



# Arrowsmith & Grant

Refrigeration

## Rapid Plate Freezer

*Models: RPF50 MKVI & RPF75 MKVI*

### High-Speed Contact Freezing for Plasma Processing

Specifically designed for blood banks and plasma-processing facilities, the Arrowsmith & Grant Rapid Plate Freezer (RPF) uses direct contact between refrigerated plates and plasma bags to rapidly and uniformly reach core temperatures of  $-30^{\circ}\text{C}$ . Large 1 L bags freeze in under 60 minutes, while smaller 350 mL units can freeze in under 50 minutes, depending on bag type.



Pictured: RPF50 MKVI

### Model Comparison

Model	No. of Chambers	Total Capacity
RPF50 MKVI	2	- Up to 20 x 1000 mL - Up to 50 x 350 mL
RPF75 MKVI	3	- Up to 30 x 1000 mL apheresis bags - Up to 75 x 350 mL bags

**Note:** Each chamber can freeze up to **10 x 1000 mL** or **25 x 350 mL** product bags.

### Innovative Plate Freezing System

Features precision-machined plates that press evenly against plasma bags from both sides, maximizing surface contact for fast and uniform thermal transfer. Integrated directly into the refrigeration system, the plates ensure consistent core freezing with minimal variation. An angled design allows for quick, ergonomic loading, streamlining operation in high-throughput environments. The dynamic plate drive system accommodates both large and small loads, **including mixed bag types and varying sizes**, offering flexibility without compromising performance.



## Designed for Clinical Environments

- Purpose-built for **blood banks**, transfusion services, and plasma collection centres.
- Supports **large or small batch processing** with consistent throughput and short cycle times.
- Ideal for **high-demand** facilities requiring rapid turnaround.



## High- Performance, Uniform Freezing

- Validated to reach **-30°C** core temperature in under 60 minutes.
- **Plate-based contact freezing** ensures even temperature distribution across all bags.
- No Airflow inside freezing chambers — reducing contamination risk and **simplifying maintenance**.
- Continuous, repeatable performance with **no degradation over successive cycles**.



## Hygienic & Ergonomic Cabinet Design

- Constructed entirely from **304-grade stainless steel** – durable and cleanroom friendly.
- Smooth internal surfaces and **removable waste trays** support quick disinfection.
- **Optimized loading height** and automatic lid movement ensure user comfort and safety.
- **Internal Heaters and insulated pipework** eliminate condensation and external moisture issues.



## Flexible & Efficient Refrigeration System

- Available with **air-cooled** or **water-cooled** condensers to match facility needs.
- Scroll compressors using **R507 refrigerant** for **energy-efficient cooling** and defrost.
- Built-in reverse-cycle defrost maintains **long-term system reliability**.



## Smart Software, Traceability & Access Control

- Full **touchscreen interface** with lid control, cycle start, data review, and diagnostics.
- Real-time pop-up **alerts and warnings** with built-in maintenance recommendations.
- Secure **multi-level user access control** for operators, technicians, and administrators.
- **Automatic logging** of scanned Donor ID, timestamps, temperature profile, and alerts for **full audit compliance**.
- **Exportable freeze cycle report** as pdf file or other desired formats.



## Built to Last, Easy to Maintain

- Engineered with **high-quality components** and minimal moving parts.
- **Front-accessible service points** streamline maintenance.
- Supports **remote diagnostics** for **faster troubleshooting** and reduced downtime.



## Certifications & Compliance Standards

- **ISO 9001 and ISO 13485 Compliant** – Quality Management Systems.
- **UKCA Marked** – Compliance with United Kingdom regulations for safety and performance.
- **ARTG Listed** – Included in the **Australian Register of Therapeutic Goods** as a medical device. ARTG #448125
- **AS 3864.2 Compliant** – Designed in accordance with **Australian Standard AS3864.2** for blood and blood component refrigeration equipment



Arrowsmith & Grant

Refrigeration

ABN: 64 007 296 586 AU09769

28–30 Marni Street, Dandenong South  
Victoria 3175, Australia

Ph: +61 3 9706 66 55

Email: [admin@arrowsmithgrant.com.au](mailto:admin@arrowsmithgrant.com.au)

Website: [www.arrowsmithgrant.com.au](http://www.arrowsmithgrant.com.au)

