MGO | Cooling Units

FARAD
HEAT EXCHANGERS

...we work on quality

Marine Gas Oil (MGO) Cooling Units

Under the new global cap, ships will have to use fuel oil on board with a sulphur content of no more than 0.50% m/m, against the current limit of 3.50%, which has been in effect since 1 January 2012. Since 1 January 2015 the sulphur limit for fuel oil used by ships in SOx Emission Control Areas (ECAS) established by IMO has been 0.10% m/m. The sulphur content of any fuel oil used on board ships shall not exceed the following limits:

Outside an ECA established to limit SOx and particulate matter emmissions

- 4.50% m/m prior to 1 January 2012
- 3.50% m/m on and after 1 January 2012
- 0.50% m/m on and after 1 January 2020

Inside an ECA established to limit SOx and particulate matter emissions

- 1.50% m/m prior to 1 July 2010
- 1.00% m/m on and after 1 July 2010
- 0.10% m/m on and after 1 January 2015

Capacity

FARAD MGO Cooling Units		
Model	**Heat duty [kW]***	**MGO flow (range) [m3/h]**
MGO-U35	31	0,5-2,0
MGO-U60	54	2,0-3,5
MGO-U85	77	3,5-5,0
MGO-U115	101	5,0-6,5
MGO-U140	124	6,5-8,0
MGO-U170	147	8,0-9,5
MGO-U190	170	9,5-11,0
MGO-U220	194	11,0-12,5

FARAD's MGO Cooling Units standard models

Electric panel with PLC system cotrols the following:

- Start/stop signals
- Emergency stop
- Safety elements (H/L Pressure Switch, Oil Pressure Switch, Compressor Module Protection Unit, Water Pressure Sensor, Flow Switch)
- Sensors (PT100 temperature sensors, water pressure sensor)
- 3-way valve for MGO temperature regulation
- Direct starters for compressor and chilled water pump

Screen display features:

- Unit status
- Safety elements status
- Running time of compressor
- Maintenance schedule according to compressor running time
- Capacity steps
- Chilled water temperature inlet/outlet
- MGO temperature inlet/outlet
- Fault monitoring with fault messages on the screen

Advantages of FARAD's MGO Cooling Units:

- MGO Cooler Unit designed and manufactured by FARAD SA Heat Exchangers, for easy and fast installation and long service in heavy marine conditions
- All–in–One Unit, ready for connection on fuel line, and power supply
- Minimal footprint due to sophisticated compact design
- Suitable for new builds as well as existing vessels
- Capacity control with a temperature step controller for MGO temperature adjustment. MGO temperature control is fully automatic.
- Simple electric panel design with PLC for easy maintenance
- Large-size suction accumulator prevents compressor damage from a sudden surge of liquid refrigerant
- 24 months FARAD's warranity

Standard design data:

- MGO inlet temp.: 50 °C.
- MGO outlet temp.: 17 °C.
- Design Pressure (MGO):1.5 Mpa.
- Cooling System:F.W or S.W.
- Suitable when M/E and G/E have common F.O service system.
- "Tailor-made" solution that is suited to vessel's specification.

Accessories (optional)

This system provides the following optional features (upon request):

- ModBus communication in RTU/TCP
- Possibility of fault logging, making fault tracing easier
- Remote access to the PLC (VPN line needed)
- Future remote maintenance (via Soft GOT software)
- Future possibility to connect to a central SCADA system and monitor the condition of the equipment on all vessels

Approvals

The design and construction are approved by all leading Classification Societies. Certification must be stated at time of order.

Delivery

3-4 weeks upon order receipt and drawing approval – confirmation.

MGO Cooler

Except Marine Gas Oil Cooling Units, FARAD has developed a new MGO product series which can be installed in the fuel oil service system.FARAD MGO stand alone (Fresh or Sea water) Cooler is a cost-effective and reliable solution for low-Sulphur emissions. The optimized shell & tube design offers easy maintenance, reliability and trouble free operation.For further information visit our site: www.farad.gr or contact with sales department.

In Particular the MGO Cooler
is an ABS type approved product

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