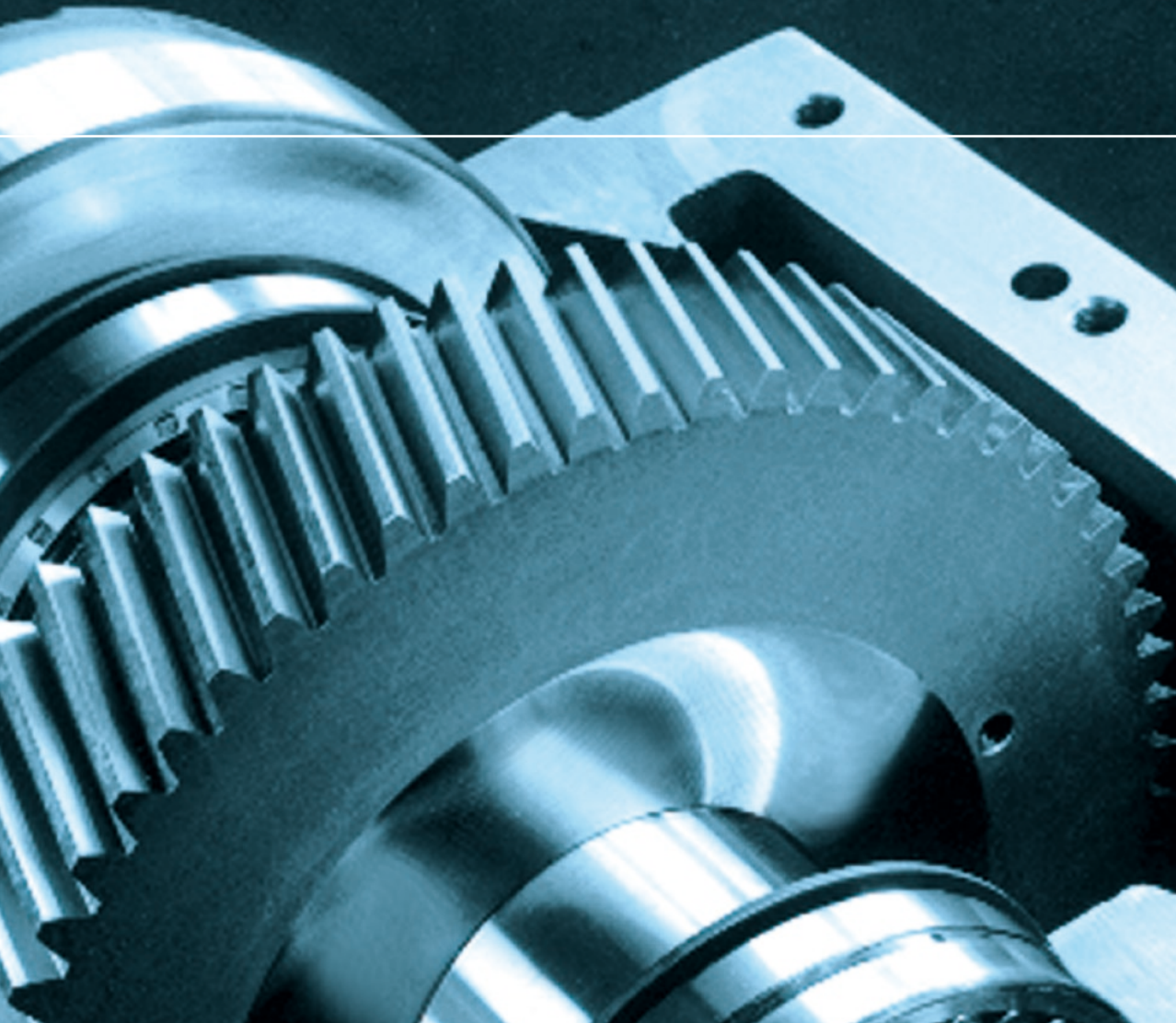


KOELLMANN GEAR

*Premium gears
for industrial use*





STATE-OF-THE-ART TECHNOLOGY

Gears by Koellmann Gear have proven themselves in machinery and systems of all kinds throughout the entire world. Our state-of-the-art technology with its unrivalled functional safety sets standards in terms of longevity, reliability and customer satisfaction.

