



HJ SIP obtains significant savings for Norwegian Shipowner Grieg Shipping Group AS

Newbuildings from Grieg Shipping had HJ SIP valves installed, which meant a much faster return on investment – especially as they installed the valves in numerous vessels in their fleet.

HJ SIP on newbuildings and retrofits

In addition to newbuildings, a number of their vessels have been retrofitted by Hans Jensen Lubricators A/S and other of their group has ordered Mitsui to install the HJ SIP system on new engines in order to obtain the significant savings from the very beginning.

In March 2008, a service engineer from Hans Jensen Lubricators A/S attended onboard M/V “Star Juventas” for inspection of the HJ SIP system that has been installed from newbuilding. In this connection the service engineer was informed by the C/E that the vessel had shown extremely good results regarding the condition of the cylinder liners and piston rings. Furthermore, the vessel was running with a remarkably low feed rate. The vessel had been in operation for more than 20,000 hours.

The principle of efficient lubrication

SIP is short for Swirl Injection Principle. The philosophy is that the lube oil is pressurized and thereby atomized into the cylinder before the piston passes the injection level in its upward going movement.

When the oil is atomized into the cylinder at this timing, it results in the scavenging air distributing the oil on the entire upper cylinder wall in a thin and even layer of oil. Furthermore, the HJ SIP system ensures that fresh lube oil is delivered to the engine at each piston stroke. Generally speaking, HJ SIP is developed

with the object of reducing the lube oil consumption and at the same time optimizing the cylinder condition.

Both M/V “Star Juventas” and her sister vessel M/V “Star Japan”, MAN B&W 6S60MC, have been equipped with HJ SIP of 230 l/24 hrs and 215 l/24hrs (0.69-0.74 g/kWh) respectively and Hans Jensen Lubricators A/S has even recommended decreasing the feed rate further.

The intention is to decrease the feedrate further

Based on the good experiences with HJ SIP lubrication, Grieg Shipping AS has already ordered HJ SIP for more vessels and recently Hans Jensen Lubricators carried out a retrofit onboard another of Grieg Shippings vessels, M/V “Star Herdla”. Subsequently the feedrate was adjusted to 0.68 g/kWh, which means that Grieg Shipping is obtaining a saving of 60 l/24 hrs.

Savings using HJ SIP

Engine: 6S60MC

After installation

Feedrate: 0.68g / kWh

Daily CLOC: 215

Savings (example)

60L saved per day

x \$1.8 per liter cylinder oil

= **\$108 saved per day**

\$108 x 250 sailing days

= **\$27,000 saved per year**