

# **BOIL-OFF-GAS MANAGEMENT**

Harnessing a rich history of delivering cryogenic solutions globally, Fabrum presents cutting-edge boil-off-gas management (BOGM) systems for liquid natural gas (LNG) and liquid hydrogen (LH<sub>2</sub>), tailored for diverse applications across industries that include aviation, mining, marine, and heavy vehicle road transport.

At the heart of these groundbreaking systems are high-efficiency reliquefiers, ensuring zero-loss storage of both liquid hydrogen and liquid natural gas. Our innovative approach facilitates seamless fuel storage, transportation, and trans-filling operations.

With unmatched reliability and performance our advanced liquid transfer and fuelling systems pave the way for sustainable energy solutions.



### **APPLICATIONS**

Fuel storage

Vehicle fuelling stations

Fuel transportation and trans-filling



### **INDUSTRIES**

Aviation

Mining

Marine

Heavy vehicle road transport

Alternative fuels



### **KEY BENEFITS**

Reliquefiers for zero-loss storage of liquid hydrogen and liquid natural gas.

High-efficiency liquid transfer and fuelling systems.

Elimination of environmentally harmful emissions.

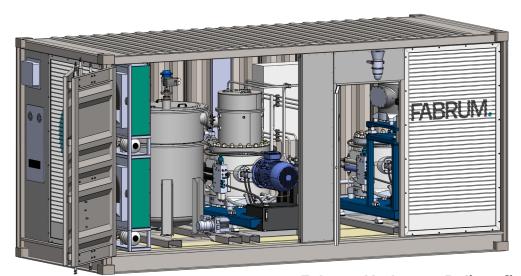
Preconditioning of receiver tanks for zero-loss fuel transfer.

# Fabrum's BOGM systems deliver these attributes:

- O1 Utilisation of pulse-tube and Joule-Thomson technologies for high efficiency reliquefaction systems.
- Design of end-to-end fuelling systems for maximum overall efficiency.
- Retrofittable to existing storage to eliminate boil-off losses.
- Pressure-management systems for optimised liquid transfer and storage.
- Patented pressure-wave-generator pulse-tube cryocooler technology.

Revolutionising Cryogenic Solutions: Fabrum's LNG and LH<sub>2</sub> Boil-Off-Gas Management Systems.





**Fabrum Hydrogen Reliquefier** 

PRODUCT SPECIFICATIONS	FABRUM HRL100	FABRUM PTC330-LNG
Applications	Liquid Hydrogen	Liquid Natural Gas
Daily reliquefier capacity (kg)	100	230
Reliquefaction pressure (barg)	2-7	8
Turn-down available	Yes	Yes
Minimum output (% of FS)	0	-
Footprint	1 x 20' ISO container	1.3 x 0.8 x 1.7 m
Nominal power consumption (kW)	65	12
SEC for entire system (kWh/kg)	15	1.5
Start up time	<1 hr	<10 min

"We operate at 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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