For construction and production, Koellmann Gear always tread the safest path. For this reason, special gears are not modified standard products. Instead, they are specially developed customisations made from high-quality components especially for the relevant field of use. All suppliers of cast parts, gearwheels, shafts and brackets must fulfil the highest quality standards. This would be virtually impossible to guarantee if production took place in low-wage countries or using parts manufactured there. For this reason, the gears by Koellmann Gear are still 100 percent "made in Germany" today.

Customers trust Koellmann Gear gears with good reason. Companies in countless industries appreciate our competence, many years of experience and flexibility.



Chemistry



Energy recovery



Rubber



Plastic



Foodstuffs



Paper



Recycling



Agitation

Gear solutions by Koellmann Gear are the best on the market. This high quality standard, which is the central part of our product philosophy, pays off for our customers as well. "Continuous improvement" at Koellmann Gear ensures that even the smallest defects are immediately analysed and the appropriate measures are introduced to prevent any repeat appearance in the future.

For Koellmann Gear, research and development have a high degree of importance. As a result of our cooperation with the Forschungsvereinigung für Antriebstechnik e. V. (FVA - the research association for power transmission engineering), we always have access to the very latest knowledge.

Taking into account the latest technical findings, ever more efficient gears are developed through the structural design.

NO COMPROMISES

The characteristics of the materials used are decisive to ensure the highest quality. At Koellmann Gear, our long-term suppliers offer the necessary security with regards quality and reliability. The performance of our suppliers is evaluated on an ongoing basis by the purchasing department and in coordination with our quality management team. Consistent goods-in checks for supplies are decisive to ensure our quality standards are met. We expect our suppliers to be committed without limit to the objectives of our customers. For this reason, those we consider to be our partners understand the context of our business, our strategy and our business policy in order to fulfil the highest demands of our customers.

