



Innovative Power Transmission



RENK-MAAG

...right in the middle!

RENK-MAAG looks back on over 100 years of history: Max Maag, Swiss born and bred, founded the «Max Maag Zahnradfabrik» in 1913 to produce gearboxes of the highest quality. Today RENK-MAAG is the first and only port of call for new turbo gearboxes, synchronous clutch and gear couplings, also for spare parts for MAAG turbo gearboxes, couplings and MAAG marine gearboxes! We operate around the globe and thus also in your area thanks to our network of agents and the ultra-mobile service team.

www.renk-maag.ch





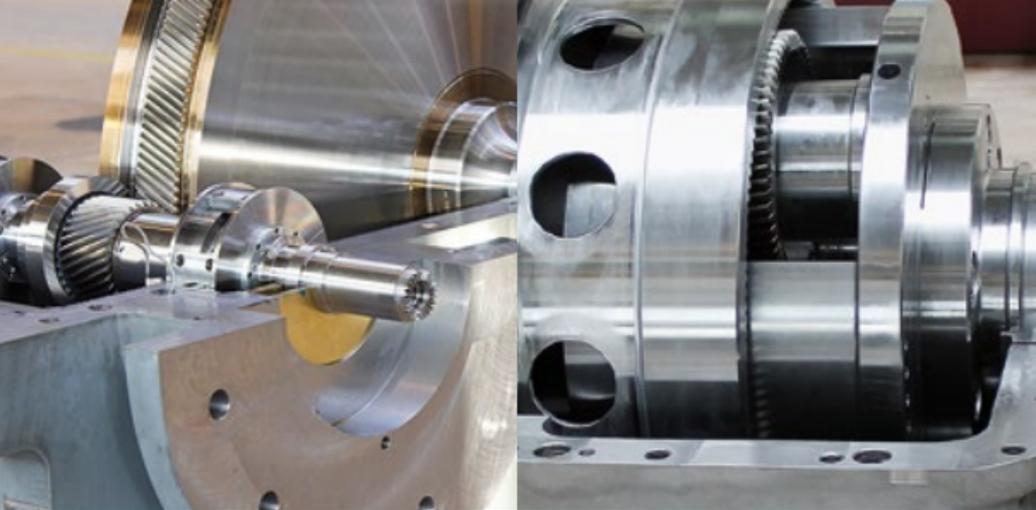
GEARBOXES

Parallel Shaft Gearboxes

Parallel Shaft Gearboxes of RENK-MAAG are designed and manufactured in accordance with the latest technical standards (AGMA, DIN, API, ISO – other norms or special design upon request) and are based on proven MAAG technology. This type is available in the range of 1 to well over 120 MW.

High Efficiency Turbogears HET Gear®

The RENK-MAAG vacuum gearbox HET Gear® (High Efficiency Turbo Gear) is world's most efficient turbo gear. It is based on the proven RENK-MAAG turbo gearbox design. Solely the fact that the case-hardened rotors can rotate in an inner casing in a vacuum permits higher efficiency. This turbo vacuum gearbox was developed specifically for use in power generation and mechanical drive applications. The primary goal: reducing the gearbox power loss (50% less power loss than with a standard gearbox at the same performance). The HET Gear® understands everything in the range of 15 to 120 MW!

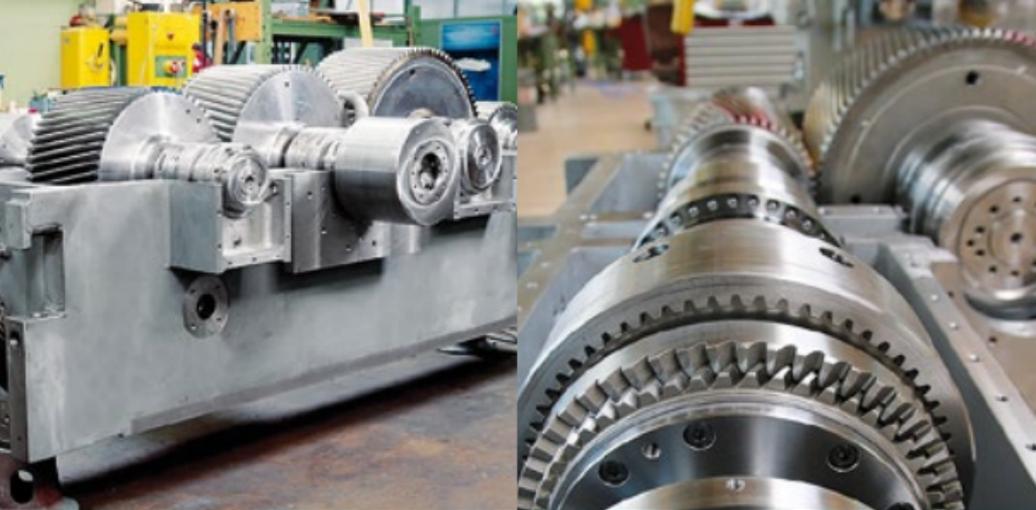


Integral Gear Unit/MULTICOM® gearboxes GMX

MULTICOM® gearboxes GMX are designed and built according to the latest findings and processes in gearbox technology. As the heart of a multi-shaft compressor system, RENK-MAAG MULTICOM® gearbox GMX drives up to 10 compressor stages with speeds up to 60 000 rpm. (Optional feature: high efficiency measures to reduce losses.)

