LARGE BORE PISTONS FROM KOLBENSCHMIDT

MACHINING ACCURACY.
OPERATIONAL RELIABILITY.
HIGHEST QUALITY.

OUR HEART BEATS FOR YOUR ENGINE.
ABOUT KSLP (CHINA)

KSLP (China) Co. Ltd. Kunshan, Jiangsu Province, is a wholly foreign-owned enterprise founded in 2012 and belongs to Rheinmetall Automotive, Germany.

The large bore pistons division of KS Kolbenscheimdt GmbH of Rheinmetall Automotive is one of the world’s major producers and offers optimal solutions for pistons in the diameter range from 150 to 640 mm made of steel and aluminum, for stationary, marine and locomotive engine applications. At the three production sites Neckarsulm (Germany), Marinette (US State of Wisconsin) and Kunshan (China), large-diameter pistons are developed and produced for all renowned manufacturers of large four-stroke engines worldwide.

KSLP (China) itself focuses on the Asian and Chinese market and produces large bore pistons in the range of 160 mm to 350 mm diameters. The machining of the pistons at KSLP (China) is done using state-of-the-art NC and CNC equipment. This ensures a maximum of machining accuracy, production reliability, reproducibility and economic efficiency. The high quality standards maintained by Kolbenscheimdt’s large bore pistons is ensured by in-production quality systems and final inspections employing sophisticated inspection equipment such as the 3-coordinate measurement units, isotope-, X-ray-equipment and ultrasonic testing equipment for non-destructive testing.

ABOUT RHEINMETALL AUTOMOTIVE

Rheinmetall Automotive AG is the parent company of Rheinmetall Group’s mobility sector and is represented worldwide at more than 40 locations.

Being an automotive supplier, Rheinmetall Automotive develops, produces and markets systems and components for the automotive industry. The core competencies of the operating units cover the following areas related to the internal combustion engine: reduction of emissions, consumption and pollutants, as well as cooling and thermal management, downsizing, and the reduction of weight and friction.

Moreover, Rheinmetall Automotive deals with the drives of the future for electric and hybrid vehicles, and has aligned its development and production accordingly. With the brands KS Kolbenscheimdt and Pierburg, Rheinmetall Automotive looks back upon more than a hundred years of automotive competency – and its Motorservice is a strong brand in the automotive aftermarket. This combination results in unique system competency that enables all current and future mobility topics to be covered in a comprehensive fashion.
Nearly all well-known manufacturers of large four-stroke engines trust in the large bore pistons from KS Kolbenschmidt.

With pistons with diameters of between 150 and 640 mm for areas of application requiring steel and aluminum, KS Kolbenschmidt is one of the world’s leading manufacturers. Hardly any other company offers that kind of variety in size. The product range is also convincing: It ranges from monobloc aluminum pistons, spheroidal graphite monobloc and composite pistons with bottom parts made of aluminum, spheroidal graphite iron and steel to new developments in the area of steel pistons – KS Kolbenschmidt has it all.

For diesel engines in ships, simplicity of servicing is especially important. That is why KS Kolbenschmidt develops solutions for customer-specific requirements that are simple to service and easy to replace on the high seas. In order to satisfy all customer requirements optimally, the production sites for our large bore pistons are located in the important markets in Europe, the USA, and China.
WORLDWIDE PRESENCE: 3 PRODUCTION SITES

NECKARSULM  
(Germany)

MARINETTE  
(State of Wisconsin, USA)

KUNSHAN  
(China)
UNIQUE DESIGN FOR SMALL STEEL PISTONS
PISTONS WITH DIAMETERS OF BETWEEN 150 AND 640 MM
MARKET LEADER IN SPHEROIDAL GRAPHITE IRON PRODUCTS
OUR LARGE BORE PISTONS FOR SHIPS

1 COMPOSITE PISTONS WITH NCI SKIRT
Our composite pistons with a conventional designed rigid steel crown section and a correspondingly dimensioned NCI 70-skirt.
- for firing pressures in the range of 21 to 25 MPa

2 COMPOSITE PISTONS WITH STEEL SKIRT
Our pistons for special applications with a crown and skirt made of 42 CrMo 4 forged steel. Both the steel skirt and forged steel crown are bolted together.
- for very high peak firing pressures in the range of 23 to 28 MPa
- high strength of skirt material

3 NCI MONOBLOCK PISTONS
Our pistons from 170 to 350 mm diameters made out of NCI 70 – since 1973.
- high strength
- low thermal expansion of material allows the manufacturing of thin-wall pistons and the introduction of low running clearances
- simple design with integrated cooling spaces

4 MONOTEKS
Our high quality pistons which cooling gallery is closed by ring shells.
- high support of ringland
- one single forging part without structural change

5 WELDTEKS
Our pistons for high loaded applications – a 2-piece steel piston which cooling gallery is closed by friction welding.
- compact design
- proven KS design
- high constructive freedom