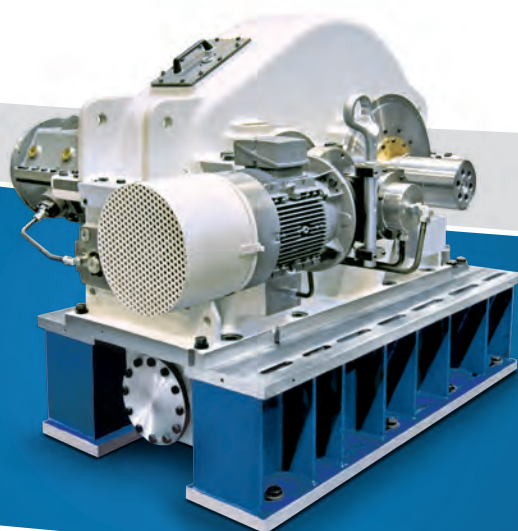
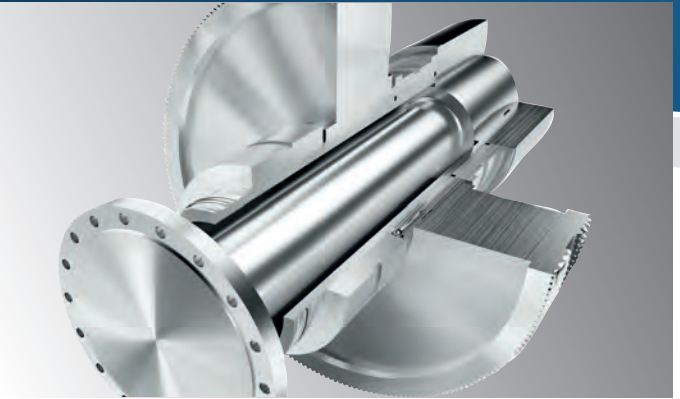


High Speed Gearboxes for
Industrial Applications

RTG 200–1000 | 500–70 000 kW



High Speed Gearboxes for Industrial Applications



Approved REINTJES quality

More than 100 years of know-how in the manufacture of gearboxes for the maritime market and our high quality standards have been ideal prerequisites for the success of the REINTJES high speed gearboxes.

For many years we have been successfully manufacturing compressor wheel sets featuring a particularly high degree of precision for a renowned manufacturer for gas and steam turbines.



Professional

- State-of-the-art engineering
- Modular design
- Tailor made solutions
- High material standard
- Excellent project management



Design

- Low bearing temperature
- Low vibration
- Low losses bearing design
- Low ventilation false bottom design
- Inhouse research & design activity



International

- International references
- Available for steam and gas turbines
- Available for compressors
- >100 compressor gear sets delivered
- Worldwide offices



Quality

- Reliable quality
- Integrated quality assurance
- DIN-certified
- Separate test bench for the RTG
- Delivery reliability



Manufacturing

- High production depth
- State-of-the-art manufacturing
- Contract manufacturing
- Separate production hall for the RTG assembly
- Inhouse heat treatment centre



