



Medtronic

AUTOLOGTM

Autotransfusion System



A simple, yet sophisticated system.

Medtronic: A Pioneer in Blood Component Technologies

Medtronic has been a key participant in the area of blood component therapies for more than a decade. We are committed to setting the industry standard by providing innovative, cost-effective products designed to meet your needs and enable you to continue to provide the best possible care.

The Medtronic Mission

To contribute to human welfare by the application of biomedical engineering in the research, design, manufacture, and sale of instruments or appliances that alleviate pain, restore health and extend life.

AUTOLOG™ Autotransfusion System

Sophisticated, Effective Processing System

- The autoLog™ Autotransfusion System's fully automated design consistently produces a high-quality end product.
- The system's preset operating program completes one processing cycle (fill, wash, empty) in approximately three minutes and returns approximately 135 ml of blood to the holding bag.
- The autoLog™ System uses a two-stage filling process capable of first stage fill speed of 600 ml/min followed by a second stage fill speed at either 600 or 250 ml/min based on incoming volume.
- While a processing cycle can be initiated manually, the autoLog™ System has a unique self-start feature.

A Source of High-Quality Blood Product

- The autoLog™ System is designed to consistently produce a blood product with a **hematocrit of 50% or greater**.
- The autoLog™ System's unique bowl design packs blood tightly to produce an increased hematocrit and allows blood to enter at a moderate G-force to **minimize hemolysis**. The end product remains consistent and is independent of the type of surgical procedure.
- The variable speed wash process, coupled with the unique design of the bowl, promotes the **effective removal** of free-plasma hemoglobin, residual anticoagulant agents, activated platelets, white blood cells, and activated clotting factors of 90% or greater in accordance with AABB guidelines.⁶

Simplicity of Operation

- Continuous software monitoring **improves quality** of end product and speed of processing.
- Easy system set-up and intuitive feature design increase efficiency and **save time** for system operators.
- The autoLog™ System is an all-inclusive processing system, **saving you money, storage space** and time on inventory management.

REFERENCES

1. LeGrand, Richard. American Red Cross letter to customers, January 2003, available at: <http://www.redcross.org/services/biomed/profess/legrand.pdf>
2. American Red Cross. American Red Cross Statement on Blood Pricing. May 24, 2001 press release available at: http://www.redcross.org/press/biomed/bm_pr/010524price.htm
3. American Red Cross. Blood Banking Community Issues National Appeal for Immediate Donations. January 12, 2004 press release available at: http://www.redcross.org/pressrelease/0,1077,0_114_2164,00.html
4. Speiss, BD. Transfusion and outcome in heart surgery. *Ann Thorac Surg* 2002; 74(4):986-7.
5. Hannon, Timothy. Medtronic autoLog™ Autotransfusion System: Comparative Wash Quality and Clinical Assessment. *Technical Concept Paper* published by Medtronic. June 1999.
6. Guidance for Standards for Perioperative Autologous Blood Collection and Administration. First Edition. American Association of Blood Banks Sec. 5.1.2, p. 21.



Packs red blood cells tightly

Unique bowl design ensures consistent product.

*"From a clinical standpoint, the compact design, economy, ease of set-up, and simplicity of operation are major advantages of the autoLog Autotransfusion System. Combined with our controlled laboratory data showing its wash program to be fast, sophisticated and quite efficient, the autoLog has proved to be a very capable and desirable autotransfusion machine."*⁵

**The Vacuum Regulator:
VR702**

regulates the vacuum
from 0-700mmHg
(recommended
operation 150-210 in
accordance to AABB
guidelines in order to
minimize hemolysis).⁶

**Hardshell Cardiotomy
Reservoir with
Micron Filter (shown)**

Vacuum canister and
softshell blood collection
reservoir bag with micron
filter also available.

Self-contained
vacuum source
provides convenience.

The device's
compact design
and small footprint
are beneficial
in a crowded
operating room.



Why Use Autologous Red Blood Cell Salvage?

