



Reducing fuel oil consumption with retrofit

Copenhagen,
28/07/2010

Turbocharger cut-out retrofit solution attracts massive interest from shipowners after proof-of-concept

In the last six months, the turbocharger cut-out solution has attracted great interest from shipowners and managers as the solution has proven its worth during tests and installations.

As a response to the needs of the shipping market for a more flexible utilization of both full and part load operation, the turbocharger cut-out solution has been developed at MAN Diesel & Turbo. Optimal fuel consumption is now possible at both full and part load.

Flexibility in slow steaming

The sailing pattern of the largest container vessels, especially between Asia and Europe, has changed recently as a result of factors such as more available tonnage, increased fuel prices and general acceptance of slow-steaming as a viable strategy. Now there are often asymmetrical requirements to the shipping time (and thus engine load levels) on the Europe-Asia trading route. This makes it beneficial to change between full and part load, depending on route direction. Turbocharger cut-out with swing gate valves permits a frequent change between full and part load operation without manually having to install and remove blinding plates.

Proof-of-Concept

There is always a certain lead time for market acceptance of new developments. They have to be proven in terms of benefits, durability, etc., before first movers will invest in the solution.

"After the system for retrofit installation has been thoroughly tested and several of the biggest shipowners have placed orders, the interest and determination to install turbocharger cut-out on vessels have soared." says Peter Rytter Jensen, manager of the retrofit department in PrimeServ Copenhagen. He continues: *"The big advantage is that you have a flexible solution to save on fuel oil. A lot of customers need to be able to continue to have the possibility of running on full load, but at the same time saving fuel oil when they are slowsteaming"*.

The turbocharger cut-out has been on the market for about a year, but the latest six months have been the most hectic in the department handling enquiries. *"Now we have a handful of installations in service, but there is a huge number of orders from the last few months waiting to be installed. It really has the attention of the biggest shipowners out there"*, Mr. Jensen adds.

MAN Diesel & Turbo SE
Teglhølmegade 41
DK-2450 Copenhagen SV
DENMARK
www.mandieselturbo.com

Group Marketing
Further information:
Peter Dan Petersen
Tel.: +45 33 85 14 70
peterd.petersen@man.eu

Graphics and images:
Mia Glarborg
Tel.: +45 33 85 15 90
mia.glarborg@man.eu



Fuel oil savings

Recent tests have proven that large container vessels, powered by e.g. a 12K98MC on slow-steaming at 40% MCR, can save 8 grams HFO per kWh when one out of three turbochargers is disconnected. This corresponds to a reduction of approx. 5%. When there is a need for increasing power to full load, the turbocharger cut-out with swing gate can easily and safely be opened without manual work.

