lid				



## Transfer Bag

#### JMS Transfer Bag

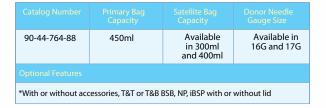
Bag capacity of 150ml - 2000ml. For blood components from whole blood and procedures that further separates these components.

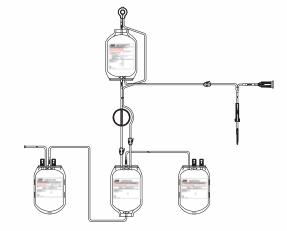
Catalog Number	Primary Bag Capacity	Standard Set	
91-15-364-00	150ml		
91-20-364-00	200ml		
91-30-364-01	300ml	Two entry port and a single	
91-50-364-00	500ml	lead with a transfer spike	
91-60-364-00	600ml		
91-91-364-00	1000ml		



CPD-SAGM Solution JMS Quadruple Blood Bag T-Bex

For whole blood collection and on-line filtration of whole blood components (Red Blood Cells and Plasma), obtained through the process of centrifugation and extraction.



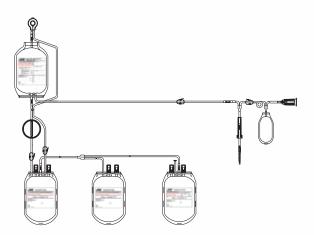


#### CPD-SAGM Solution

JMS Quadruple Blood Bag

For whole blood collection and on-line filtration of whole blood components (Red Blood Cells and Plasma), obtained through the process of centrifugation and extraction.

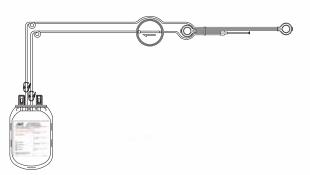
Catalog Number	Primary Bag Capacity	Satellite Bag Capacity	Donor Needle Gauge Size		
90-44-764-77	450ml	Available in 300ml and 400ml	Available in 16G and 17G		
Optional Features					
*With or without acc	*With or without accessories, T&T or T&B BSB, NP, iBSP with or without lid				



#### JMS Dockable Red Cell Leuko-Filtration System

Leukoreduction & Storage Set for Red Cell. For dockable of a pack of red cell and provide an on-line filtration of the red cell.

Catalog Number	Primary Bag Capacity	Satellite Bag Capacity	Donor Needle Gauge Size
90-88-000-01	450ml	Available in 300ml and 400ml	Available in 16G and 17G
Optional Features			
*With or without accessories, T&T or T&B BSB, NP, iBSP with or without lid			



### Product Configuration Transfusion Set

JMS Transfusion Set Type-5

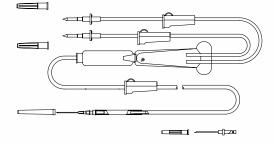
JMS Transfusion Set Type-5 is designed for administration of whole blood and red cells or plasma from Blood Bag. Consist of a double chamber; the upper chamber with a blood filter and the lower chamber with a drip orifice. This configuration assures full utilization of the filter of the upper chamber and easy observation of drops in the lower.

Catalog Number	Standard Set	
04-35-061-00	With Venous Needle	
04-35-061-01	Without Venous Needle	

#### JMS Transfusion Set Type-Y

JMS Transfusion Set Type-Y is designed for simultaneous or alternate administration of blood and solution. The spike is designed to fit both the blood bags and solution bag.

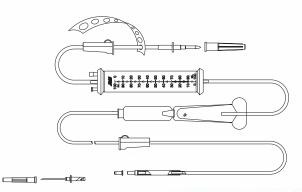
Catalog Number	Standard Set	
04-90-061-00	With Venous Needle	
04-35-090-01	Without Venous Needle	



#### JMS Transfusion Set with Buret

JMS Transfusion Set with Buret for small volume blood transfusion is especially useful in neonatal, premature babies and pediatrics. The buret (volumetric chamber) is graduated in 1ml interval to allow precise blood volume control.