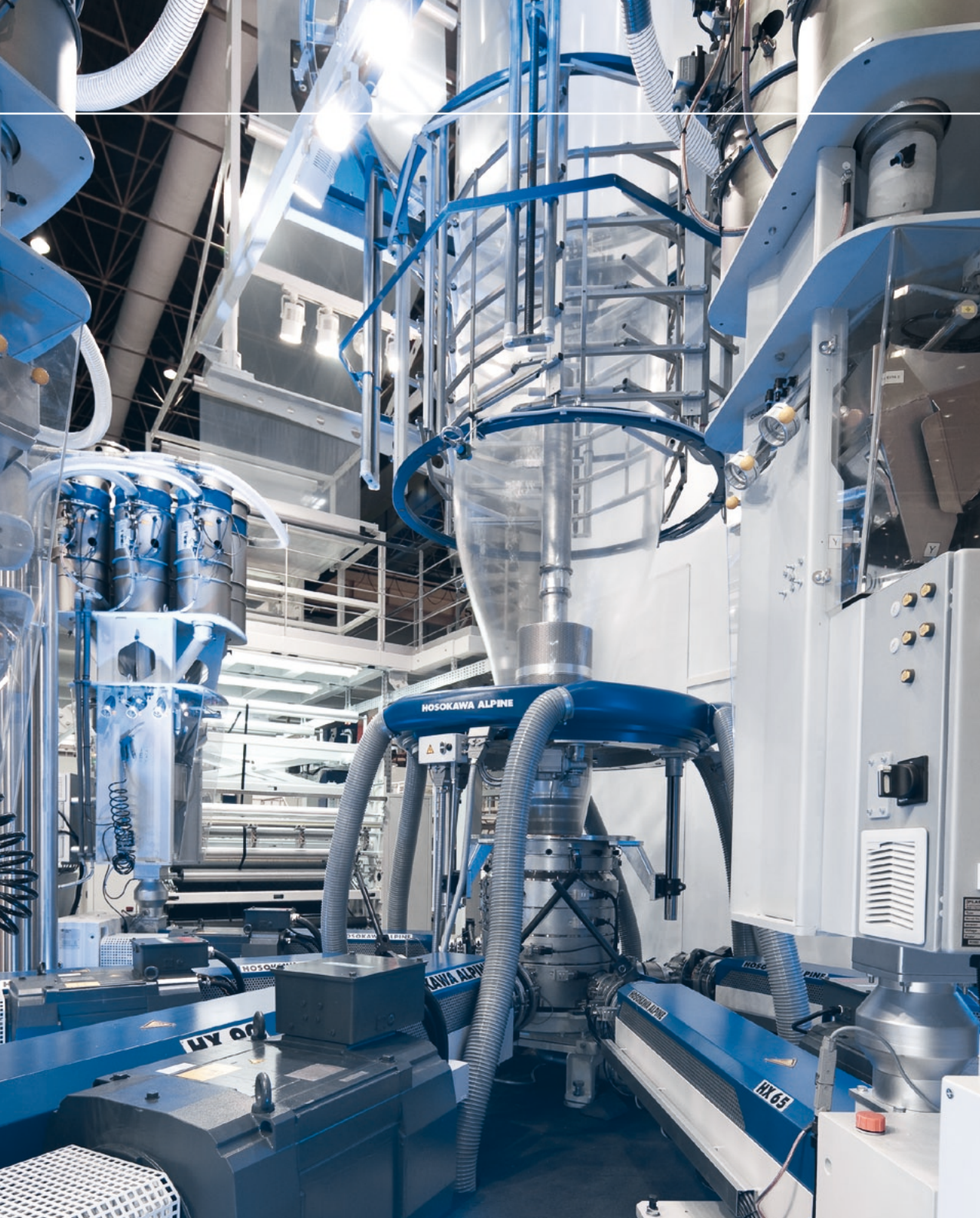
Precision in production, the longevity of our gears and the many years of experience have made Koellmann Gear one of the first points of call for tailor-made solutions. We have a statistical failure rate of less than one percent and offer extensive global service 24 hours a day - should a fault occur.



Textile

Metal forming





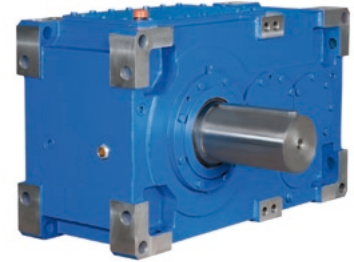
OUR PRODUCTS

Every branch places very specific requirements on the gears it uses. In addition, an optimal degree of efficiency is an important aspect of the job specification. Koellmann Gear offers its customers gears with innovative top-quality technology for all their tasks.

H-TEC

Koellmann Gear has developed a universal gear series, H-TEC, which is designed for specific industrial processes. With a constant interval of input and output shafts, two-level and three-level solutions can be offered. The helical gearings are produced to be optimised in terms of noise and performance.

- ▶ Design size of 10 – 140
- ▶ Nominal output torque of 5,000 – 300,000 Nm, special designs possible
- ▶ Nominal output speed of 1 – 3,000 U/min
- ▶ Gear ratio from $i = 7$
- ▶ 2-level and 3-level designs
- ▶ Housing designs: Monoblock housing, cast iron, spheroidal graphite, special designs such as welded and aluminium housing



EXTRUDER GEARS

UNEX is a range of extruder gears with 18 sizes and over 500 variations. The design is adapted to the individual customer requirements. Accessories such as oil coolant and oil pump units round off the range of extruder gears.

