Blood Bank Processing Solutions

MSP-4650R PLUS





ISO Quality 9001/13485
ANMAT: PM1532-1

Calle 34 (Ex Francia) Nº 3917, San Martín - B1650IHM - Bs. As. - Arg.
4755-7780 / 4755-4004 11 2488 7703
www.presvac.net presvac@presvac.net

The **Presvac refrigerated centrifuge,** model **MSP-4650R PLUS**, is a **high-capacity system** designed for **intensive processing** in **blood banks and transfusion centers**. Its rotor accommodates up to **4 blood bags** (double, triple, or quadruple configurations) using **1,000 mL bag carriers**, and reaches a **maximum speed of 3,500 RPM**, ensuring efficient and reliable component separation.

The **MEMOSOFT V** control system allows **programming of up to 50 different protocols**, with precise adjustment of **speed, temperature, time, acceleration, and braking**.

The centrifuge incorporates **multiple safety systems,** including lid locking, imbalance detection with immediate shutdown and audible and visual alarms, a brushless low-maintenance induction motor, and a CFC-free refrigeration system, environmentally friendly.

Optional accessory: **barcode reader with PC connection via RS-232 cable**. It allows the software to record the date, time, method, and duration of each centrifugation cycle, ensuring process traceability.

Advanced Safety Features

Imbalance detection with immediate stop

Provides real-time imbalance monitoring with an instant stop function, protecting both the equipment and samples against any load imbalance.

Anti-vibration lid lock

Prevents accidental opening during operation, safeguarding sample integrity and operator safety.

Comprehensive alarm system

Equipped with a multifunction alarm system that monitors abnormal voltage, high temperature, overspeed, load imbalance, missing rotor, brake anomalies, and motor faults.

High-quality connectivity

Equipped with a 220 V, 50/60 Hz power connector for easy, fast, and safe operation.

Robust construction

Steel sheet structure with epoxy paint and a stainless-steel chamber that provides durability and safety.

All-stainless-steel chamber and inner lid

Delivers excellent durability and corrosion resistance, ensuring a long service life.

Emergency lid release

Allows the lid to be manually opened in the event of an emergency or power loss.

11 2488 7703 presvac@presvac.net presvac.net

Key features of the 4-bag centrifuge

• **Expanded programming capacity**
Streamline operations with built-in memory that stores 50+ customized programs—ideal for standardizing and automating complex procedures in high-demand environments.

• **Advanced thermal efficiency**
Reach a rapid working temperature from ambient conditions, ensuring fast start-up and efficiency in the preparation of temperature-sensitive processes.

• **Low-impact acoustic design**
Reduce laboratory noise with an optimized structural design that keeps sound levels below 65 dB, even at maximum speed.

• **Dynamic cycle management**
Fine-tune every operational stage with 10 programmable acceleration and deceleration ramps, allowing centrifugation profiles to be tailored to the specific requirements of each application.

• **High-efficiency, low-maintenance drive system**
Powered by a brushless induction motor, this unit delivers clean, continuous operation with minimal maintenance, supporting long-term operational reliability.

• **Enhanced stability**
A low center-of-gravity structural design provides maximum mechanical stability during operation, contributing to safe, consistent, and reproducible results across all load types.

MEMOSOFT V Control Panel



The **MEMOSOFT V control panel** combines proven reliability and safety with an intuitive **user communication system** via **graphic displays** for streamlined programming and equipment management. This upgraded platform can **automatically store all processed units**. Ensuring maximum traceability throughout blood unit processing.

With this management system, you can identify **exactly when each blood unit was processed** and securely store the complete centrifugation cycle data—**Date, time, method, and process duration**—delivering a **comprehensive, traceable, and secure** record.





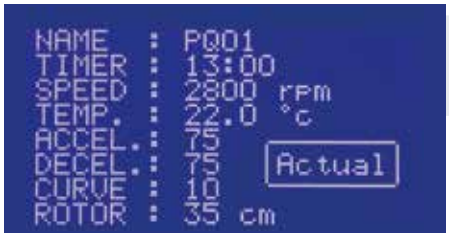




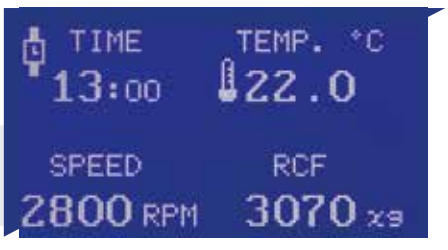
11 2488 7703 presvac@presvac.net presvac.net

- Program Display & Activation
- Program Selection
- Program Creation & Storage
- Delete Program
- Manual
- PC Data Connection & Transfer
- User Group
- Enable Data Storage System
- Date & Time Settings
- Delete Database
- Maintenance Time
- Centrifugation Time
- User Screen Lock
- User Identification

Display Graphics Description



Manual Program Creation



Real-Time Parameter Display During Operation

11 2488 7703 presvac@presvac.net presvac.net

Technical Data Sheet – Model MSP-4650R PLUS

Technical Specifications	Value
Depth	750 mm
Length	620 mm
Height	930 mm
Weight	147 kg
Materials	Ext: Enameled steel / Int: Stainless steel
Maintenance clearance	Does not require leveling
Mounting	Horizontal positioning with adjustable feet
Max. electrical current draw	13 A (13 A in continuous operation)
Max. power	2420 VA
Power supply	220 V ± 3%, 50/60 Hz
Heat dissipation	1700 kcal/h max. per cycle
Ambient temperature	25 °C
Refrigerant	R 404a
Working pressure	45 psi suction pressure
Warranty	1 year
Scheduled maintenance (per manufacturer)	6 months
Certifications	ISO 9001 | ISO 13485 | ANMAT

Technical specifications – 4B swinging rotor (4 bags)

Technical Specifications	Value
Material	Steel and aluminum alloy
Processing capacity	4 blood bag holders
Tube volume	1000 mL
Maximum speed	3500 RPM
Programmable operating temperature	Min. 4 °C – Max. 40 °C (+/-)6°C
Maximum rotor diameter	460 mm

Centrifuge rotors



Rotor 4 B

Rotor without bags



(R4B)

Max RPM	3500
Max RCF	4198
Capacity	4 Buckets

Bucket (set of 4)



(BU4)

Adapter (set of 4)



(ADA4B)

Maximun Bucket Capacity	1000 mL Blood Bag
Maximun Rotor Capacity	4 x 1000 mL Blood bag



Fixed-Angle Rotor

(R6A)

Max RPM	7500
Max RCF	13376 x g
Capacity	1000 ml x unidad
Adapter per Rotor	6

Optional accessories

Motorized gas spring



Designed for enhanced safety, the motorized gas springs enable smooth, controlled opening and closing of the centrifuge chamber, providing an additional layer of protection for the user.

Buffy Coat adapters



Includes specific adapters for Buffy Coat processing, optimizing cell separation and ensuring reliable, reproducible results. Ideal for clinical and research applications that require precise extraction of cellular components.



Barcode scanner

11 2488 7703 presvac@presvac.net presvac.net

Presvac

11 2488 7703 presvac@presvac.net
presvac.net