Service

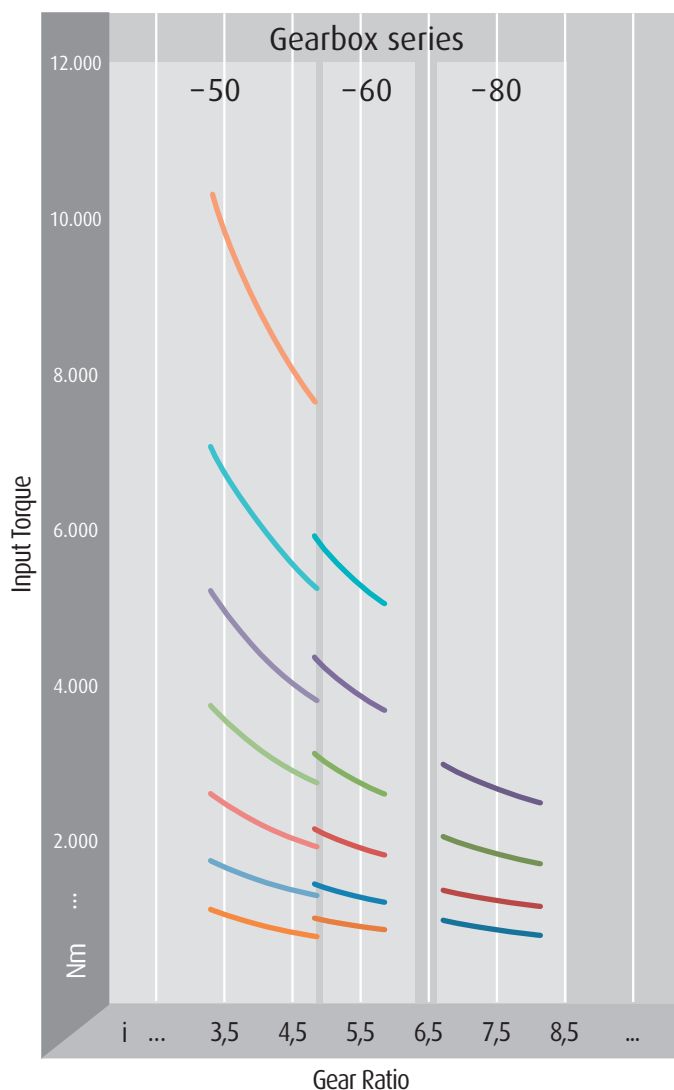
- 24/7/365 availability
- Service Hotline + 49 51 51/104-237
- Fast response
- Worldwide service
- Training know-how

Capability

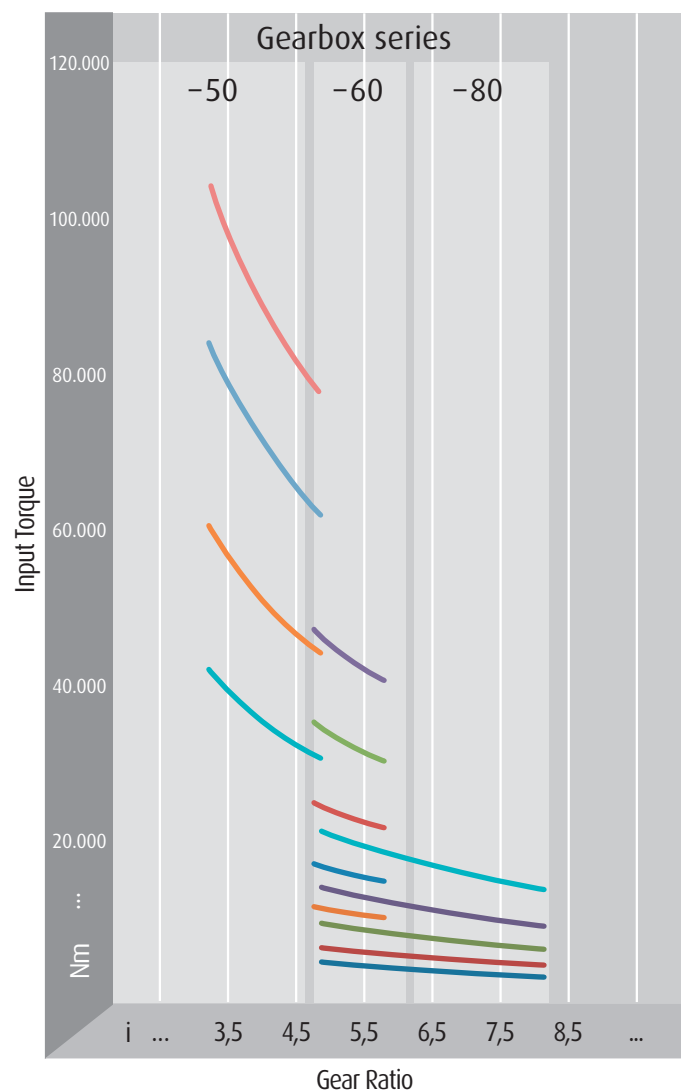
The toothing of high speed gearboxes are designed according to DIN 3990, ISO 6336, DIN EN ISO 13691, AGMA 421.06, AGMA 6011, ANSI/AGMA 2101-D04, API 613, or API 617 depending on the specifications.

The slide bearings are designed with state-of-the-art computer software, following the basic principles of design standard API 613, based on latest research and development results. The results have been validated through numerous trial series and practical tests.