- | | |
|---|---|
| ▶ Flat film extrusion | ▶ Regranulation |
| ▶ Extrusion blow moulding of films | ▶ Food extrusion |
| ▶ Sheet extrusion | ▶ Lamination and coating |
| ▶ Profile and pipe extrusion | ▶ Extrusion of monofilaments and multifilaments |
| ▶ Cable coating | ▶ Rubber profile extrusion |
| ▶ Extrusion blow moulding of solid structures | ▶ Injection moulding and similar machinery |



SPECIAL GEARS

By using gear teeth parts and a modular gear structure, the production and construction of special gears can be adapted in a customer-friendly manner. Even unusual tasks can be solved economically and to suit demands.



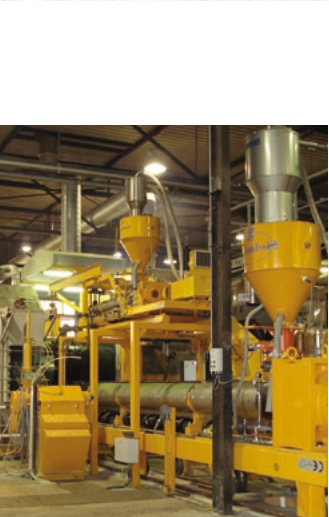
THE COMPANY

The business division of Koellmann Gear, together with the business division of Koellmann Airtec, belongs to Thielenhaus Technologies GmbH. The highest quality and technical top-rate performances have a long tradition at Koellmann Gear. Versatile and economical solutions for a huge range of industries and applications stand for the high degree of flexibility of the product range. As different as the products and fields of use are, the concept which is primarily committed to technical advancement to benefit customers and end users is consistent.

Our customers in mechanical engineering and plant engineering value Koellmann Gear as one of the most competence suppliers of technical drive solutions.

Koellmann Gear supplies a multitude of renowned manufacturers with tailor-made gear designs, while also offering a complete comprehensive service.

The Thielenhaus/ Koellmann team is made up of 220 employees, many who have worked for the companies for decades. Flat hierarchies and open, cross-departmental communication ensure a high degree of work satisfaction. All employees have continual further training in their fields of activity, putting them in the position to advise our customers in line with the latest technical standards.



Koellmann Gear and Koellmann Airtec, today business divisions of Thielenhaus Technologies GmbH, date back to Zahnräderfabrik Köllmann GmbH which was founded in Leipzig in 1904. After the Second World War, gear production was continued at the Langenberg site, where previously only longitudinal milling machines had been produced. In 1951, the company relocated to Düsseldorf-Heerdt.

Four years later, the company was taken over by Maschinenfabrik Ernst Thielenhaus GmbH, which moved gear and compressor construction to its new factory in Wuppertal in 1964. Since the change of ownership, the company has changed its name to Zahnradwerk Köllmann GmbH.

As part of the reorganisation of the Thielenhaus Group, the gearwheel factory was broken down into the business divisions of Koellmann Gear and Koellmann Airtec of Thielenhaus Technologies GmbH in October 2002.