	04-80-061-80	With 100ml Buret	
-	04-80-062-00	With 150ml Buret	

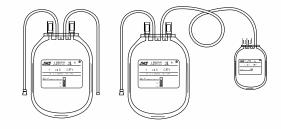


### Product Configuration Platelet Storage Bag

JMS Platelet Storage Bag

A new generation of container with high oxygen permeability to maintain the aerobic metabolism of Platelets. The UPX-80 PVC material is designed to achieve an optimum PH balance during storage.

Тур				
Single	Bag	90-70-130-00	1000ml	Available in 100ml
Double	e Bag	90-70-230-00	1000ml	

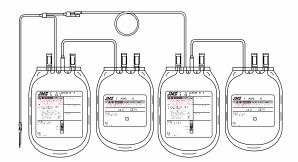


## Plasmapheresis System

JMS Single and Multiple Plasmapheresis

For Plasmapheresis and collection of comparably larger volume of plasma. After centrifugation, plasma is extracted and the red cells returned to the donor through a blood returning port. Many important therapeutic products are derived from plasma including albumin and plasma protein fraction. JMS Plasmapheresis's systems are designed in Single Plasmapheresis (2 Bags) and Multiple Plasmapheresis (4 or 6 bags) Pack with maximum utilization of small donor pool. The primary bag contains anti-coagulant CPD solution.

Catalog Number			
92-56-364-01	400ml	Available in 300ml, 400ml, and 500ml	Available in 16G or 17G
90-68-364-01	500ml		
90-66-364-01	600ml		
Optional Features			
*With or without acc	*With or without accessories, T&T or T&B BSB, NP, iBSP with or without lid		





### We innovate for a better tomorrow

JMS offers a full and complete range of blood banking accessories to complement the use of our blood bag products. With our state of the art research & development facilities we strive to offer unique and innovative solutions to meet the diversifying needs of healthcare market.



Pg 23

## Global market leader with worldwide distribution network



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

#### JMS CO., LTD

 Tokyo Headquarters

 Shin-Minamiohi Building

 1-13-5 Minamiohi

 Shinagawa-ku

 Tokyo 140-0013

 Tel : +81-(0)3-6404-0600

 Fax: +81-(0)3-6404-0610

#### **Hiroshima Headquarters**

12-17 Kako-machi, Naka-ku Hiroshima-shi, Hiroshima-ken 730-8652

Tel:+81-(0)82-243-5844 Fax:+81-(0)82-243-5997

#### JMS (K) Medical Supply Co., Ltd

547 Gasan-Dong, Geumcheon-gu Republic of Korea

Tel:+82-2-856-0518 Fax:+82-2-862-4598



For more information please contact us or your local distributor

Copyright ©2010 JMS North America Corporation. All rights reserved. BRO/BB-E/001\_R1

### Asia

#### JMS Dalian Medical Supply Co., Ltd

25 Huanghaixi Road Dalian Economic and Technical Development Zone, Dalian, People's Republic of China

Tel:+86-411-7613414 Fax:+86-411-7612300

#### **PT JMS Batam**

JI.Beringin Lot 211-212 Kawasan Industri Batamindo Mukakuning Batam 29433, Indonesia Tel: +62-770-611-805 Fax: +62-770-611-806

**JMS Singapore Pte Ltd** 440 Ang Mo Kio Industrial Park 1, Singapore 569620

Tel:+65-6457-1144 Fax:+65-6459-9564

### North America

JMS North America Corporation Main Office 22320 Foothill Boulevard Suite 350 Hayward, CA 94541, USA

Tel:+510-888-9090 Fax:+510-888-9099

#### **Eastern Region Office**

480 Sawgrass Corporate Parkway Suite 120 Sunrise, FL 33325 USA

Tel : +954-689-9280 Fax: +954-689-9289

#### Europe

**Bionic Medizintechnik G.m.b.H** Max-Planck, Str. 21, 61381, Friedrichsdorf, Germany

Tel: +49-6172-7576-0 Fax: +49-6172-7576-10

Distributor