



## Greek shipowner Cosmship Management achieves great results with HJ Mechtronic SIP

**Onboard the good vessel M/V "Nobility" equipped with MAN 6S46MC-C engine, the shipowner has experienced good cylinder condition and a significant reduction in cylinder oil consumption.**

### Optimizing cylinder condition

Mechanical lubricators have a tendency to overlubricate cylinders. This often results in high wear rates and an overconsumption of cylinder oil.

To overcome this situation Cosmship Management in April 2014 upgraded their mechanical lubricators onboard the vessel M/V "Nobility" with HJ Mechtronic SIP. This system enables automatic electronic control of the cylinder lubricators meaning that feed rate is regulated according to ME load.

### Lowering cylinder oil consumption

Mr. Damianakos from Cosmship Management explains: *"Before installation of the HJ Mechtronic SIP system we experienced a high feed rate on M/V "Nobility". By upgrading we have lowered our feed rates from 1.95 to 0.79 g/kWh at around 55% load. We are very pleased with how the system works."*

The difference in daily cylinder oil consumption is 139 liters.

This reduction translates into a total savings of 55,309 EUR per year.

### Cylinder condition

Cylinder condition is very good and Hans Jensen Lubricators have recommended reducing consumption even further, based on received feedback from the vessel.

Piston rings, piston top land and cylinder liner wall are all in very good condition. On page 2 you can view port inspection pictures of the general cylinder condition.

### Cosmship Management S.A.

Established in 1997 in Piraeus, Greece Cosmship Management owns and operates a relatively new fleet consisting of a mix of container and bulk carrier vessels. HJ Mechtronic SIP is installed on two of their vessels: M/V "Nobility" and M/V "Dignity C". Cosmship Management is currently working on getting Hans Jensen Lubricators systems on their newbuildings.







### Savings using HJ Mechtronic SIP onboard M/V "Nobility"

Engine	ME load	Before installation			After installation		
		Feed rate	Daily		Feed rate	Daily	
6S46MC-C	55%	1.95 g/kWh	233 CLOC	233 liters	0.79 g/kWh	94 CLOC	94 liters
<p>139 L saved per day x \$1.8 (\$/L cyl. oil) = \$250 saved per day. \$250 x 250 sailing days (/1.13 EUR) = <b>€55,309 per year</b></p>							

**Cylinder condition – further reduction in feed rate recommended**

Condition of piston, piston rings and cylinder liner looks very good, however there is clearly signs of overlubrication as chemical residues are building up on piston top and top land. It is our recommendation that the feed rate is reduced. Below you can view pictures from unit #2, #4 and #5 which are representative for the whole cylinder condition.

**Engine: MAN 6S46MC-C8.1 - ME load: 55% - Feed rate: 0.79 g/kWh – Sulphur in HFO: 1.5 – 2.5 %**

	
<p><b>Unit 2 – Piston rings and top land</b> Good condition of piston rings. Signs of overlubrication due to buildup of carbon residues.</p>	<p><b>Unit 2 – Liner wall</b> Good condition. Honing marks clearly visible.</p>
	
<p><b>Unit 4 - Piston rings and top land</b> Good condition of piston rings. Signs of overlubrication due to buildup chemical residues.</p>	<p><b>Unit 4 – Liner wall</b> Good condition. Honing marks clearly visible.</p>
	
<p><b>Unit 5 – Piston rings and top land</b> Good condition of piston rings. Signs of overlubrication due to buildup chemical residues.</p>	<p><b>Unit 5 – Liner wall</b> Good condition. Honing marks clearly visible.</p>