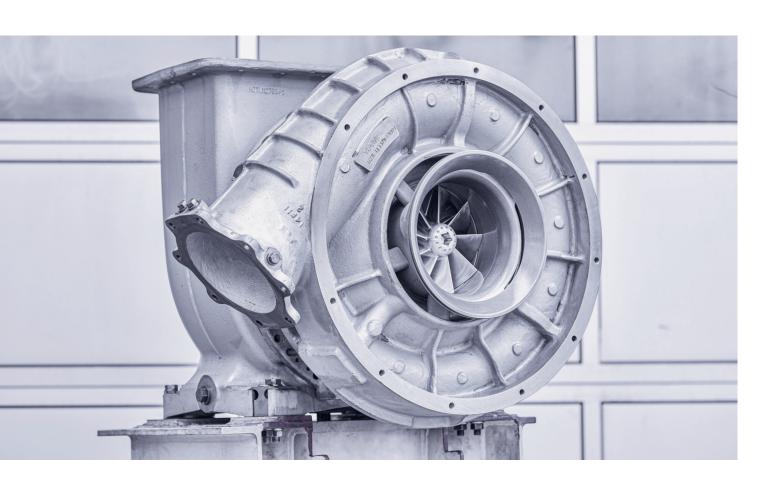


The resilient turbocharger for four-stroke rail engines

TPR



The TPR single-stage turbocharger is specifically designed for medium-speed rail engines used on heavy duty locomotives.

Field proven components ensure high durability and reliability, combined with ease of maintenance. All this while satisfying the demand for high power density, fuel economy and compliance with strict emissions legislations.

TPR turbocharger



TPR turbochargers

The TPR design concept provides a robust, reliable platform for turbochargers on locomotive engines. Two frame sizes are available:

- · TPR61 for engines rated up to 6000 horse power
- TPR56 for engines rated up to 45000 horse power

Features:

- Compact, robust and rigid construction for installation in restricted spaces and to withstand high mechanical loads
- · High efficiency at all loads
- · High pressure ratios at high performance levels
- Easy removal and replacement of the entire turbocharger as needed
- · Compliance with strict engine emission regulations
- · Significant fuel savings
- · Increased rotor stability
- · Reduced friction and a longer lifespan
- · No water connections; no corrosion or leakage



The TPR56FV75 is a model variant that offers the highest pressure ratio (up to 6.0+) and efficiency in its class.

This enables engine manufacturers to increase output and efficiency in a simple single-stage configuration.

Benefits:

- Higher pressure ratios enabling stronger miller to reduce NOx emissions
- · No compromise in altitude capabilities
- · No compromise between emissions and fuel economy

Variable Turbine Geometry

Combining the Variable Turbine Geometry (VTG) with the TPR turbocharger allows your long-haul locomotive engine to save as much as 4% on fuel a year, at a wider range of temperatures and altitudes. So you will benefit from lower costs, better performance and more flexibility, no matter where you are.

By adapting air delivery to ambient operating conditions, your engine will cope better with constant fluctuations typical of rail applications. Think load modulation and ambient conditions.

Benefits:

- Greater operational flexibility; lower thermal loading and improved engine performance
- · All-in-one mechanical unit; drop-in design, easy to exchange
- VTG control system "stand-alone" or with full ECU connectivity enables compatibility with existing and latest engine technologies

TPR platform compressor pressure ratio vs. volumetric flow range

☐ TPR56-F ☐ TPR61-F ☐ TPR56FV75

