

TCR

How to dismantle

MAN Diesel SE

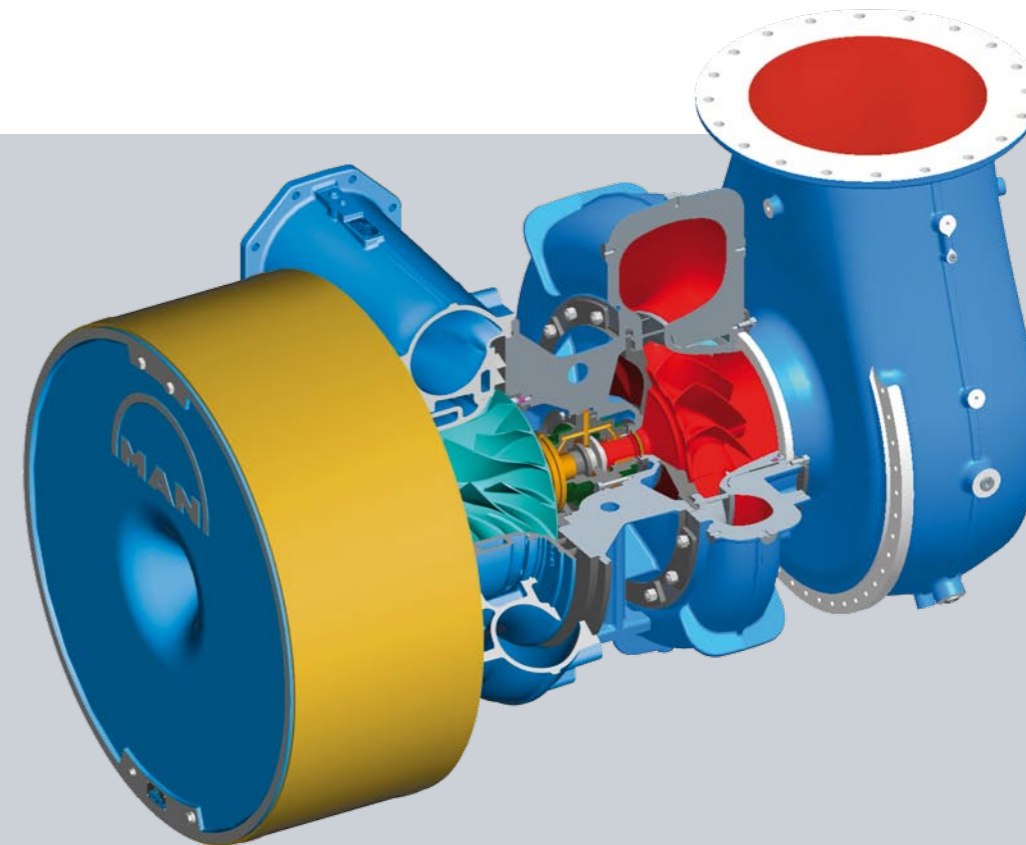
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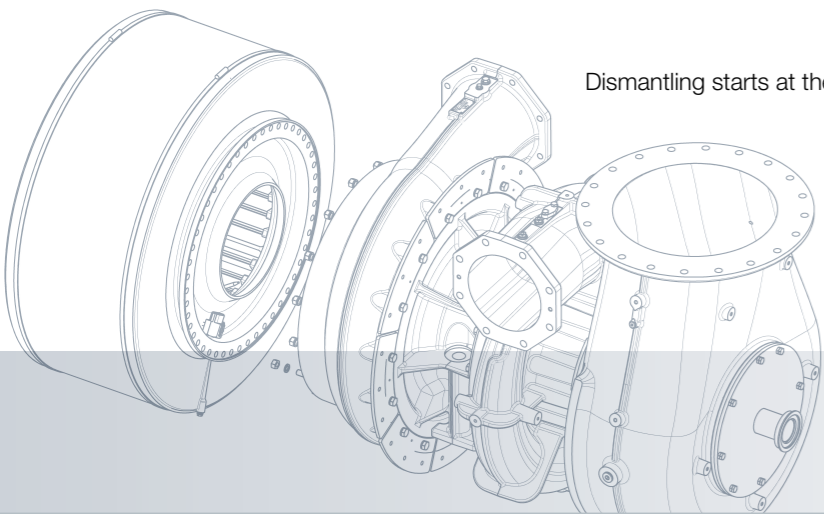
TCR – How to dismantle

This brochure provides a quick demonstration of how simple maintenance of a TCR turbocharger is. For a more detailed description of assembly and maintenance please refer to the Operating Manuals / Work Cards.