Autologous red blood cell salvage is a safe, reliable, cost effective method of returning red blood cells back to patients. The autologous red cell salvage procedure maximizes patient safety, overall cost savings, and blood quality. It:

- Eliminates the risk of clerical errors during blood handling.
- Minimizes costs associated with the use of allogenic blood transfusion.
- Minimizes the use of banked blood products, thereby reducing the risk for transmission of blood-borne diseases, lowering the risk of transfusion reaction, and providing an option for those with religious objections to transfusions.
- Addresses the issue of blood shortages. Blood shortages are common and will become more acute in the next few years.⁴
- Provides red blood cells with normal 2,3 DPG levels and viability superior to preoperative autologous blood donation.⁵

Facts on Blood Prices and Supply

- Blood product prices have increased significantly due to the rising costs of safety measures and requirements for the blood supply.^{1,2}
- National blood inventory levels have dropped well below a safe and adequate supply. Certain critical blood types are not routinely available and as a result some elective surgeries have been postponed or cancelled.³
- Transfusion for cardiac surgery utilizes approximately 20% of the United States' blood supply.⁴



AUTOLOG™ AUTOTRANSFUSION SYSTEM SPECIFICATIONS

Electrical Classification

Class I, Type B, Ordinary, Continuous Operation

Power

Voltage: 110/120 or 220/240 V
Cycles: 50-60 Hz
Phase: Single
Current: 1.6/0.8 amps (depending upon voltage selection)
Fuses: 4 AT/240 V
Power cord: 2 wires plus ground (earth) connector; 3-prong hospital grade (USA only)

Speed and Flow Rate Specifications

Centrifuge: 0-10,000 RPM (±5%)
Pump: 0-600 ml/min (±5%)
Vacuum: 200-280 mbar

Dimensions

Width: 33 cm (13 inches)
Height: 75 cm (30 inches)
Depth: 22 cm (9 inches)

Weight

32 kg (70 lb.)

Temperature Limit

Operational: 10°C-30°C (50°F-86°F)
Storage: 5°C-30°C (41°F-86°F)

Humidity Range

Operational: 10-95% non-condensing
Storage: 10-95% non-condensing

NOTE: Technical data, features, and options referenced are based on the latest information available at the time of printing. Medtronic reserves the right to change specifications without notice.

ORDERING INFORMATION

autoLog™ System Product Codes

Part #	Description	Qty
ATLG	autoLog™ Autotransfusion System	1
ATLVC	Vacuum Canister w/Gauge	1
VR702	Vacuum Regulator	1
ATL2001	Wash Kit	6
BT725	Suction/Anticoagulation Line	10
ATL1005	Collection Reservoir Bag – Large	6
BT1000SP	Blood Handling Bag	24
ELUWB1	Waste Bag	10
EL2120	Hardshell Blood Collection Reservoir with 120 micron filter	6
EL240	Hardshell Blood Collection Reservoir with 40 micron filter	6
EL400	4 Liter Hardshell Cardiotomy Reservoir with 120 micron filter	6
EL402	4 Liter Hardshell Cardiotomy Reservoir with 20 micron filter	6
EL404	4 Liter Hardshell Cardiotomy Reservoir with 40 micron filter	6
E302	Reservoir Holder	1

One Source Packs

Part #	Description	Qty
ATLS15	Includes One of Each	4
ATL2001	Wash Kit	
BT725	Suction/Anticoagulant Line	
ATL1005	3 Liter Softshell Blood Collection Reservoir with 150 micron filter	
ATLS21	Includes One of Each	4
ATL2001	Wash Kit	
BT725	Suction/Anticoagulant Line	
EL2120	4 Liter Hardshell Blood Collection Reservoir with 120 micron filter	
ATLS24	Includes One of Each	4
ATL2001	Wash Kit	
BT725	Suction/Anticoagulant Line	
EL240	4 Liter Hardshell Blood Collection Reservoir with 40 micron filter	
ATLS00	Includes One of Each	4
ATL2001	Wash Kit	
BT725	Suction/Anticoagulant Line	
EL400	4 Liter Hardshell Cardiotomy Reservoir with 120 micron filter; 1/4" and 3/8" prime ports	
ATLS02	Includes One of Each	4
ATL2001	Wash Kit	
BT725	Suction/Anticoagulant Line	
EL402	4 Liter Hardshell Cardiotomy Reservoir with 20 micron filter; 1/4" and 3/8" prime ports	
ATLS04	Includes One of Each	4
ATL2001	Wash Kit	
BT725	Suction/Anticoagulant Line	
EL404	4 Liter Hardshell Cardiotomy Reservoir with 40 micron filter; 1/4" and 3/8" prime ports	



Medtronic
When Life Depends on Medical Technology

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