FABRUM. INDUSTRIAL CRYOCOOLER

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# INDUSTRIAL CRYOCOOLER FOR DISTRIBUTED PRODUCTION

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.



#### **APPLICATIONS**

Onsite production of liquid air, nitrogen and oxygen.

Onsite 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 Renewable energy



### **KEY BENEFITS**

Onsite production Reliable and efficient Easy to operate Minimal maintenance Measurable return on investment Key technology enabler

## The Fabrum Industrial Cryocoolers deliver these attributes:

- O1 Minimal set up requirements: plug in for liquid production within 20 minutes.
- O2 Scalable and modular: install a single unit into an existing cooling system, configure multiple units or install a full liquefaction system.

**03** Efficient, cost effective, reliable, continuous running.

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

**05** Well-suited for use in remote locations.

Efficient and Robust Performance: Fabrum's Patented Cryocooler Technology.



PRODUCT SPECIFICATIONS	РТСЗЗО	РТС1000
Cooling power @ 77°K [W]	500	1500
Cooling power @ 110°K [W]	860	2500
No load temperature [°K]	42	42
Input power [kW]	13	32
Weight [kg]	700	1600
Dimensions LxWxH [m]	1.25 x 0.8 x 1.65	1.70 x 1.20 x 1.95
Shipping Dimensions LxWxH [m]	1.50 x 1.05 x 1.90	1.95 x 1.45 x 2.15

"We operate from the bottom of the world but we perform at the top of it; and this is just the beginning of our story."



**Mission Critical Solutions.** Providing world leading solutions in engineering and cryogenic technology. Clever Solutions for a Better Future.

#### **NEW ZEALAND**

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