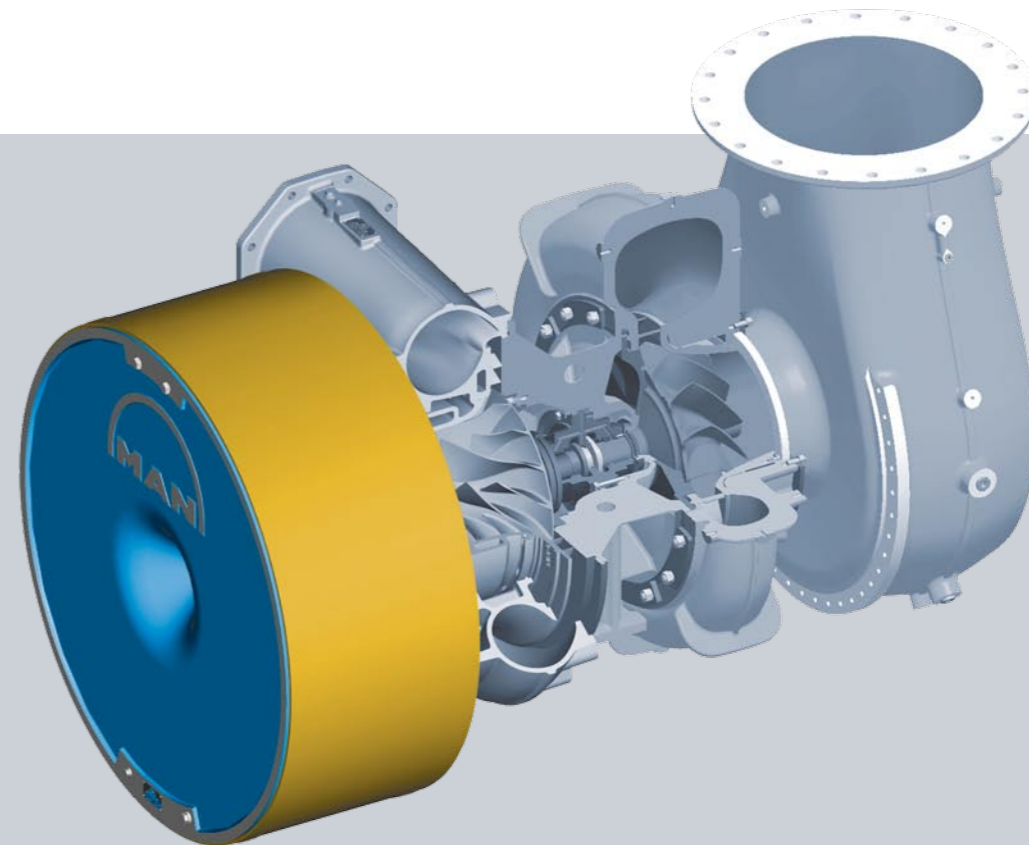


Step 1 Remove silencer from compressor casing

Dismantling starts at the compressor side with removal of the silencer.

