



Big on the details

WSK forging and crankshaft technology



Customised solutions for big challenges

Wildauer Schmiede- und Kurbelwellentechnik GmbH (WSK) excel at manufacturing large components, with maximum precision. Our core area of expertise: die-forged parts up to 3.5 tonnes and crankshaft machining for large 4-stroke engines up to 20 tonnes as well as for pumps and compressors, which exactly fulfil even the most demanding and individual requirements.

Expertise acquired from over 100 years of production at our location in Wildau flows into each and every product. As we are closely connected with other GMH Gruppe companies, our corporate streamlining ensures efficient production processes for our customers who want to make an impact and keep big machinery moving. WSK, therefore, is one of the European specialists in the final machining stages for ready-to-install crankshafts weighing up to 20 tonnes. In the die forging process we use counterblow hammers with impact forces of 400 kNm and 800 kNm to produce components weighing from 70 kg to 3,500 kg - in exact accordance with customer requirements. From simulation to shipment, the production processes are optimally customized to the product requirements.

Quality - for absolute reliability

For large components which have to prove their worth in terms of high load capacity and dimensional accuracy, every detail counts - from the very beginning. We utilise extensive simulation procedures, our in-house tool shop and powerful machinery, and also implement a strict system of quality management to ensure we provide the best solution.

Quality without compromise

Full quality assurance

We respond to high demands by guaranteeing an capable rigorous system of quality assurance. This is ensured by means of our own materials laboratory, non-destructive testing carried out by employees who are certified in accordance with levels 1, 2 and 3 of DIN EN ISO 9712, the most precise technologies, measurement testing by accredited partners as well as renowned auditing institutions.

The entire value chain

At the Wildau location we share our expertise with Schmiedewerke Gröditz and SMB Wildau, ensuring optimum added value for our customers. In carefully coordinated processes we achieve perfect results quickly and efficiently - from steel production, a wide range of possibilities in forging technology and machining, to the ready-to-install component.

Our expertise

- Over 100 years of expertise at our location
- In-house tool shop
- Extensive simulation procedures
- Products and services from crude steel to ready-to-install components

Forging technology

- Die-forged parts: max. outer diameter 1,150mm and/or max. length 4,500mm
- Press forged parts using the TR forging principle: crankshaft blanks with a length of 4.50m or more using the throw-by-throw method and a hydraulic press, component geometries such as fittings, flanges, valve tappets, etc., in line with the grain orientation
- Machining in compliance with customer specifications on request

Crankshaft machining

- Crankshafts for 4-stroke engines: crank radius max. 450mm, bearing diameter 100 to 480mm, swing diameter max. 1,300mm, total length 1,500mm to 13,000mm, max. finished weight 20,000kg
- Ready-to-install eccentric shafts for compressors, pumps: total length min. 1,500mm, swing diameter max. 1,300mm, finished weight min. 1,500kg (special dimensions on request)

Comprehensive services

- Refinishing: turning, milling, turn-milling, drilling and multi-lateral machining as well as cylindrical grinding and non-destructive testing
- Close support from construction to production of crankshafts

- Assembly and disassembly of counterweights, gears and other attachment parts
- After-sales service for reconditioning crankshafts depending on evaluation of wear-out or damage

Quality assurance

- In-house materials laboratory
- Non-destructive testing (UT, MT, PT, VT) by trained employees (certified in accordance with DIN EN ISO 9712 levels 1, 2 and 3)
- World's largest MT equipment for crankshafts
- Ultrasonics with circular disc-shaped reflector (0.3mm or more)

Management certifications

- DIN EN ISO 9001:2015
- DIN EN ISO 14001:2015
- DIN EN ISO 50001:2011

Auditing institutions

- American Bureau of Shipping (ABS)
- Bureau Veritas (BV)
- China Classification Society (PRC)
- Deutsche Bahn AG (DB)
- Det Norske Veritas - Germanischer Lloyd (DNV GL SE)
- Lloyd's Register Shipping (LRS)
- Nippon Kaiji Kyokai (NKK)
- Polish Register of Shipping (PRS)
- Registro Italiano Navale (RINA)
- Russian Maritime Register of Shipping
- TÜV Technischer Überwachungsverein

Approval categories on request.

