

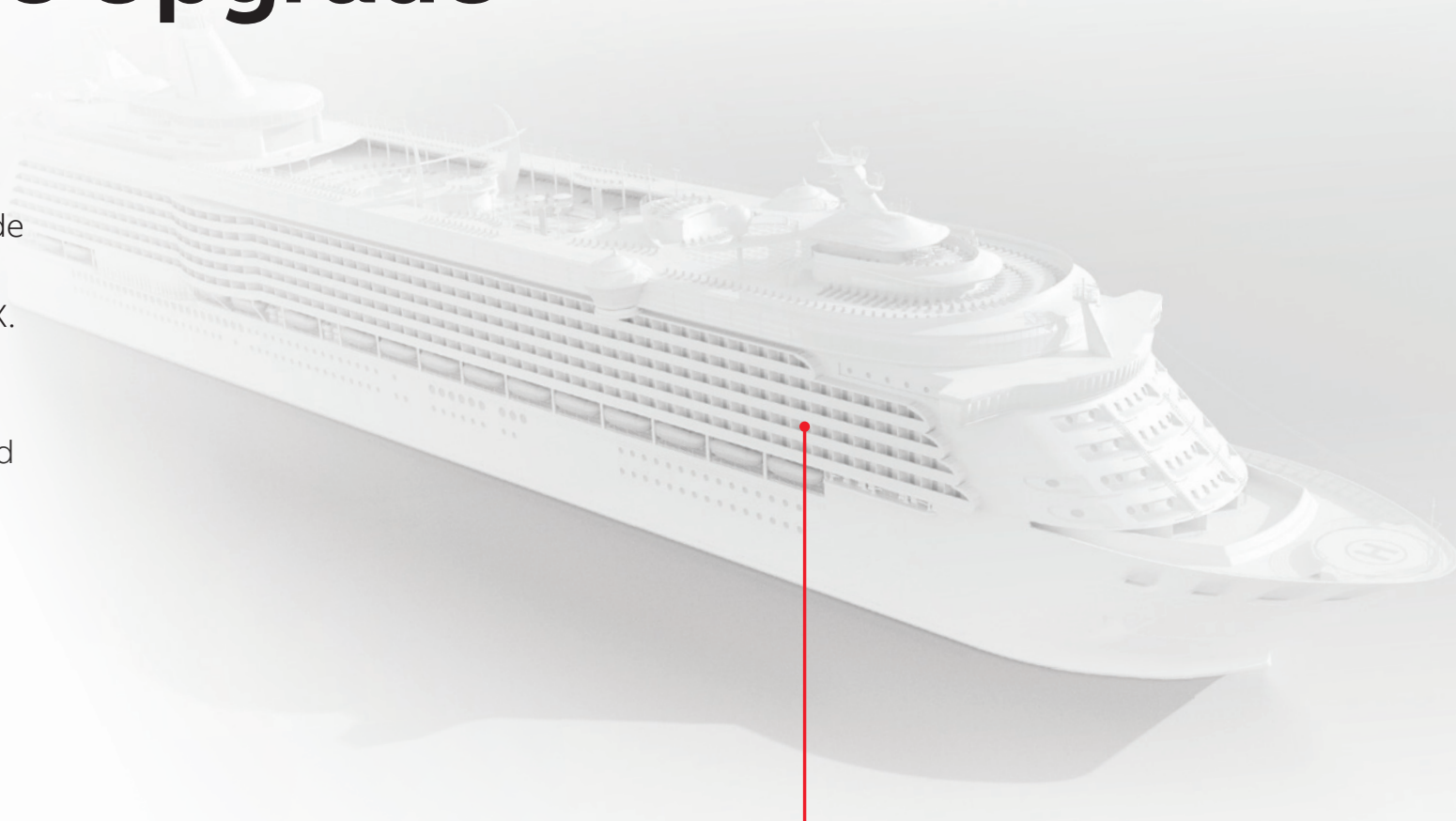
Performance Upgrade

Upgrade solution for TPL76-C
M 43 C & M 46 DF Engines – Marine

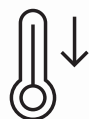
“This fast to implement drop-in upgrade solution uses the latest technology to increase performance and lower OPEX.

This makes customers more competitive, especially when combined with engine side upgrades.”

Simone Bernasconi,
Senior Sales Manager
Product Line Upgrades, ABB.