Centre distances 200 – 450 mm



Centre distances 500 – 1000 mm



Wide range of centre distances

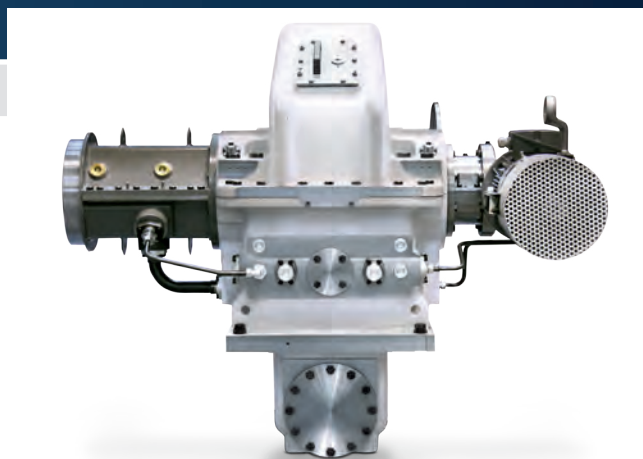
- 200, 250, 280, 315, 350, 400, 450, 500, 560, 630, 710, 800, 900, 950, 1000 mm
- Special centre distance on demand

- up to 20 MW -80 high reduction ratio
- up to 40 MW -60 medium reduction ratio
- up to 60 MW -50 low reduction ratio
- up to 70 MW very low reduction ratio