Fields of expertise



MECHANICAL ENGINEERING AND PLANT CONSTRUCTION



MINING



ENERGY



LARGE ENGINE INDUSTRY



PUMPS AND COMPRESSORS



RAILWAY SYSTEMS



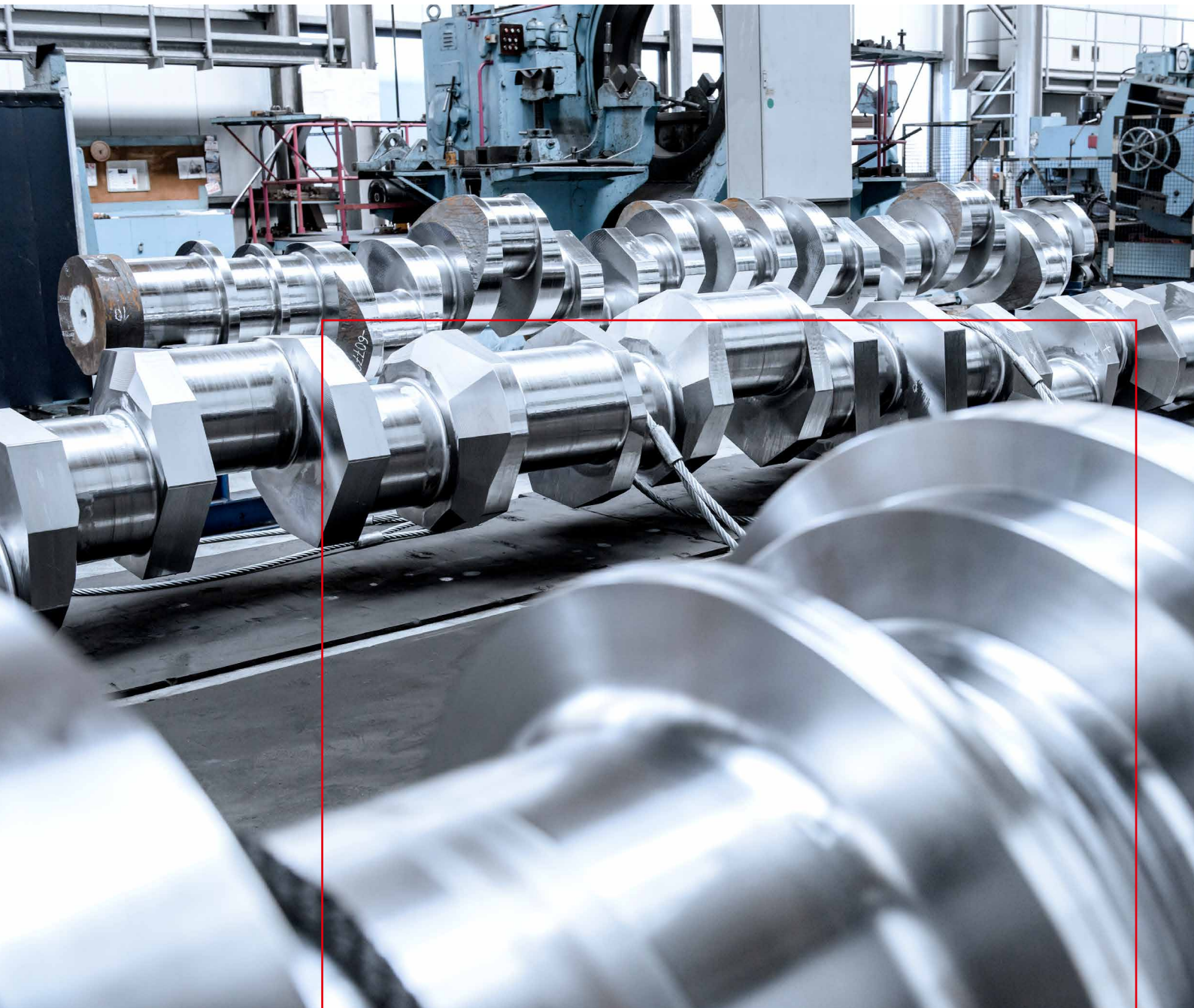
FOOD INDUSTRY



CONSTRUCTION, AGRICULTURAL AND COMMERCIAL VEHICLES



CHEMICAL AND PETROCHEMICAL INDUSTRY



Keeping big machinery moving, together

At WSK we find the best solution by engaging in collaborative partnerships from the very beginning. Combining your requirements, needs and technical specifications with our experience and expertise, we work closely together to achieve optimum results: big on the details, customised and delivered on schedule.

WSK is part of the Forging Technology Business Unit of GMH Gruppe

From the raw material to the finished component - with a passion for precision

**Wildauer Schmiede- und
Kurbelwellentechnik GmbH**

Schmiedestraße
15745 Wildau | Germany
T +49 (0)3375 586-201
www.wsk-wildau.de

GMH Gruppe

www.gmh-gruppe.de