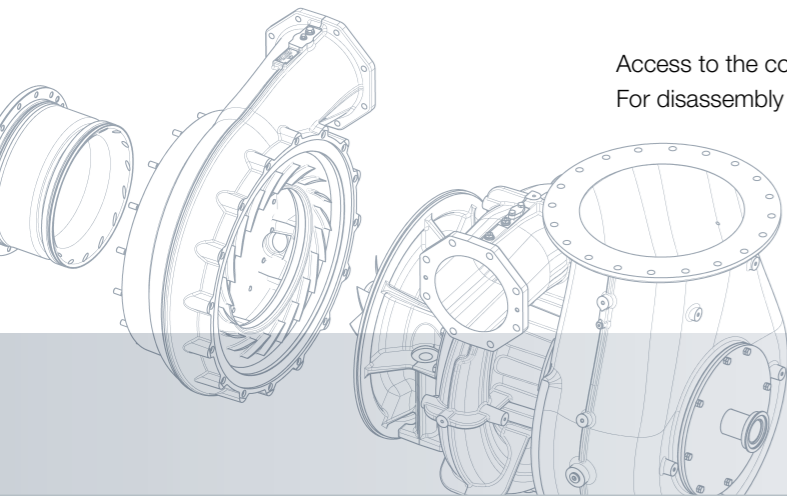


>> Inspection of silencer via rear opening

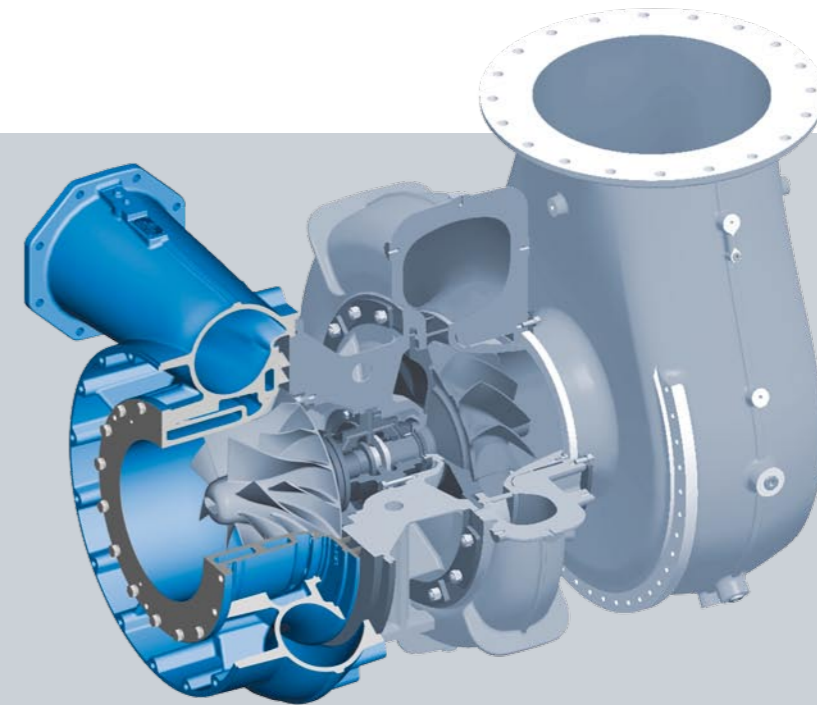


Step 2 Remove insert and compressor casing

Access to the compressor wheel is gained by removal of the insert.
For disassembly remove the compressor casing.



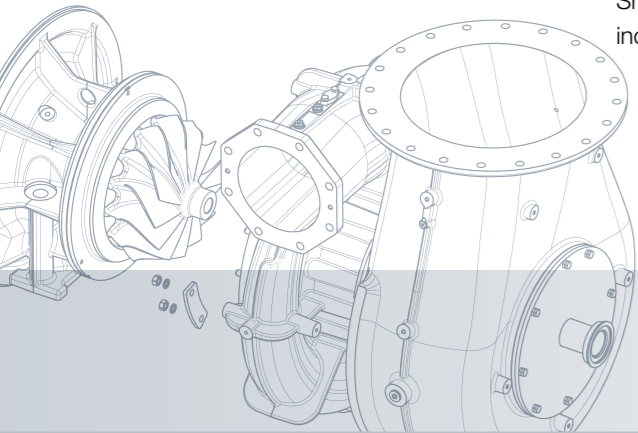
>> Inspection and manual cleaning of compressor wheel



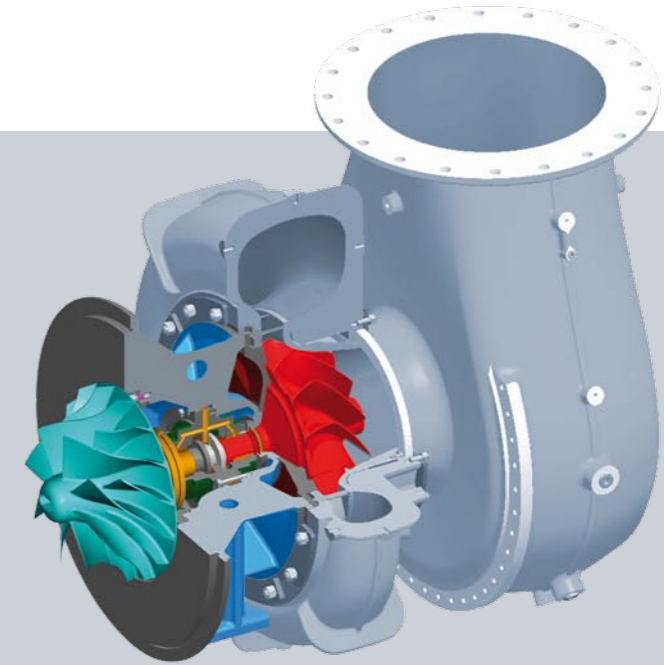
Step 3

Remove cartridge from gas-admission casing

Smart design enables fast and easy disassembly of the complete cartridge including rotor, bearing casing and bearings.

