Desorber D5

Water, salt and particle removal from lube oils, emulsified oils and Environmentally Acceptable Lubricants (EALs) / Biodegradable Oils

Product Sheet

APPLICATION

The **CJC® Desorber D5 with integrated particle filter** is applied on oil systems where there is a risk of water contamination. The unit removes water and solid particles from a wide range of lubricants including emulsified oils and **EAL's (Environmentally Acceptable Lubricants) / biodegradable lubricants** in applications such as:

Marine applications:

- thruster gear boxes
- stern tubes
- stabiliser hydraulics
- controllable pitch propellers

EAL/biodegradable oils:

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

CUSTOMER BENEFITS

The **CJC® Desorber D5 with integrated particle filter** is solving problems with both water, salt 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
- Removal of salt (seawater)
- Reduced corrosion and wear/tear of rubber made sealings
- Extended lifetime of both oil and components by a factor 3 to 4
- Prevents uncontrolled shut downs and reduces maintenance costs
- Compact in size
- Environmental friendly solution

FUNCTION

The water separation ability of the CJC® Desorber D5 is unaffected by viscosity and additive package. The Desorber D5 treats mineral oil as well as synthetic oils and EAL oils / biodegradable oil and is able to break stable emulsions. The Desorber D5 with integrated filter is able to maintain the water and salt content within systems to very low levels. The CJC® Oil Filter has a filtration rating at 3 micron absolute and 0.8 micron nominally. The unit is equipped with a pressure gauge to notify when the CJC® Filter Insert needs replacement. The frame is made of stainless steel. The unit is provided with terminals for common alarm.

DESORBER PRINCIPLES

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 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 and drain the water.

FEATURES

- Local start / stop
- Common alarm - local and external
- Automatic stop at high filter pressure
- Leak detection
- Pressure gauge for filter pressure reading
- Oil sample point
- Continuous discharge of separated water to external drain
- De-hydration ON/OFF

FACTS

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.

The CJC ® Desorber D5

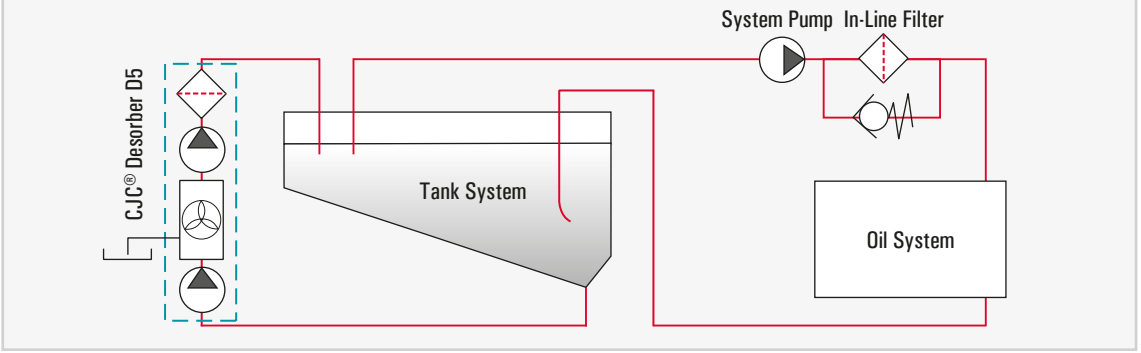
TECHNICAL DATA

CJC® Desorber D5						
Voltage	V	1 x 208	1 x 230		3 x 400	
Frequency	Hz	60	50	60	50	60
Power consump.	kW	1.85				
Current	A	8.4	8.4		3.3	
Flow	L/h gal/h	36 9.5	30 7.9	36 9.5	30 7.9	36 9.5
Viscosity class ISO 3448		ISO VG 46-150				
Ambient operation temperature	C° F°	0 - 45 32-113				
Design temperature	C° F°	80 176				
Design pressure	bar psig	7 101				
Dimensions, LxBxH	mm in	515 x 517 x 786 21 x 21 x 31				
Weight	kg/lbs	100 / 220				
System pressure	bar psi	-0.2 - 3.0 -3 - 44				
Nominal dehydration capacity at major water leak *)	ml/ 24 h	> 1000				
Nominal dehydration capacity during normal operation	ml/ 24 h	> 60				

*) Based on RH% > 90%, oil temperature 30°C and ambient temperature 20°C. Oil type and brand may influence water removal

Product Sheet

INSTALLATION PRINCIPLE



C.C.JENSEN A/S
Løvholmen 13 • DK-5700 Svendborg • Denmark
Phone: +45 6321 2014 • Fax: +45 6222 4615
sales@cjc.dk • www.cjc.dk