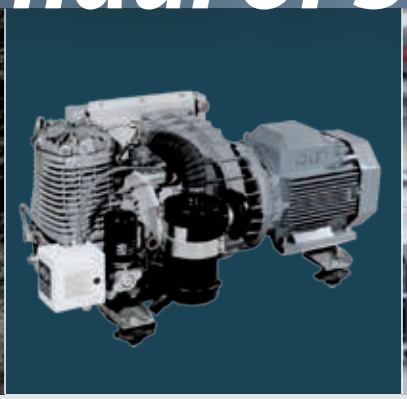
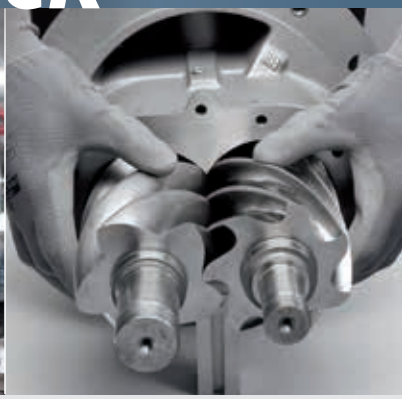
Overhaul of Screw Block



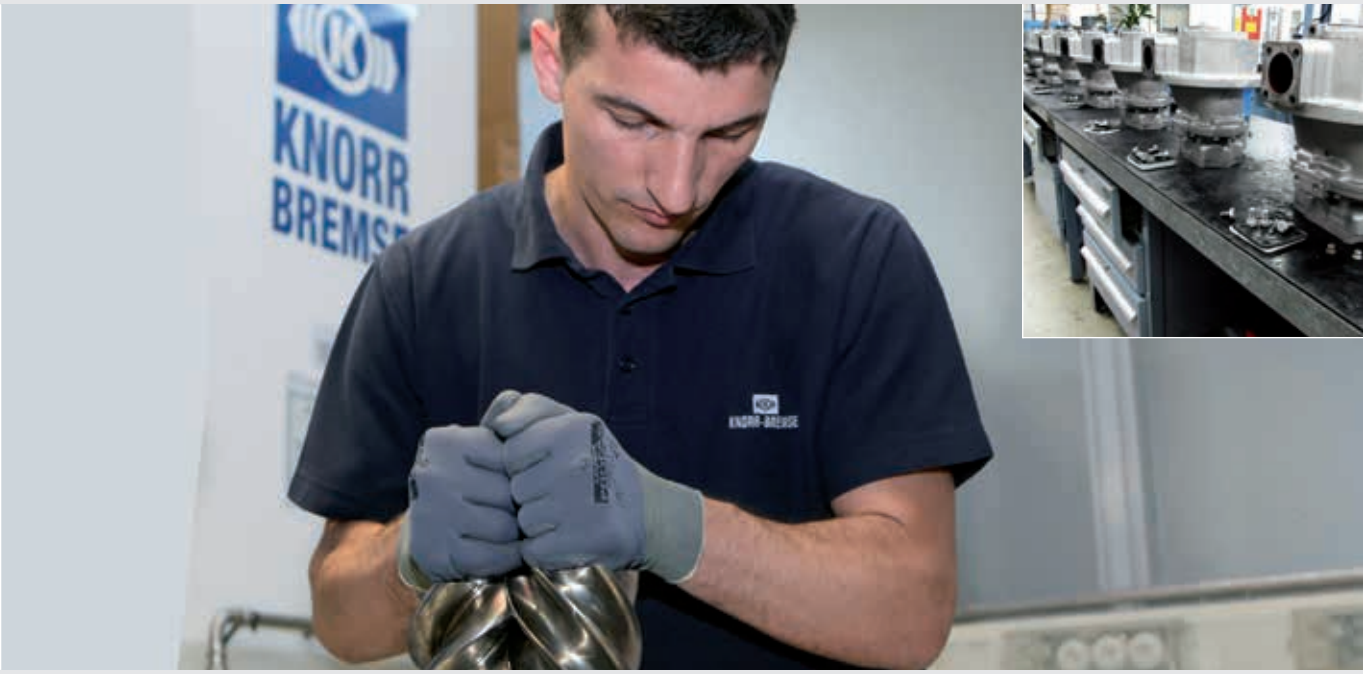


APPLICATIONS

Maintenance and Overhaul of Knorr-Bremse Units

RAILSERVICES
always on track

HIGH AVAILABILITY THROUGH OPTIMAL OVERHAUL SERVICE



SYSTEM RELIABILITY IS BECOMING AN INCREASINGLY IMPORTANT FACTOR IN THE RAIL SINGLE VEHICLE SECTOR. Knorr-Bremse has developed a structured but flexible RailServices program which has a significant impact on the high reliability of products over their entire life cycle. The screw block overhaul service is an example which can reduce costs and deliver improved vehicle availability.

SERVICE

In conjunction with original spare part kits, Knorr-Bremse offers a general overhaul service for the central element of a screw compressor – the screw block. This involves restoring the block to an as new condition in terms of performance, durability and appearance.