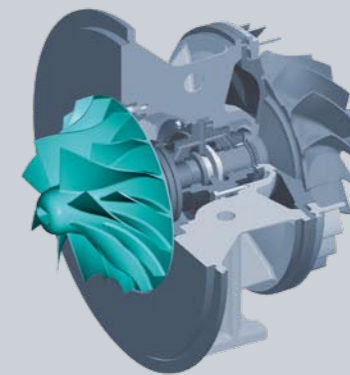
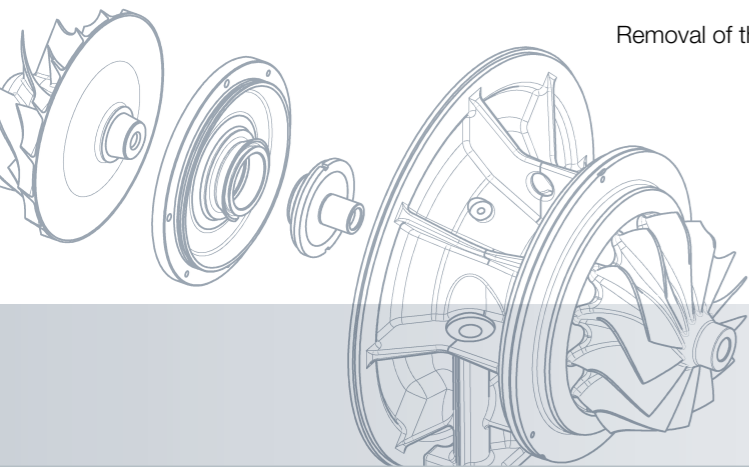


>> Inspection of turbine and cartridge



Step 4 Remove compressor wheel from rotor shaft

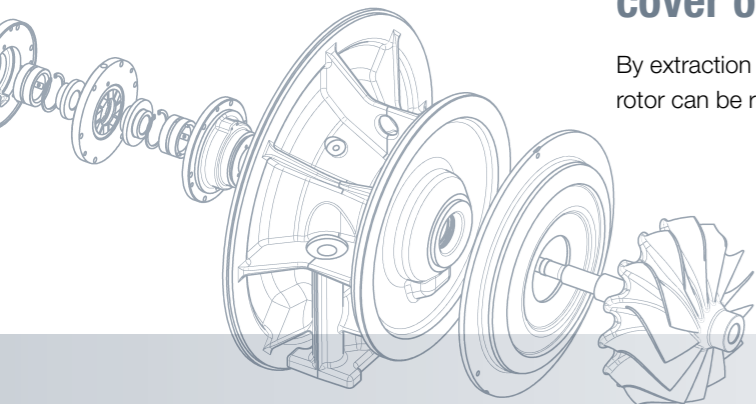
Removal of the compressor wheel enables access to the bearings.



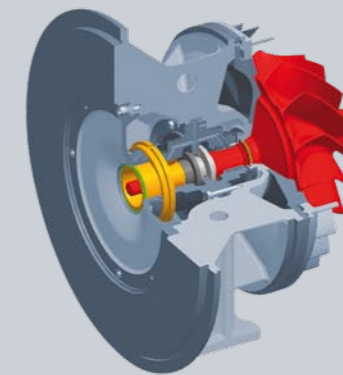
Step 5

Remove bearing parts, turbine rotor and cover on turbine side

By extraction of the turbine and disassembly of the bearing elements, the whole rotor can be removed.