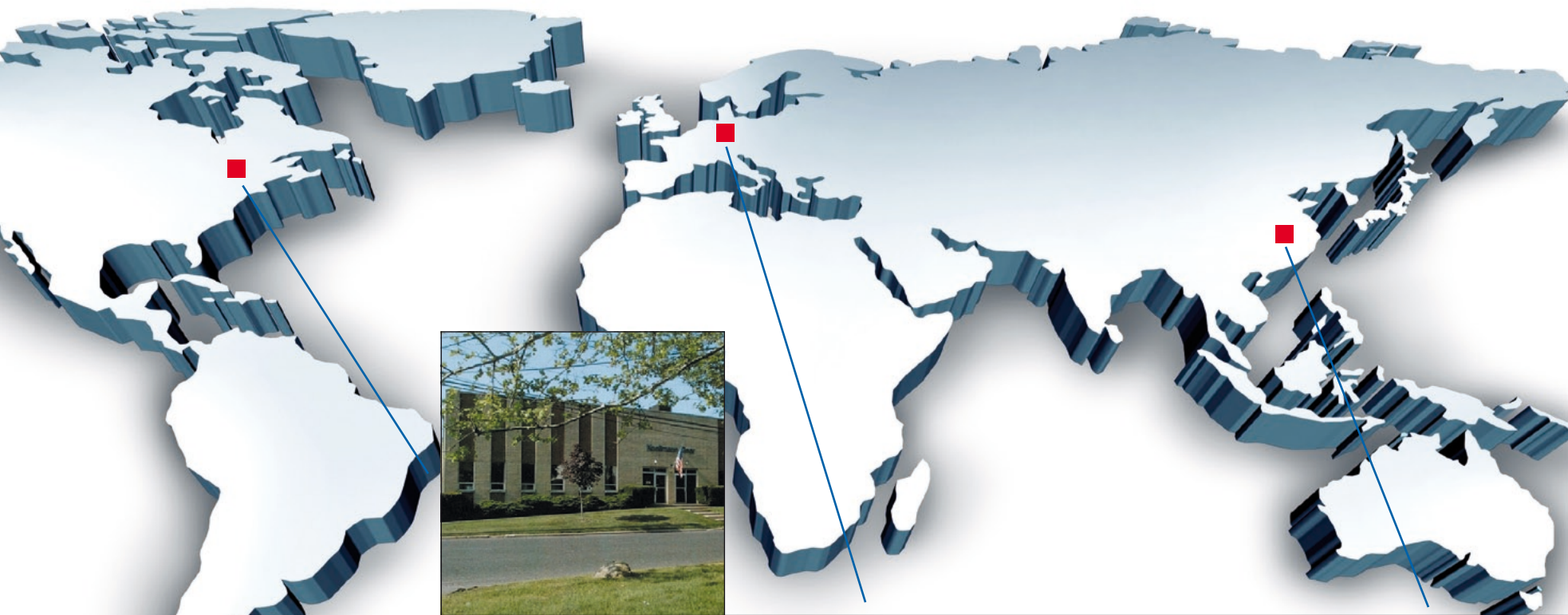
Since 1974, the subsidiary company Koellmann Gear Corporation in Waldwick, New Jersey, USA has been operating successfully on the North-American market. The complete product range and entire spectrum of services are provided here. The company entered the Asian market at the end of 2007 with the opening of the Chinese production site Thielenhaus Machinery Shanghai.

RANGE OF SERVICES

- ▶ Technical support (solutions for lubrication, cooling, monitoring components, change of technical data)
- ▶ Preventative maintenance (e.g. visual assessment/endoscopy, frequency analysis, oil analysis)
- ▶ Damage appraisal (assessment/measurement of all components)
- ▶ Repairs, general overhauls (even for third-party gears)
- ▶ Replacement part delivery (constant stocking of gear teeth, ball bearings, cooling coils, heat exchangers, power pumps and other consumables and standard parts)
- ▶ Training (for sales, construction and maintenance)

24-Hour Service Hotline
 + 49 (0)2 02 / 4 81-4 81
 service@koellmann-gear.com





Koellmann Gear Corporation

8 Industrial Park
Waldwick, NJ 07463 U.S.A.
Phone: +1 (201) 447 0200
Fax: +1 (201) 447 6595
E-Mail: info@koellmann.com
www.koellmann.com



**Division Koellmann Gear
Thielenhaus Technologies GmbH**

Schwesterstraße 50
42285 Wuppertal, Germany
Phone: +49 (0) 2 02 4 81 0
Fax: +49 (0)2 02 4 81 296
E-Mail: info@koellmann-gear.com
www.koellmann-gear.com



**Division Koellmann Gear
Thielenhaus Machinery (Shanghai) Co., Ltd**

Jiangtian Dong Lu 212, building 7
Songjiang Industrial Zone
201613 Shanghai, P.R. China
Phone: +86 (21) 67 75 31 57
Fax: +86 (21) 33 52 87 66
E-Mail: info@thielenhaus.cn
www.thielenhaus.cn



A Division of

