



# CJC® Desorber D85

Dewatering and Drying of Oils and Fluids

Product Sheet

## APPLICATION

The CJC® Desorber (D85) reduces quickly and efficiently the water content in your oils and fluids down to below < 100 ppm. The CJC® D85 breaks even stable emulsions with a water content of up to 70 %. Typical applications are e. g.:

### Systems:

- Hydraulic- & hydrostatic systems
- Gearboxes & lube oil systems
- Oil recovery:
  - Machining oil
  - Leakage oil
  - Quenching oil

### Fluids:

- Mineral oil
- Bio-oil / EAL
- Ester
- PAG
- PAO
- synthetic fluids

In the paper, steel, plastic moulding and metalworking industries, just as in maritime applications, exists – environment- and process-related – a high risk for water ingress in the oil systems.

## ADVANTAGES

You can install the CJC® D85 quickly and easily at a free-standing tank or in the off-line flow. The independent circuit enables continuous desorption (24/7) and ensures dry oil within the shortest time. The CJC® D85 ...

- removes free, emulsified and dissolved water
- prevents oil and additive degradation (acids, sludge, varnish), and microorganisms
- enables maximum corrosion and wear protection
- extends the lifetime of oil and system components by factor 3 to 4
- helps to reduce unplanned downtime and costs
- is easy to install and operate and low-maintenance

The water separation based on desorption occurs independently from viscosity and air content in the oil. It has no impact on the additive package.

## FUNCTION

The pump in the oil inlet sucks in the oil from the tank. In the desorber chamber, the warm, moist oil meets a cold, dry air counterflow. The oil heats the cold air so that the air is capable of absorbing a lot of moisture (system pressure constantly low < 2 bar). In a subsequent process, the warm, moist air cools down again, and the water condenses.



CJC® D85

## TECHNICAL DATA

CJC® D85					
<b>Oil volume,</b> dimensioning, e. g.	L	40,000			
<b>Viscosity range</b> (ISO 3448)	up to ISO VG 1000				
<b>Water content in oil</b>	max. 700,000 ppm (70 %)				
<b>Water separation</b>	Water content permanent < 100 ppm (0,01 %)				
<b>Supply voltage</b>	V	3 x 400	3 x 480	3 x 525	3 x 575
<b>Frequency</b>	Hz	50	60	50	60
<b>Power consumption</b> (2 or 3 preheaters)	kW	18 or 27			
<b>Current</b>	A	54			
<b>Pump flow</b> (24/7)	L/h	2,260			
<b>System pressure (suction side)</b>	bar	max. 0.5			
<b>Weight without/with cooling unit,</b> approx.	kg	1,410 / 1.658			
<b>Dimensions, L x B x H</b>	mm	1,700 x 1,727 x 1,925			
<b>Dimensions cooling unit, L x B x H</b>	mm	608 x 808 x 2.238			

### Equipment and features

#### Standard:

- Pump with motor
- electrical control with integrated terminals for common alarm
- Leakage monitoring
- Sample point for oil/fluid analysis
- automatic discharge of separated water

#### Optional:

- Air, water or coolant cooling system
- Actuator-Kit (automatic closing of the valves in the oil inlet and outlet once the CJC® Desorber stops)

## FACTS

*Water in oil changes the viscosity and deteriorates the lubricity of the oil. Furthermore, water accelerates oxidative oil ageing processes and decimates the additive package. Resulting in wear, corrosion, cavitation, increased foam risk, and bacterial growth – all factors that lead to a reduced lifetime of both system components and the oil.*

## DNV-GL

*The Classification Society, DNV-GL, has stated 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.“*



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