



CLEAN OIL
BRIGHT IDEAS

CJC™ Desorber/Filter Combi Unit

Water and particle removal from
Emulsified Oils and Environmentally Acceptable Lubricants (EALs) / Biodegradable Oils

CJC™ Product Sheet

APPLICATION

CJC™ Desorber/Filter Combi Unit, a combined product used for maintenance of oils. The unit **removes large amounts of water and particles** from a wide range of lubricants including emulsified oils and **EAL's (Environmentally Acceptable Lubricants) / biodegradable lubricants** in applications such as:

Marine Applications:

- thrusters
- stern tubes
- rudders
- stabiliser fins
- controllable pitch propeller
- etc.

EAL's / Biodegradable Oils:

- Esters
- PAG'S
- PAO'S
- emulsified oils

CHALLENGE

*Water in oil leads to change in viscosity, reduced filter ability, reduced lubricity, formation of rust and bacterial growth and increased degradation of the oil - all factors that lead to reduced lifetime of both system components and the oil *)*

CUSTOMER BENEFITS

The CJC™ Desorber/Filter Combi Unit is one unit solving problems with both water and particles. One inlet and one outlet, plug-and-play type easy to install, has a small footprint area and ready to work in less than 30 minutes.

- Removal of large amounts of water - even from emulsified lubricants, preventing formation of acid and microbial growth
- Removal of particles and sodium
- Reduced corrosion and wear/tear of rubber made sealings
- Extended lifetime of both oil and components
- Prevents uncontrolled shut downs and reduces maintenance costs
- Compact in size
- Environmental friendly solution

The advantages of the CJC™ Desorber/Filter Combi Unit are that the water separation ability is unaffected by viscosity and additive package. The Desorber treats mineral oils as well as synthetic fluids, even the new kind of EAL's (Environmentally Acceptable Lubricants) / biodegradable lubricants and is able to break stable emulsions. The CJC™ Desorber/Filter Combi Unit is able to maintain the water content within systems to very low levels. Furthermore, particles are continuously removed from the oil system by passing through the CJC™ Oil Filter placed on top of the CJC™ Desorber. The filter has a filtration rating at 3 micron absolute and 0.8 micron nominally.

FUNCTION

Desorber:

The desorption process is based on the principle that heated air can effectively hold large quantities of water. In the Desorber the oil is preheated to 60°C and met by a counter flow of cold dry air. The air is heated rapidly by the hot oil and absorbs any water present in the oil, until the air is saturated. The warm, moist air is then chilled to condense the water out.

Oil Filter:

The filtration process is performed by the separate pump drawing oil from the main system and passing it through the fine filter, exiting from the filter base and back to the main system.



The CJC™ Desorber/Filter Combi Unit

*) FACTS

The Classification Society, DNV-GL, in their Technical e-Newsletter of June 12th 2013 has stated that, for their Clean Design Class Notification:

"If a biodegradable oil is used, an arrangement shall be in place to keep the water content of the oil under control".

	Dim.	CJC™ Desorber/Filter Combi Unit
Height	mm / inches	1635 / 64.5
Length	mm / inches	649 / 25.5
Width	mm / inches	570 / 22.4
Weight	kg / lb	145 / 319
Voltage / Frequency	V / Hz	1 x 230 / 60* 1 x 208 / 60
Power consumption	kW	2.9
Current	A	12.6
Flow, Desorber inlet (nominal flow)	L/gal per. hour	55 / 15
Flow, Desorber outlet (nominal flow)	L/gal per. hour	75 / 20
Flow, Fine Filter (nominal flow)	L/gal per. hour	145 / 38
Filter Insert, type		BLA
Viscosity range		ISO VG 32-150
Ambient temp. max.	°C / °F	40 / 104

*) also available in 50 Hz



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