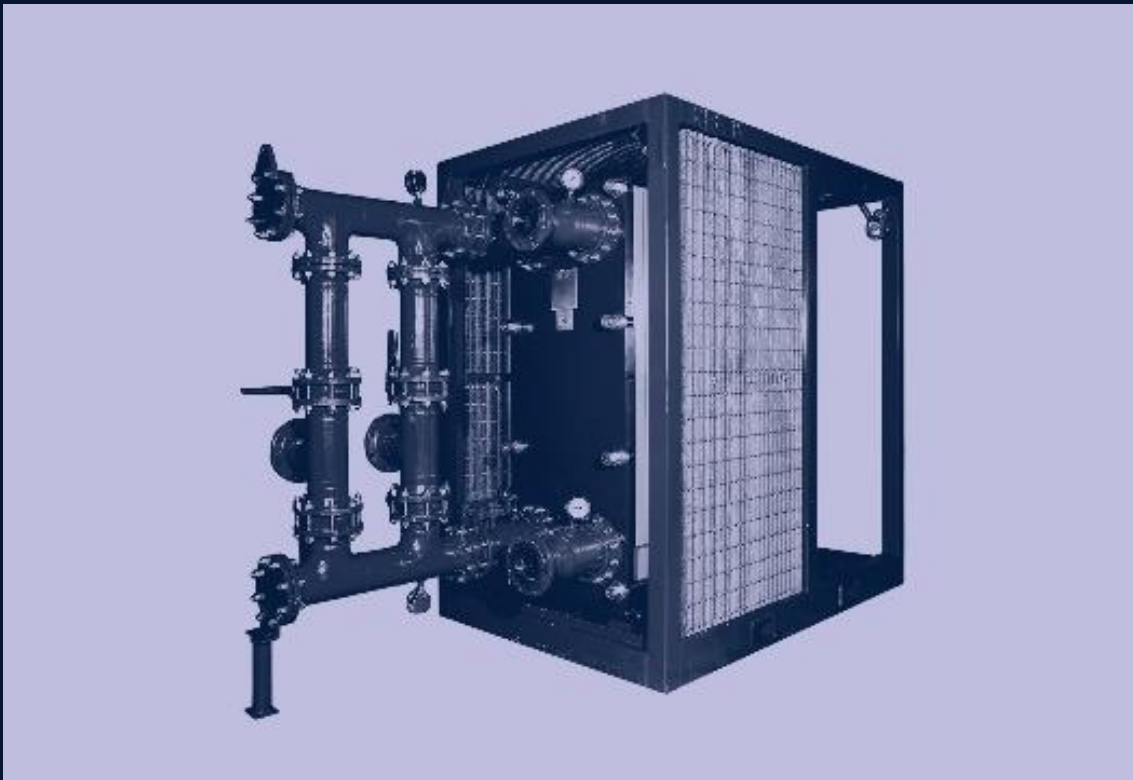
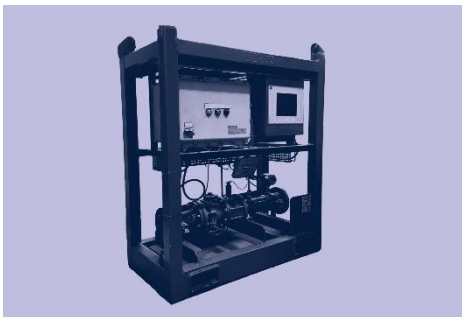
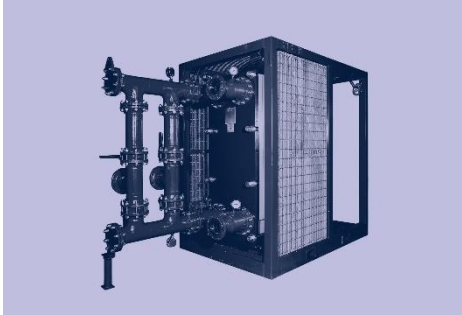


High volume mud cooler





OSSO is a unified and essential partner to any well design team.

Our extensive experience which spans across oil and gas HP/HT hole sections and geothermal wells means not only do we comprehend and understand the complexities and challenges when undertaking such campaigns, but we have the learned knowledge and the proven field technology to effectively support them.

Deployed globally, our fleet of mud cooling systems are supplied skid mounted, built in accordance to global standards and regulations and can be tailored to suit a range of operational requirements.

Our new technology, AutoCul, further enhances operational efficiency by enabling continuous real time monitoring and providing greater control of cool mud temperature back to surface pits by automatised valves controlling volume of cooling medium (cool water).

A complete system

The OSSO single and dual high volume mud coolers incorporates either one or two plate heat exchangers designed specifically for drilling mud and in accordance with PED/ASME codes and standards. They have inlet /outlet pressure and temperature gauges, and the dual mud cooler can be operated as an individual unit, or in series.