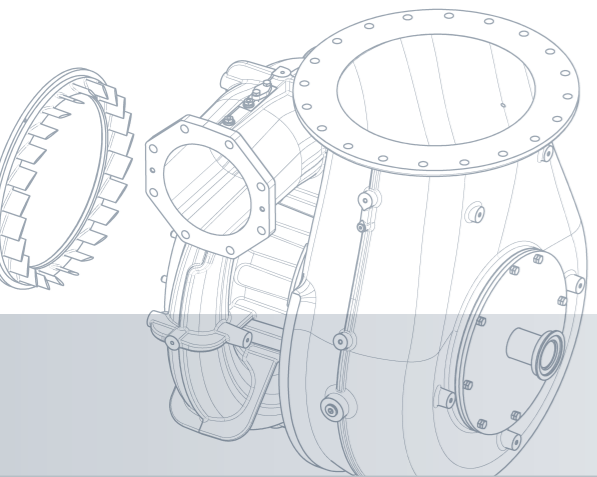


>> Inspection or replacement of bearings

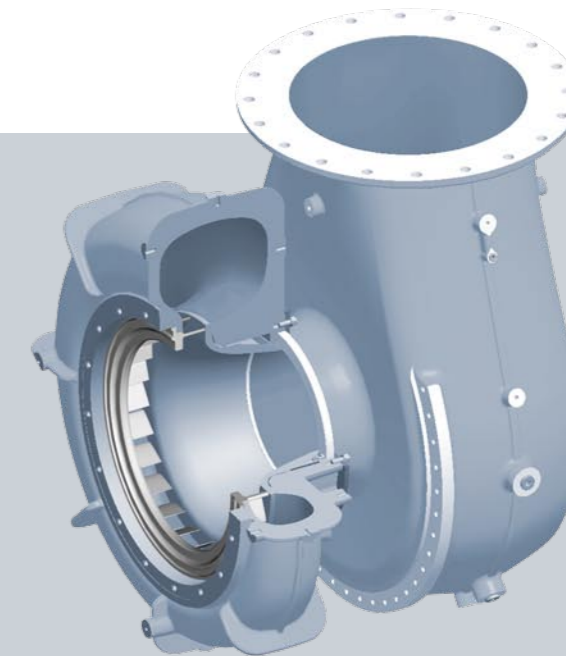


Step 6 Remove turbine nozzle ring

Easy removal and re-fitting of the turbine nozzle ring.

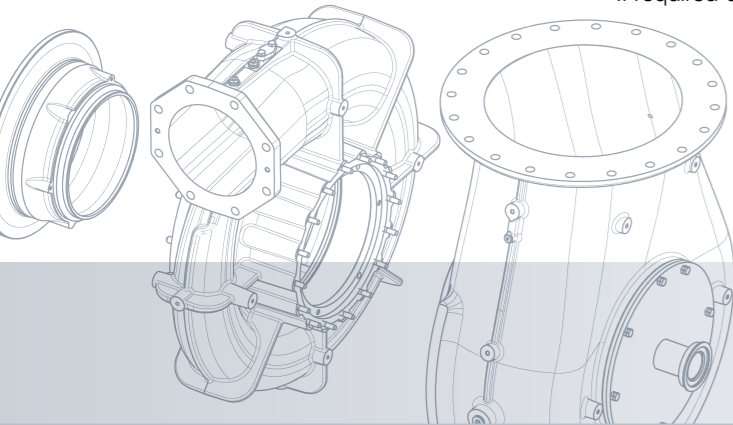


>> Inspection and replacement of nozzle ring

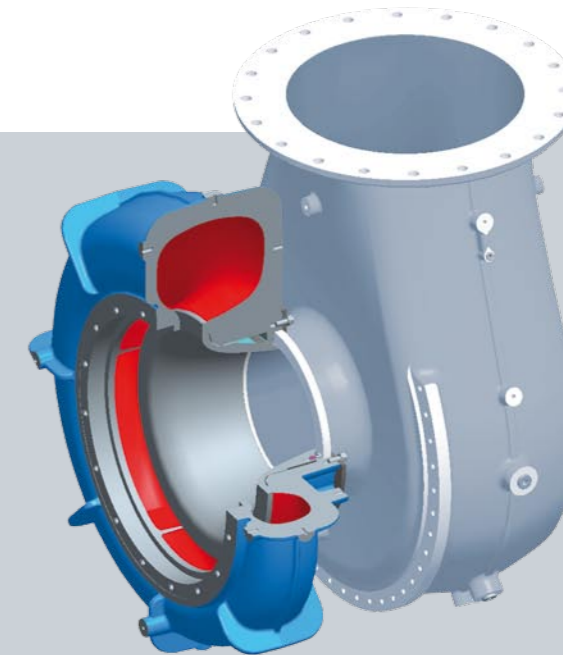


Step 7 Remove gas-admission casing and insert

If required quick removal of gas-admission casing and insert is possible.



>> Inspection of exhaust gas casings





TCR – The Cutting Edge

Light weight and greater compactness paired with high efficiency and performance put the TCR at the cutting edge of the radial turbocharger market. Extended lifetime combined with service and maintenance friendliness allow the TCR to meet exacting customer demands.

- >> For engine outputs from 400 to 6,700 kW per turbocharger
- >> Maximum pressure ratio 5.2
- >> Suitable for heavy fuel, diesel oil and gas operation
- >> Radial flow turbine
- >> “Waterless” design
- >> Inboard plain bearings
- >> Lubricated by the engine’s lube oil system
- >> Easy maintenance
- >> Market introduction 2004