High-Speed Epicyclic Gears

High-Speed Epicyclic Gears can be built relatively small as the power is distributed over several meshes. This results in a high “power to weight ratio” and, together with lower pitch line velocity, leads to improved efficiency. A simple, efficient principle when space and weight is at a premium, therefore plant construction costs can be reduced by the coaxial design. Epicyclic or planetary gears are available in the range of 1 to 45 MW.



Special Gears

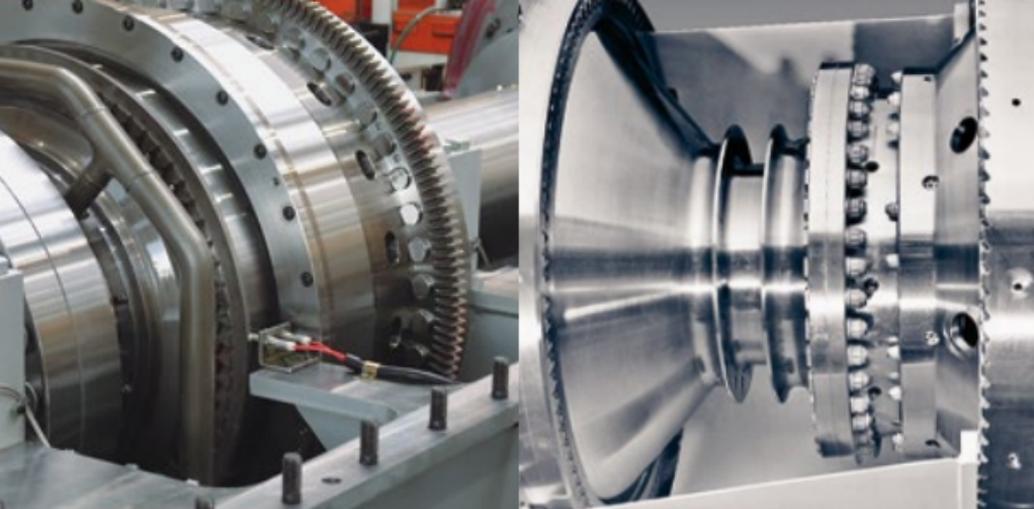
RENK-MAAG develops and manufactures special gears for an enormously wide range of applications. The clear strength lies in the close technical cooperation with customers. A detailed specification and required gearbox design for optimum solutions are discussed and developed in person with the customer.

Gearboxes with integrated Synchronous Clutch

In modern power recovery processes RENK-MAAG turbo gearboxes e.g. BPRT¹⁾ with integrated clutch are used. The recovered power is automatically and directly fed back to the train (compressor or generator) by means of an integrated RENK-MAAG Synchronous Clutch. RENK-MAAG turbo gearboxes with integrated clutch are available in the range of 1 to well over 100 MW.

¹⁾ Blast Furnace Power Recovery Turbine. Also available as SHRT (Sintering Heat Recovery Turbine) for application between steam turbine and fan for steel works.

**>> Your direct contact for new gearboxes and couplings:
gear@renk-maag.ch**



COUPLINGS

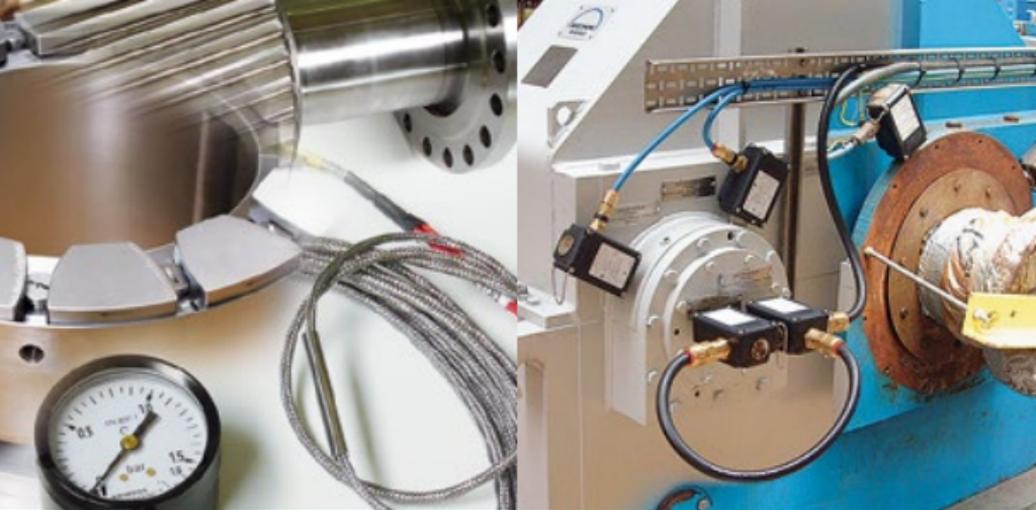
Synchronous Clutch Couplings type MS or HS