In order to offer this service, a new department has been set up in which automated equipment is used to align the rotors to tolerances within the µ range. A final test run is carried out using a test rig that recreates the operating environment of the entire compressor.

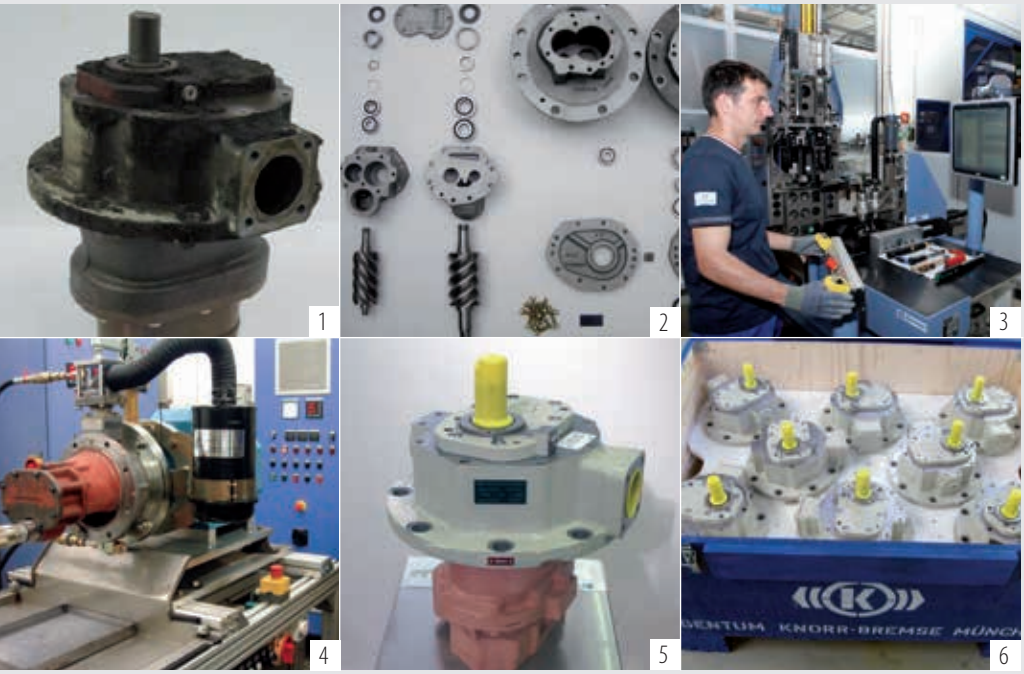
At the end of the process, the screw block is ready to operate fully until the next major overhaul service.

The overhaul service of the screw block, together with the compressor's regular maintenance and major overhaul spare part kits, ensures a high reliability level of the compressor during its continued use in the vehicle.

CUSTOMER BENEFITS

- Screw block overhaul is more cost-effective than a new screw block replacement
- Quality overhaul work ensures high level of day-to-day operating reliability
- High availability of screw block reduces vehicle downtime
- A comprehensive final test after the overhaul verifies performance of the screw block
- Individual delivery schedule to meet customer requirements
- Warranty on all units overhauled by Knorr-Bremse

OVERHAULING OF SCREW BLOCKS

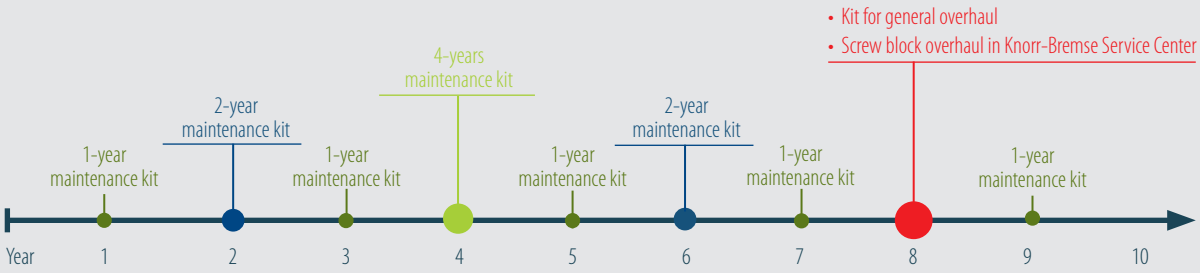


1 Condition assessment on reception
2 Overhauled and tested parts together with new original components prior to assembly
3 Insertion and computerized alignment of rotors on special assembly system
4 Final testing on special test rig
5 Condition on return to customer
6 Special packaging

STEPS FOR SCREW BLOCK OVERHAUL

- Disassembly and coating removal
- Assessment of re-usable components
- Cleaning and re-conditioning of parts
- Surface treatment
- Replacement of bearings and seals
- High precision adjustment of axial and radial clearances
- Comprehensive functional test including test report
- Complete screw block re-coating

MAINTENANCE ACTIVITIES UNDER STANDARD CONDITIONS



Maintenance services offered by Knorr-Bremse

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