



**CLEAN OIL
BRIGHT IDEAS**

CJC™ Application Study

**Application Study
written by:**

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CUSTOMER

Ship: **M/V "Island Scout"**
M/V "Island Pride"
Ship owner: Island Offshore Management AS
Contact person: Trond Hauge

THE SYSTEM - M/V "ISLAND SCOUT"

System: CPP-system with gear box
Oil volume: Approx. 400 L
Oil type: Castrol MHP-154 (engine lube oil)

THE SYSTEM - M/V "ISLAND PRIDE"

System: CPP-system with gear-box
Oil volume: Approx. 450 L
Oil type: Castrol Coral D (stern tube oil)
Castrol MHP 154 (engine lube oil)

PROBLEM

Water in the stern tube oil in both ships.

SOLUTION

CJC™ Desorber D10 with built-in heat exchanger and pump.

THE RESULT - M/V "ISLAND SCOUT"

M/V "Island Scout" had the CJC™ Desorber D10 on board from M/V "Island Pride" and put it into operation on the port stern tube. At that time, there was 2.4% water in the stern tube oil, corresponding to approx. 10 L of water in the system ($2.4 \times 400/100 = 9.6$ L).

The desorber was put into operation in the afternoon on 2007.05.08. 15 hours later the desorber had removed approx. 5 L of water. Over the following 24 hours the desorber removed additional 5 L of water and the last oil samples showed a water content of less than 0.05%.

The oil is now again clear and fine for further use on the port stern tube. Before the desorber came on board the oil had a brownish-milky colour. The Desorber D10 was moved to the starboard stern tube and with a similar result.

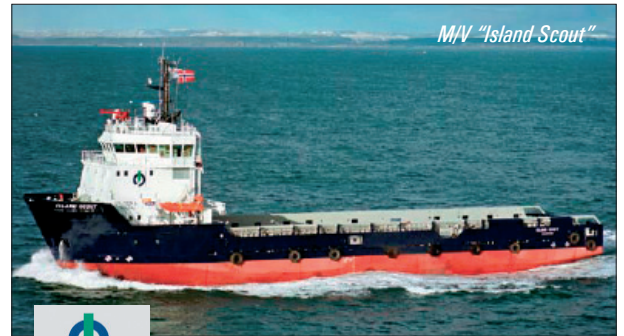
The CJC™ Desorber circulates approx. 45 L/h and needs only 10A as the heater is only of 0.6 KW, 1 phase.

The desorber proved unique for this situation as it can work while the vessel is in operation.

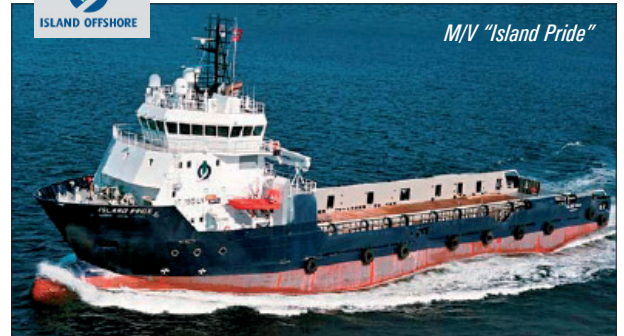
THE RESULT - M/V "ISLAND PRIDE"

The CJC™ Desorber D10 was in operation for approx. 60 hours before an oil sample was taken. Over the same period, approx. 26 L of water was removed from the stern tube oil. Before the desorber was started, an oil sample showed 8% of water, corresponding to approx. $(450 \times 8/100) = 36$ L of water in the stern tube.

A sample now shows 2.2% corresponding to approx. 10 L of water in the stern tube, a result that we, of course, are very pleased with. This sample indicates to us that the desorber works very well and we expect to see even further reduction in the water content.



M/V "Island Scout"



M/V "Island Pride"



CJC™ Desorber D10

THE RESULT

	Before	After	Total removal
M/V "Island Scout"			
Water, %	2.5%	0.05%	
Water, L	10 L	0.2 L	9.8 L
M/V "Island Pride"			
Water, %	8%	2.2%	
Water, L	36 L	10 L	26 L