The hot drilling mud from the mud surface pits is pumped to the mud inlet via a duplex strainer. The basket strainer prevents foreign objects entering the 4th generation design plate pack. A back flush arrangement within the mud cooler manifold is incorporated for flushing the plates in the plate pack.

Benefits:

- High volume mud coolers specifically designed for water / oil-based muds with densities up to 19ppg (2.3sg) with solids content of 40%
- Increases endurance and down hole measuring devices such as MWD resulting in reduced round trip and decreasing actual drilling rig time
- Increases life cycle elastomers in MWD, BOP, shaker screens and pump liners
- Assists in controlling mud rheology and mud flash point
- HSE highlight, improves working environment within shaker house and active mud pit room



Single Module

Dimensions mud cooler single skid

Length	3,616 mm
Width	1,500 mm
Height	2,610 mm
Weight	3,750 kg

Dimensions Filter skid

Length	1,850 mm
Width	1,100 mm
Height	1,003 mm
Weight	1,200 kg

Design

Design pressure	8 bar remove
Design temp	130°C
Heat transfer area	185m ²
Pressure vessel code	PED 97/23/EC Or ASME / API
Frame	DNV 2.7-1 / 2.7-3

Materials

Piping	Mild steel schedule 80
Support frame	Mild steel
Frame plates	Mild steel
Channel plates	Titanium

Connections

Cooling water outlet	6" or 4" Ansi 150LB
Cooling water inlet	6" or 4" Ansi 150LB
Drilling fluid inlet	6" Ansi 150LB
Drilling fluid outlet	6" Ansi 150LB

Utilities

Cooling water flow	up to 227m ³ /hr (1000 gpm)
Drilling fluid flow	up to 227 m ³ /hr (1000 gpm)

Liquid hold up volumes - mud

Plate heat exchanger	366 liters
Module pipework manifold	23 liters
Filer skid	36 liters
TOTAL VOLUME	475 liters

Liquid hold up volumes – water

Plate heat exchanger	366 liters
Pipework manifold	23 liters
TOTAL VOLUME	376 liters

Dual Module

Dimensions mud cooler dual skid

Length	6,250 mm
Width	1,500 mm
Height	2,610 mm
Weight	7,500 kg

Dimensions Filter skid

Length	1,850 mm
Width	1,100 mm
Height	1,003 mm
Weight	1,200 kg

Design

Design pressure	8 bar remove
Design temp	130°C
Heat transfer area	370m ²
Pressure vessel code	PED 97/23/EC Or ASME / API
Frame	DNV 2.7-1 / 2.7-3

Materials

Piping	Mild steel schedule 80
Support frame	Mild steel
Frame plates	Mild steel
Channel plates	Titanium

Connections

Cooling water outlet	6" or 4" Ansi 150LB
Cooling water inlet	6" or 4" Ansi 150LB
Drilling fluid inlet	6" Ansi 150LB
Drilling fluid outlet	6" Ansi 150LB

Utilities

Cooling water flow	up to 275m ³ /hr recommended flow
Drilling fluid flow	up to 275m ³ /hr recommended flow

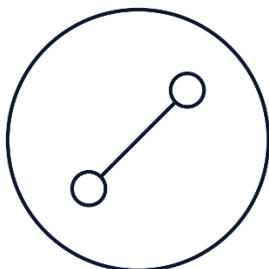
Liquid hold up volumes - mud

Plate heat exchanger	732 liters
Module pipework manifold	46 liters
Filer skid	86 liters
TOTAL VOLUME	864 liters

Liquid hold up volumes – water

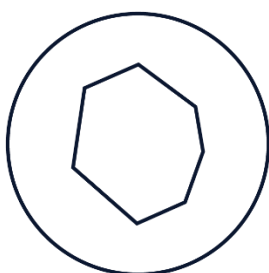
Plate heat exchanger	732 liters
Pipework manifold	46 liters
TOTAL VOLUME	778 liters

Our Services



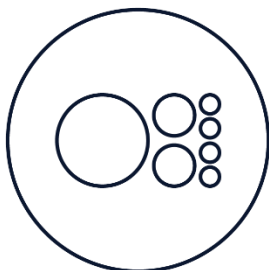
Consultancy

- Technical authorities
- Highly skilled and competent field engineers
- Unrivalled service
- Survey and inspection
- Fluid and fuel analysis



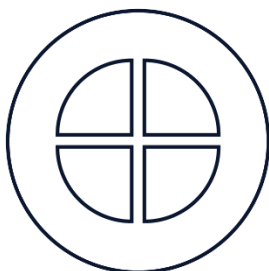
Fluid Temperature Control

- Onshore mud-coolers
- Offshore mud-coolers
- Zone 1 & 2 rated equipment
- Certified partner with Alfa Laval
- Design and development
- Remotely operated coolers



Fluid Separation

- Decanter centrifuges
- Disk stacks
- ATEX rated
- Zone 1 & 2 rated
- Compliant with global standards



Repair and Maintenance

- OEM spare parts
- Servicing
- Repairs
- Refurb
- Maintenance programmes