FABRUM.

AFCRYOCOOLER

PTC1000 CRYOCOOLER



PTC1000 INDUSTRIAL CRYOCOOLER

APPLICATIONS

Onsite production of liquid air, nitrogen and oxygen

Onsite production liquefaction of hydrogen, natural gas and methane

High cooling capacity helium cooling loops and specialised applications

INDUSTRIES

Food and beverage

Research

Superconductivity

Animal breeding

Life science

Specialist manufacturing

KEY BENEFITS

Surety through onsite production

Reliable and efficient

Easy to operate

Minimal maintenance

Measurable return on investment

Key technology enabler

A cryocooler is a mechanical device utilising a refrigeration cycle, designed to cool to a temperature so low that ordinary gases become liquid.

Whilst many variations of cryocoolers are available, few systems can provide robust industrialised functionality.

Fabrum cryocoolers require very low maintenance and have proven ability to operate in harsh environments with NO degradation of cooling performance over the life of the unit. This ensures continuous operation extending beyond 50,000 hours.

The patented* dual diaphragm pressure wave generator with large linear pulse tubes delivers these attributes:

Minimal set up requirements: plug in for liquid production within 20 minutes

Scalable and modular: install a single unit into an existing cooling system, configure multiple units or install a full liquefaction system.

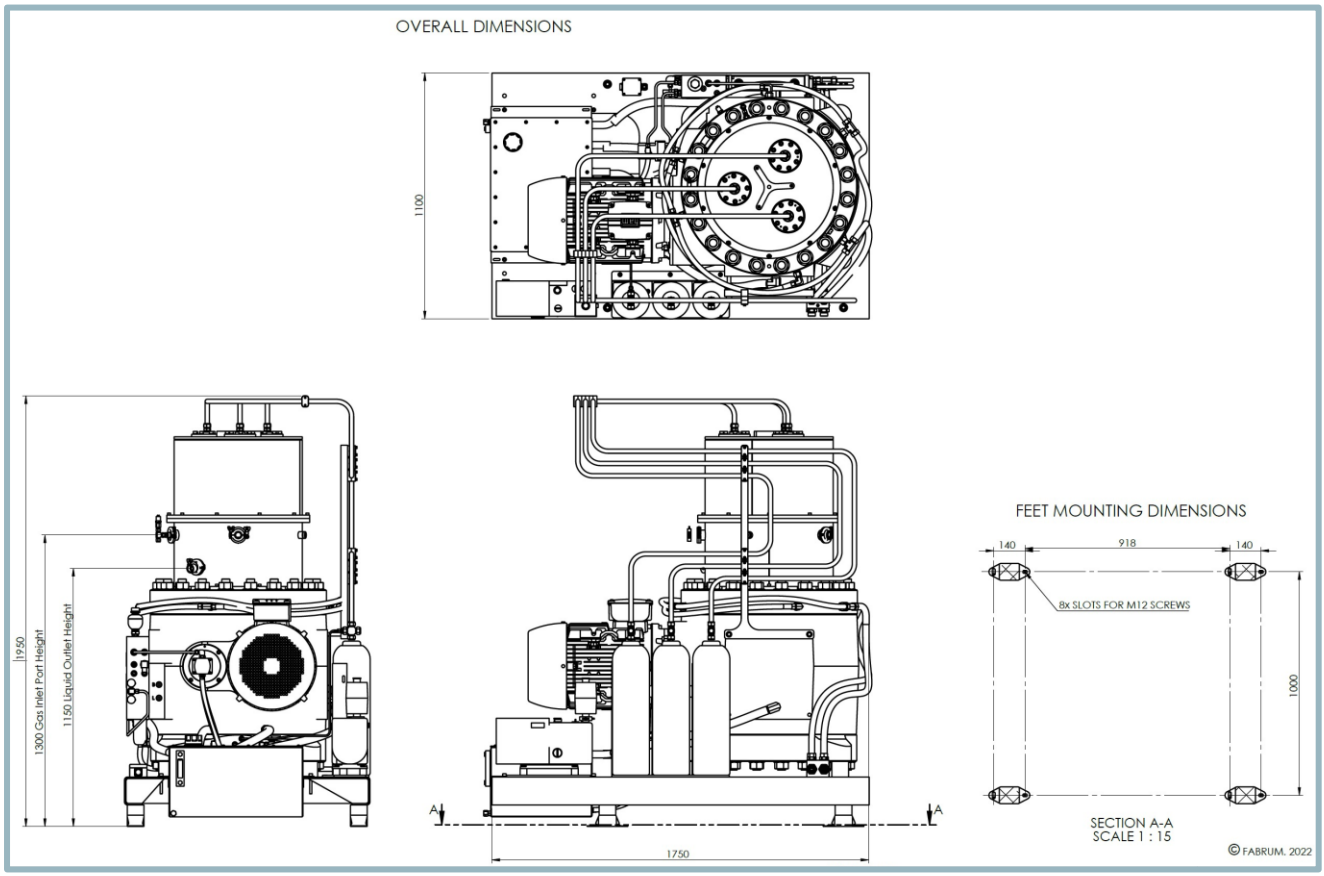
Efficient, cost effective, reliable, continuous running

Low maintenance: servicing at 40,000 hours provides uninterrupted supply

Well-suited for use in remote locations

* Patented dual diaphragm pressure wave generator delivers rugged, low maintenance and efficient cryocooling.

Long life diaphragm separates the cryogenic cold head from the wave generator: ensures a clean cryogenic system without contamination.



PRODUCT SPECIFICATIONS

Cooling power @ 77°K [W]	1500	Motor current rating [A]	65
Cooling power @ 110°K [W]	2500	Nominal helium pressure [bar]	25
No load temperature [°K]	42	Water / Glycol fluid ratio [%]	80 / 20
Input power [kW]	32	Cooling flow rate [l/min]	65
Nominal motor size [kW]	37	Cooling water connection	2 x 1" BSPP Male
Weight [kg]	1600	Air cooler fan power [kW]	2
Dimensions LxWxH [m]	1.70 x 1.20 x 1.95	Motor connection [mm^2]	4 core 16mm screened
Shipping Dimensions LxWxH [m]	1.95 x 1.45 x 2.15	Nominal gas connection	3/8" Swagelok™ tube
Shipping Weight [kg]	1850	Nominal liquid outlet	1/2x3" Female bayonet

FABRUM.

Mission Critical Solutions. Providing world leading solutions in engineering and cryogenic technology.

Telarc. Registered
Quality ISO 9001

NEW ZEALAND.COM
Licence No.100526

NEW ZEALAND
128a Waterloo Road, Hornby,
Christchurch 8042
Phone +64 3 982 2810

FRANCE
2 Rue des Murailles,
38170 Seyssinet Pariset
France

USA
Gloversville, NY 12078
United States of America

INDIA
Kasturba Gandhi, Marg,
New Delhi 110 001
India

FABRUM.NZ

CONTACT@FABRUM.NZ