











Special Gears

Customised top technology

STANDARD FOR HIGHEST GEAR QUALITY

Those machine and equipment manufacturers who want to stay one step ahead in an increasingly competitive market, must be able to offer more than their competitors. This is especially true in terms of the reliability and resilience of the products, as well as their efficiency, durability, energy efficiency, and noise reduction. Standard gears often fail to meet the specific system requirements especially in the drive technology market. Therefore, customised solutions are becoming the key to top performance.

Gear technology is the core of machinery and equipment. The extreme drive torques often applied in the drive technology result in high permanent loads. Failures not only cause costly standstill times for the operator, but also turn into economic risks due to the related delivery delays. Therefore, many renowned manufacturers of machines and equipment do not accept any compromises specifically in these important components and decide to use the Koellmann Gear high-quality gears instead. Our customers benefit from our long-standing experience in the design and fabrication of special gears for a wide range of applications. Over the past decade, Koellmann Gear has evolved into a global player especially in the field of special gear technology.

- ★ Perfect customised solutions
- ★ Compact, robust housing (e.g. made of Ferrocast)
- ★ Specifically optimised, diagonally interlocked spur gears
- ★ Only roller bearings and shaft sealing rings of renowned ★ Best efficiency at concurrently low sound pressure level



Optimised housing design using FEM

PRECISION AND DURABILITY

Koellmann Gear always takes the safest path in construction and production. Thus, the special gears are no modified standard products, but customised products developed specifically for the respective area of use and made of high-quality components. All suppliers of cast parts, gears, shafts and bearings must meet the highest quality standards.

WARRANTY

With a warranty period of two years, Koellmann Gear commits to a longlived top technology.

CONTINUOUS IMPROVEMENT

Continuous Improvement ensures that even smallest errors are analysed at once and the corresponding measures are initiated at Koellmann Gear to prevent future recurrence.

PRODUCT SAMPLES

Koellmann Gear is ideally placed to meet all the requirements of machine manufacturers for special gears. We are committed to meet the most individual customer-specific needs - from consultancy, through design, construction and manufacturing, to the delivery of the solutions, based on the long-standing experience and the resulting product expertise. We offer special gears up to a torque of 300,000 Nm and a weight of up to 15 t.

TYPE EWG 320

Mixer gear for heavy-duty industrial applications

TYPE VG 9-19

Gear for a 9-roller sheet straightening machine



TYPE ZMV 270

6-shaft gear for a wire pulling system



Saw blade drive of a sawing machine



TYPE AFG 450

Gear for a recycling plant with a torque arm



TYPE DSL 270

Double worm gear for an oil press



TYPE NEXT 300

Single-stage gear with a torque motor

TYPE KEG 240

Gear for the rubber industry with two counter-rotating meshing gear shafts



TYPE WEX 6.03

Gear for opening / closing of moulds in the plastics industry



TYPE EEs 196

Manual gearbox for a stranding machine





FIELDS OF APPLICATION

Special gears by Koellmann Gear have already proven their worth in thousands of machines and plants around the world. The long-lived top technology by Koellmann Gear is a major competitive edge that sets standards not only in terms of reliability and durability, but also in terms of customer satisfaction.

MULTI-MOTOR TECHNOLOGY

- Gear driven by two or more motors
- Use of standard ICE motors
- Free choice of the motor manufacturer
- ▶ Motors connected directly to the gear via flanges, short, compact build of the drive unit
- Removal of the motor without disassembly of the gear by deep-hole-drilled input shafts
- Screw extension optionally also backwards through the gear





LONG-LIVED TOP TECHNOLOGY

Gear solutions by Koellmann Gear are deemed the best on the market. This high quality claim, which is the core of the product philosophy, pays off for the customer. Koellmann gears have a statistic failure rate below one percent.



Quality management of Koellmann Gear is certified to DIN EN ISO 9001 and VDA 6.4.

> Fields of application (from top to bottom): Metalworking, printing industry, textile industry, wood processing industry, packaging industry, environmental engineering













GLOBAL SERVICE

The special strengths of Koellmann Gear include comprehensive service for gears. The works customer service offers periodic maintenance as well as quick and unbureaucratic help in case of damage. A perfectly trained service team permits short times to reaction and global installer deployments.





Other gear solutions:





PERFORMANCE RANGE

- ▶ Technical support (solutions for lubrication, cooling, monitoring components, changes to the technical data)
- Preventive maintenance (e.g. visual assessment / endoscopy, frequency analysis, oil analysis)
- Damage assessment (assessment / measurement of all components)
- Repairs, general overhauls (also for third-party gears)
- ▶ Replacement deliveries (continuous supply of interlocks, roller bearings, cooling coils, heat exchangers, motor pumps and other wear and standard parts)
- Training (for sale, construction and maintenance)



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