Apart from the possibility to startup and shutdown single-shaft CCGP faster, the clutch also provides the opportunity to earn money at a standstill, for example: By separating the gas turbine and generator, in the “condensing mode” operation, profit will be generated without the gas turbine is in operation. Besides power generation, couplings of RENK-MAAG are also used in the marine sector. This mainly in combined powertrains where several drives act in combination to one or more propellers (CODOG, CODAG,...). The mechanical coupling and uncoupling of different energy sources (PTI, PTO or PTH) can thus be simple and efficient. RENK-MAAG couplings cover the range from 0.5 to more than 200 MW.

Gear Couplings

The purpose of the gear coupling is to connect two trains with independent bearings and transfer the torque, with reciprocal radial and axial displacement of the shafts occurring in operation.

>> Your direct contact: gear@renk-maag.ch



OTHER BENEFITS

Spare Parts

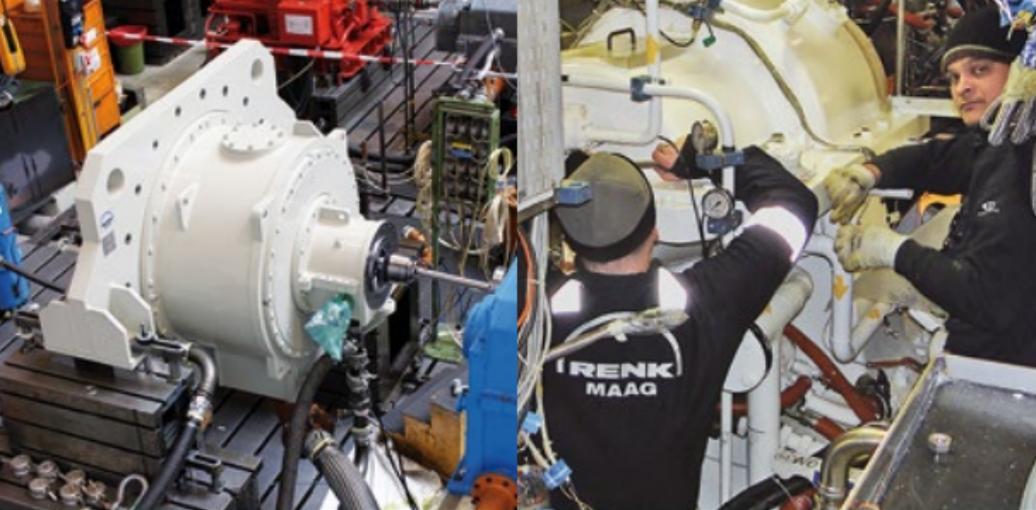
MAAG/RENK-MAAG gearboxes and couplings are well-known for their proverbial longevity. Although, the availability of your plant is also of the utmost importance to us which can be ensured by stocking key spare parts on site.

>> Your direct contact: parts@renk-maag.ch

Modifications and repairs

RENK-MAAG repairs or overhauls all RENK-MAAG products where necessary. The same applies for all MAAG turbo and marine gearboxes, couplings and GP pumps for which spare parts are manufactured according to original drawings. RENK-MAAG also maintains individual components such as bearings, rotors, turning gears, etc. RENK-MAAG is interested and well capable to conduct repairs and modifications of third party products.

>> Your direct contact: repair@renk-maag.ch



Testbed

Gearboxes and clutches from the RENK-MAAG production facility are rigorously tested with state-of-the-art testbed technology. We can also test gearboxes we have modified on request. Additionally we can also test system components for external companies. The testbed engineering team also has experience with heavy-duty and marine gearboxes, pumps, engines and compressors.

>> Your direct contact: testbed@renk-maag.ch

Field Service

Professional, swift and customerfocused – this is the dynamic service team of RENK-MAAG. Our service technicians work tirelessly around the globe, all year round, to install and maintain gearboxes and couplings for our customers. Any necessary repairs are undertaken on site whenever possible.

>> Your direct contact: service@renk-maag.ch



Worldwide Contacts

RENK-MAAG is represented by designated agents in over 35 countries around the world. So we can advise and support our customers on all continents directly – whether on new gearboxes or couplings, modifications, replacements, spare parts, repairs or field service.

>> www.renk-maag.ch > Worldwide Contacts



RENK-MAAG
at your disposal

Our manufacturing and other operational activities are implemented in accordance with our internal quality assurance system and in strict compliance with ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007.



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