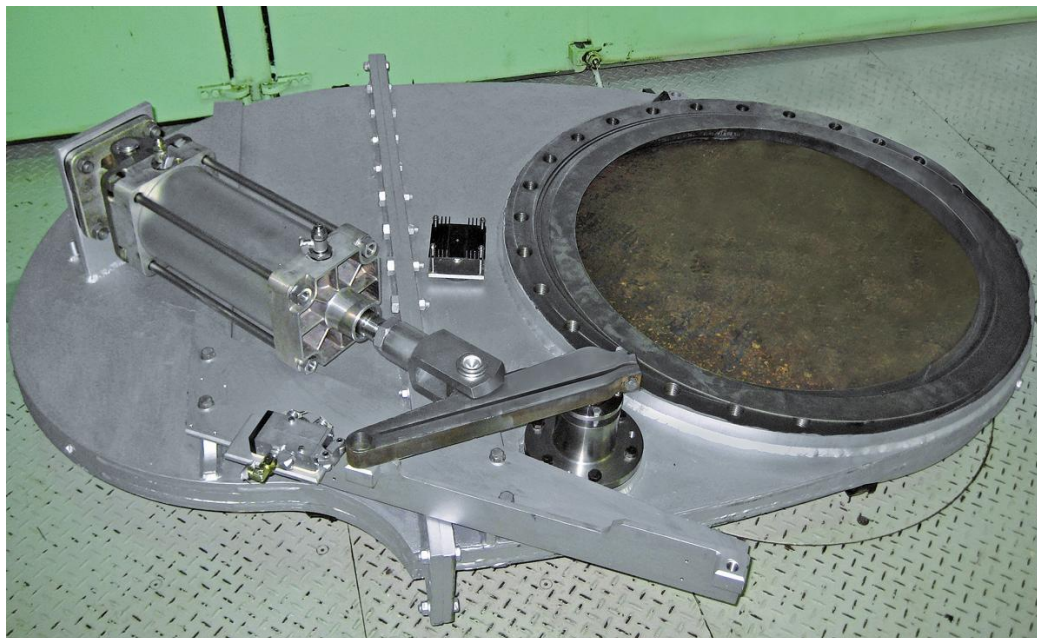
Installation

There is currently about three months delivery time for constructing the necessary parts. The installation itself is done in about 48 hours and can be carried out in these eight PrimeServ locations:

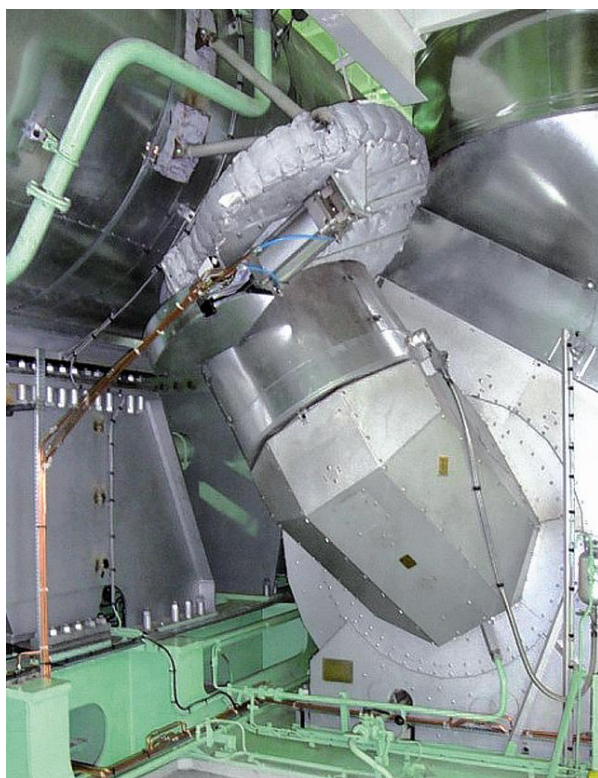
- MAN PrimeServ Benelux
- MAN PrimeServ Dubai
- MAN PrimeServ Hamburg
- MAN PrimeServ Hong Kong
- MAN PrimeServ Portugal
- MAN PrimeServ Singapore
- MAN PrimeServ Spain
- MAN PrimeServ Shanghai

See the turbocharger cut-out on display at SMM

A turbocharger cut-out swing gate valve will be on display at the SMM Fair in Hamburg from 7 to 10 September 2010 where visitors will get a chance to see and feel it.



Turbocharger cut-out with a swing gate valve



Installation of a turbocharger cut-out onboard a vessel

Press Release

MAN Diesel & Turbo



Press Release

Page 4 / 4

About MAN Diesel & Turbo

MAN Diesel & Turbo SE, based in Augsburg, Germany, is the world's leading provider of large-bore diesel engines and turbomachinery for marine and stationary applications. It designs two-stroke and four-stroke engines that are manufactured both by the company and by its licensees. The engines have power outputs ranging from 450 kW to 87 MW. MAN Diesel & Turbo also designs and manufactures gas turbines of up to 50 MW, steam turbines of up to 150 MW and compressors with volume flows of up to 1.5 million m³/h and pressures of up to 1,000 bar. The product range is rounded off by turbochargers, CP propellers, gas engines and chemical reactors. MAN Diesel & Turbo's range of goods includes complete marine propulsion systems, turbomachinery units for the oil & gas as well as the process industries and turnkey power plants. Customers receive worldwide after-sales services marketed under the MAN PrimeServ brand. The company employs around 12,700 staff at more than 100 international sites, primarily in Germany, Denmark, France, Switzerland, the Czech Republic, Italy, India and China. MAN Diesel & Turbo is a company of the Power Engineering business area of MAN SE, which is listed on the DAX share index of the 30 leading companies in Germany.