Fuel savings
Up to **3%**



Lower exhaust temperature
Up to **30°C** reduction



Solution drop-in



Maintenance cost
Up to **30%** reduced



Rotating component exchange interval
Extended by **50%**

Turbocharger Upgrade Solution

Upgrade to the TPL76-C8X

The solution in a nutshell

The TPL turbocharger component upgrade increases the performance of both turbocharger and engine alike. This simple, drop-in solution replaces internal components only, meaning no changes to external connections and the upgrade can be performed quicker, getting you back on track in under 12 hours.

As the upgrade consists of improvements to several key components, such as new compressor wheel and diffuser designs, improved turbine and optimized nozzle ring and bearings, you enjoy a significant increase in fuel savings and a reduction in exhaust gas temperatures. In addition, due to the extended interval for replacement of rotating components, you can benefit from lower maintenance costs.

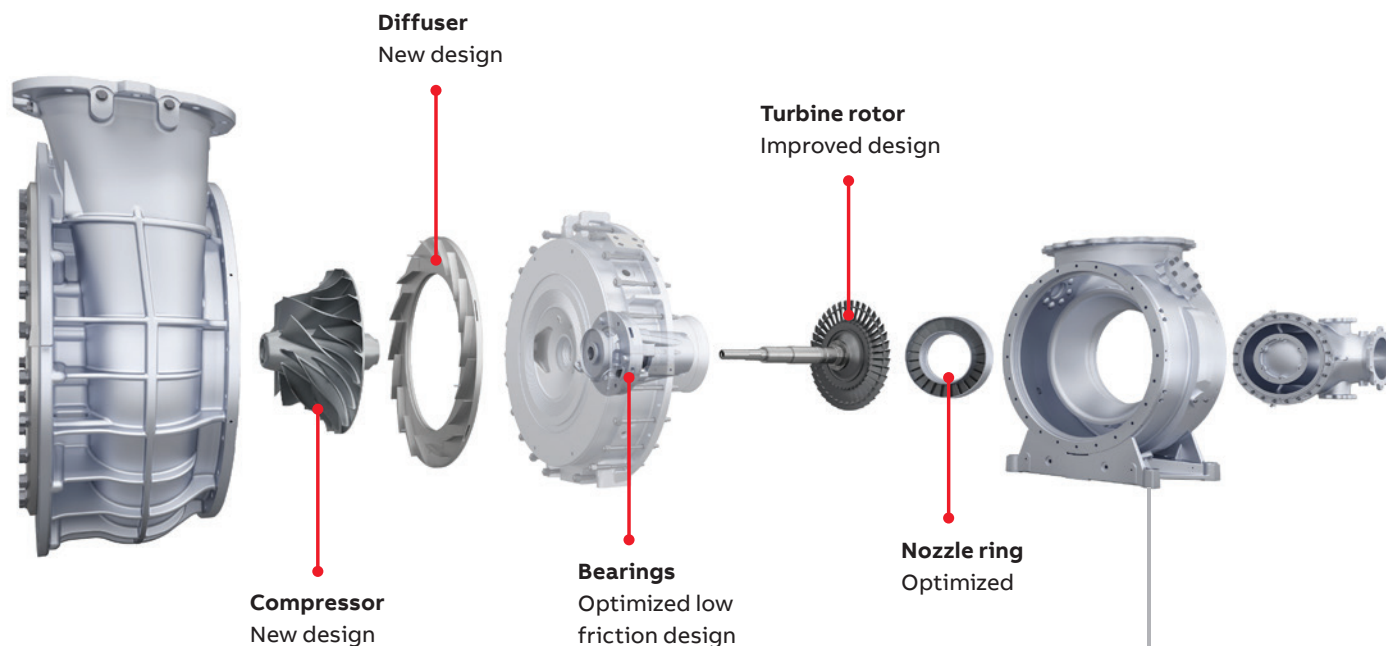
By implementing an engine upgrade at the same time, you will multiply your benefits, ensuring you stay ahead of your competition. That's why the TPL component upgrade is your formula for success.

Application

- For turbocharger type TPL76-C
- MaK engines M 43 C and M 46 DF fitted with TPL76-C turbochargers
- All fuel types: Gas, HFO, MDO

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Case study

Engine	9M43C with TPL76-C
Rated engine power	9'000 kW
Major engine load point	85%
Yearly running hours	5'000 h
Fuel savings	4.5g/kWh*
Annual added value	
Exhaust gas temperature	- 30°C
Fuel savings	172 tons
Fuel cost savings(@ 480\$/t)	83'000\$/year

* In combination with an engine upgrade