References

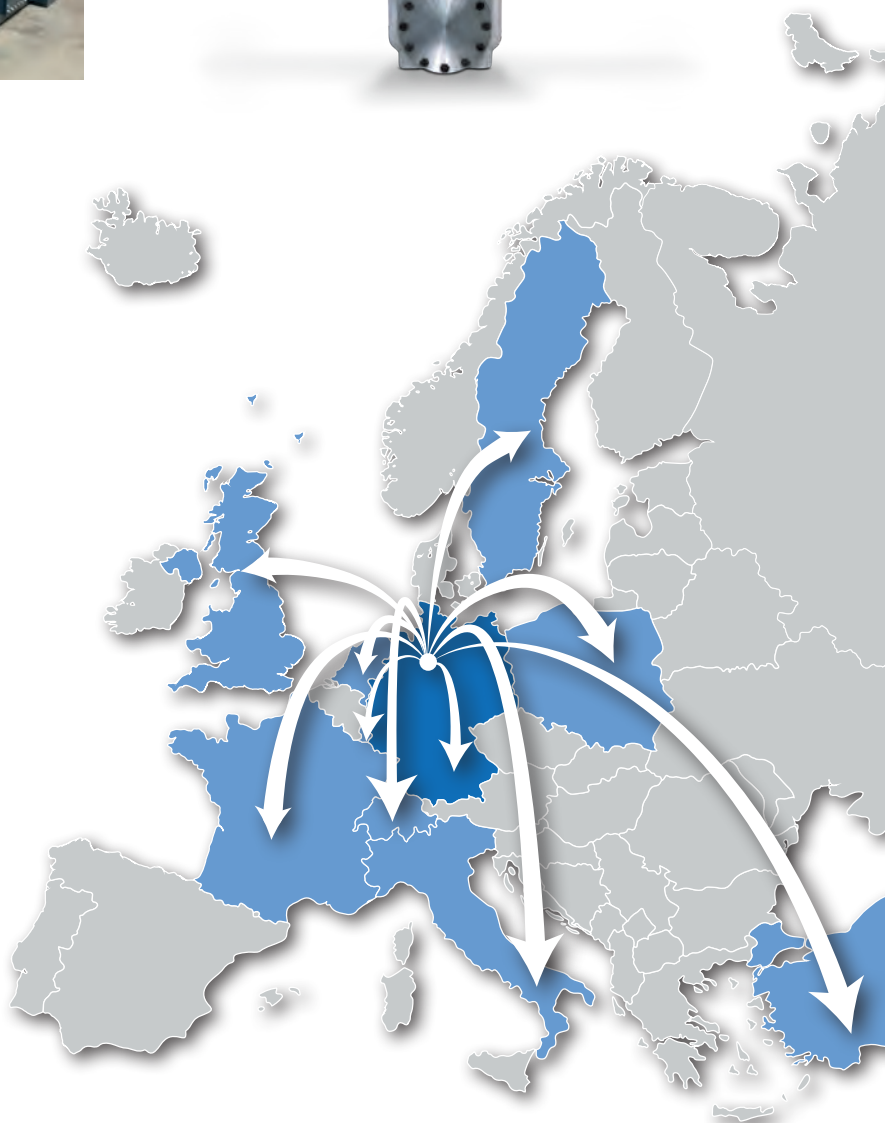
High Speed Gearboxes



Worldwide power & precision

Typical applications equipped with REINTJES high speed gearboxes

- Paper plant in France
- Ethanol plant in Italy
- Waste to energy plant in the UK
- Paper plant in Switzerland
- Biomass power plant in Sweden
- Combined heat and power plant in the UK
- Wood processing plant in Poland
- Sugar factory in Germany
- Waste incineration plant in Germany
- Waste gasification plant in the UK
- Sewage sludge incineration in Turkey
- Wood-fired power plant in Luxembourg
- Waste incineration plant in the Netherlands



Options for High Speed Gearboxes



Rotor turning device[®] (RDV)

- automatic clutch in by mechanical self synchronisation
- clutch actuated by electric motor
- access for manual turning
- low speed motors for low vibration
- the rotor turning device is also available as stand-alone component

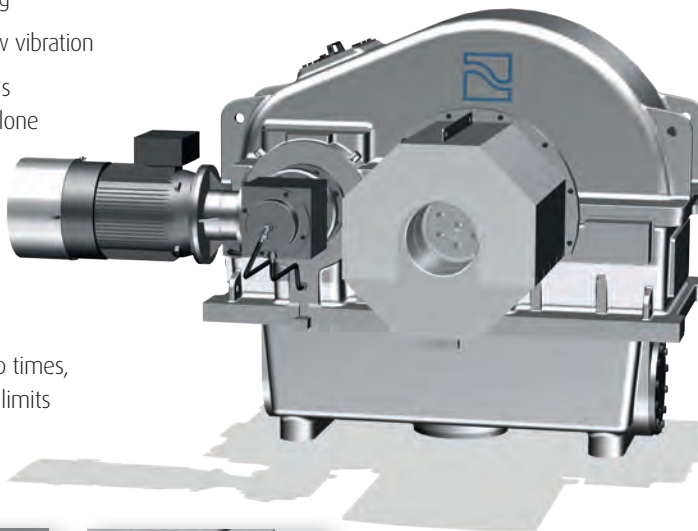
The integrated soft starter

- enables a controlled start of the rotor turning device
- provides adjustable ramp times, start values, and current limits

© Developed by REINTJES

Monitoring

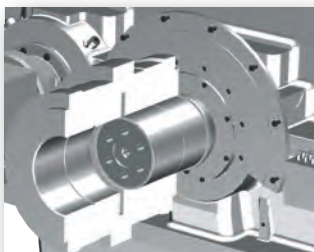
Gearboxes of the RTG series are provided with surfaces and spaces for shaft and housing vibration sensors as well as bearing temperature sensors. Other sensors on demand.



Oil pump

The mechanical oil pump supplies the complete drive system with oil. It is installed on the gearbox upon customer request. The mechanical oil pump is characterised by

- high delivery rates at small space requirements
- a smooth and quiet running
- reliable design connected by use of a full steel compensating coupling



Couplings

High speed and low speed tooth coupling with axial backlash limitation. The couplings compensate axial, angular, and parallel displacements of the connected shafts that may occur due to alignment or thermal expansion during operation.

