

Marine Performance Upgrade

Upgrade Solution with new compressor designed for TPL73 and TPL77

W46 Engine – Marine Main Propulsion

“This well proven component upgrade delivers immediate measurable results. As it requires only minimum downtime it can be implemented during a normal stopover at any port globally.”

Philipp Schürmann,
Head of Product Line Upgrades, ABB



Fuel savings
up to
1.5%



Temperature
up to
50°C
reduction



Solution
drop-in



Installation
easy & fast

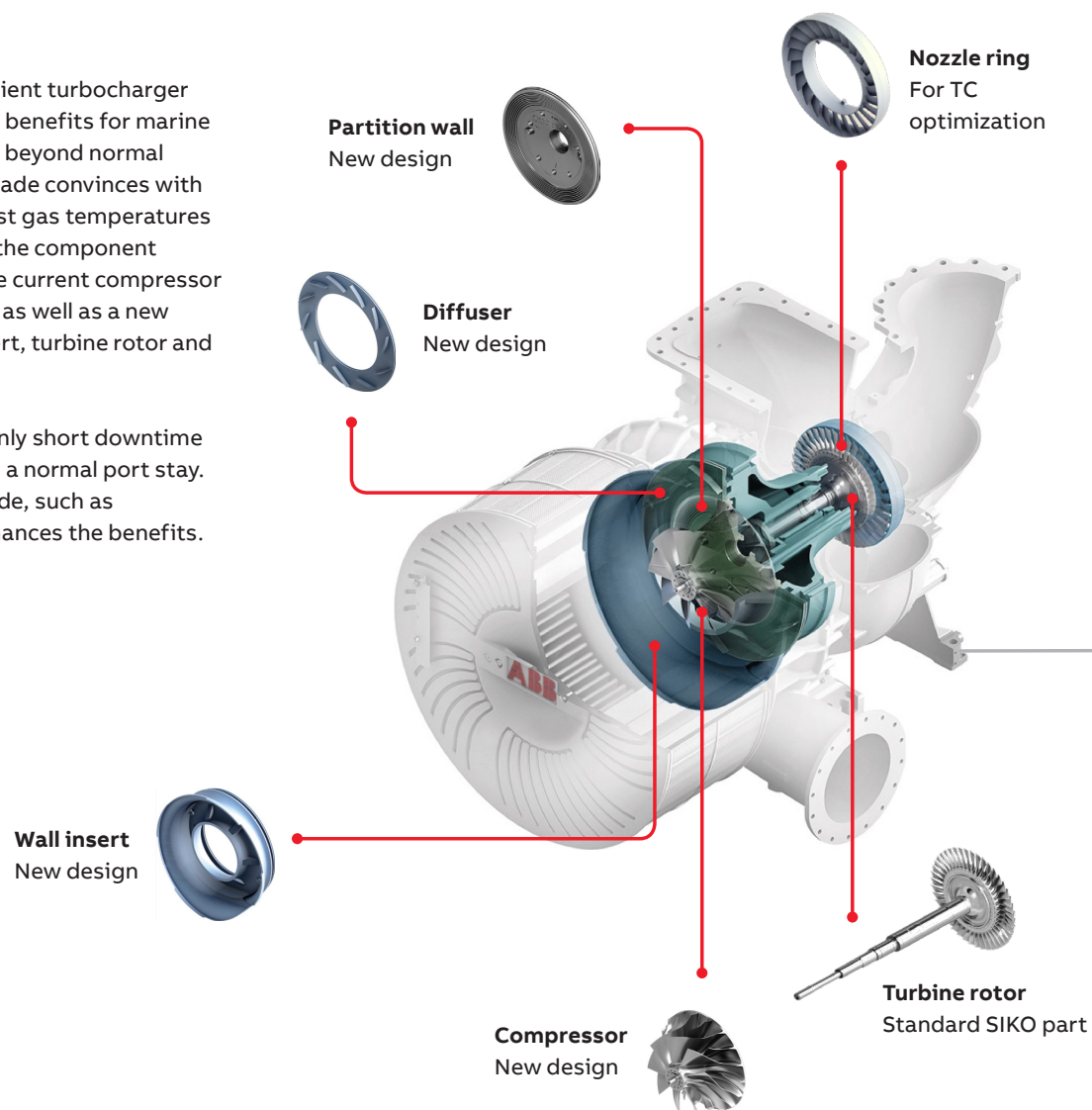
Turbocharger Upgrade Solution

Upgrade from TPL73/77-A30 to -A32

The solution in a nutshell

ABB and Wärtsilä offer a convenient turbocharger upgrade that delivers attractive benefits for marine main propulsion engines. Going beyond normal overhauls, this component upgrade convinces with fuel savings and reduced exhaust gas temperatures which has a positive impact on the component lifetime. It involves replacing the current compressor stage with an optimized design as well as a new diffuser, partition wall, wall insert, turbine rotor and nozzle ring.

This drop-in solution requires only short downtime and can be implemented during a normal port stay. A complementary engine upgrade, such as camshaft exchange, further enhances the benefits.



Application

- Marine W46 engines fitted with TPL73-A30 or TPL77-A30
- All cylinder configurations and engine versions
- All fuel types: Diesel, HFO, MDO

Case study

Engine	W8L46 with TPL73
Rated engine power	8400 kW
Major engine load point	85%
Yearly running hours	5500 h
Fuel savings by upgrade	1%
Annual added value	
Exhaust gas temperature	- 30°C
Fuel savings (@ 500\$/t HFO)	38'000 \$/year

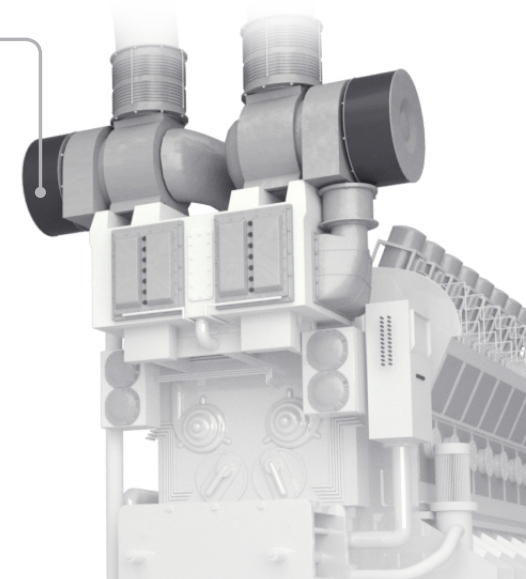


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