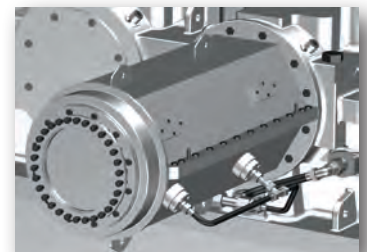
- tooth coupling or lamina type coupling
- high speed tooth coupling oil lubricated in light weight design
- slow speed tooth coupling in oil or grease lubricated design



Quill shaft

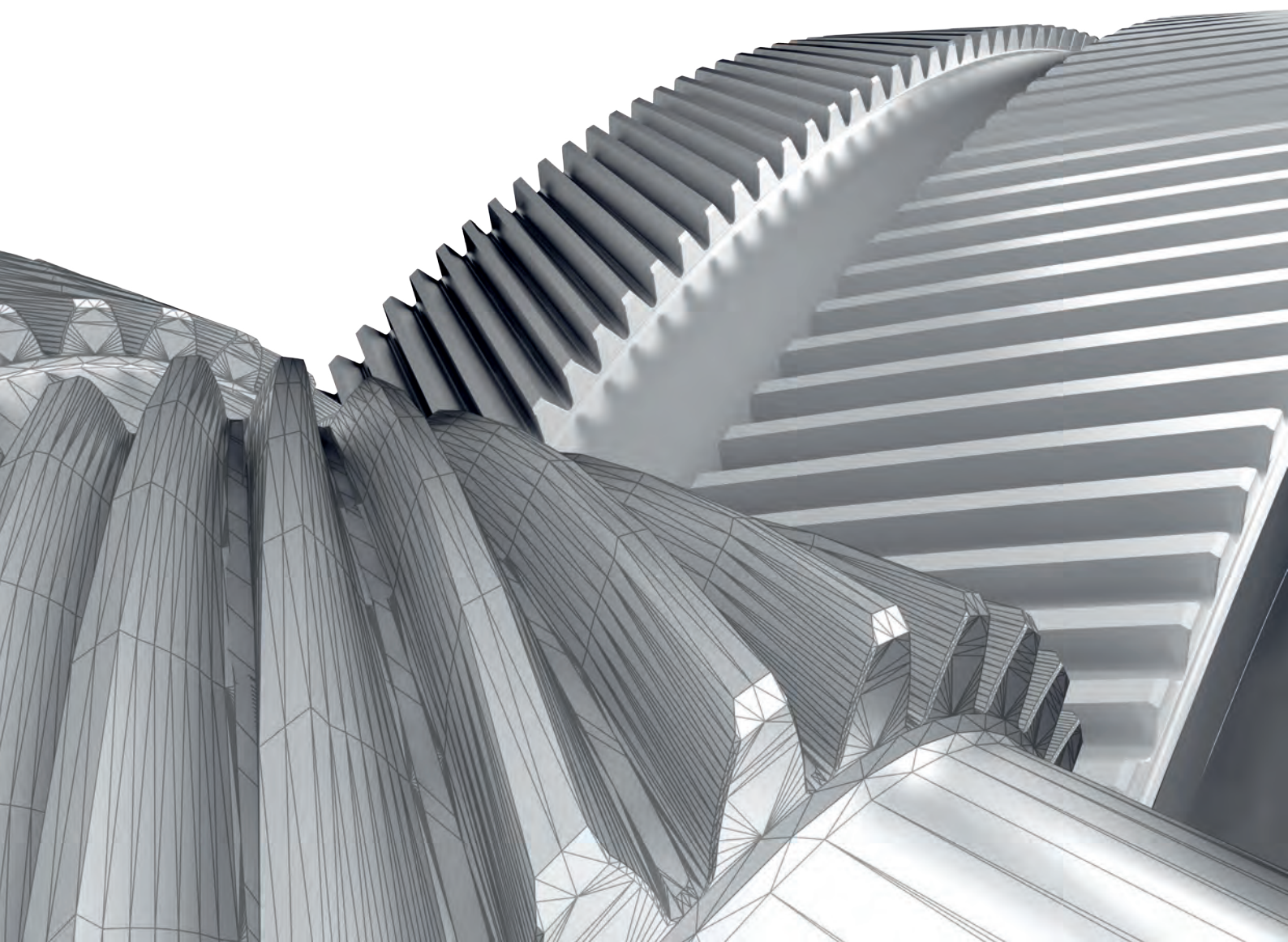
The quill shaft is designed for

- allowing torsional flexibility by reducing torsional stresses in the shafts
- compensating radial deflections in full steel and maintenance free design
- small space requirement



Housings / Covers

Input/output shaft with high speed/low speed couplings resp. are covered by oil-tight housings and protective covers that allow for a safe operation of the high speed gearbox. The design of oil connections of the high speed coupling etc. can be adapted to customer requirements.



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