

SUCCESS STORY



Creative. Visionary. Successful.

The efficient cooperation is the foundation for success. Yours and ours.

Your partner for successful joining – worldwide.

Kel
BULGARIA
BÖLLHOFF

EUROPIPE advances into new dimensions

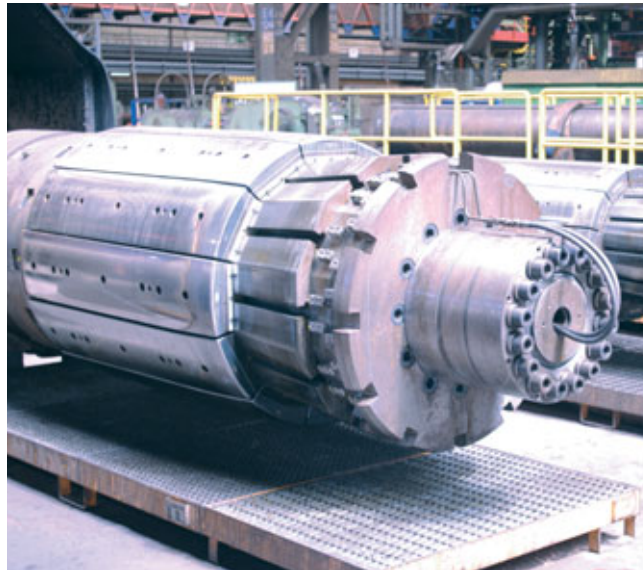


EUROPIPE

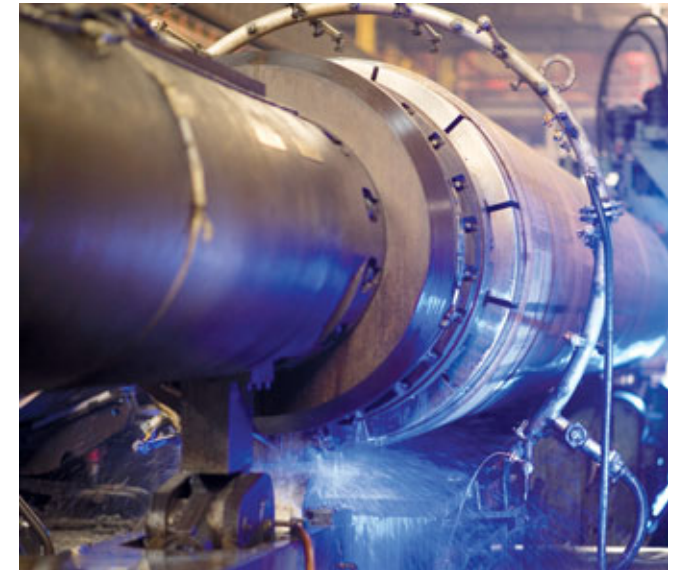
Interesting information about the EUROPIPE Group

The group's headquarters and its worldwide most powerful largediameter pipe mill are situated in Mülheim an der Ruhr (NRW, Germany). Further production sites are located in France and in the USA. The global market leader produces welded large-diameter pipes according to international standards and individual customer specifications. The pipes are applicable for the transportation of oil, gas as well as water and are delivered throughout the world. These pipes withstand the desert heat, the arctic cold or the pressure of the deep sea. Daily, up to 5 km pipes are manufactured in a 83,000 m² large production hall. Pipes with outer diameters of Ø 610 – Ø 1,524 mm and wall thicknesses of 7 – 45 mm comprise the main product portfolio of EUROPIPE.

For the currently international largest offshore project Nord Stream, EUROPIPE produced as the main supplier approx. 1,900 km or 1.6 million tons of large-diameter pipes for the construction of the new pipeline, transporting natural gas from Russia to Europe through the Baltic Sea.



Expander tension rods



Mechanical pipe expansion

Initial situation

During the production of large-diameter pipes, dual-head expanders are used for the last forming process. By means of this expander, the welded pipes are gradually enlarged in order to achieve the accuracy grade and the required geometrical data. Based on the pipe features such as diameter, wall thickness and steel grade, the expansion rate may vary between 0.8 % and 1.5 %. The permanent strain of up to 1,500 tons tensile load caused the thread wear at the expander's drawbar. The resulting costs demanded for a lasting improvement.

The solution with Böllhoff

Together with EUROPIPE, a solution has been developed successfully. In this case, a HELICOIL® thread insert is screwed into the tension rod nut for effecting an improved dispersal of the preload force during the mechanical expansion. An increased fatigue strength of the thread guarantees a significantly longer service life of the mechanical expander. Fatigue strength without HELICOIL® 600 to 950 t
Fatigue strength with HELICOIL® 750 to 1200 t
Consequently, Böllhoff has produced for EUROPIPE the largest HELICOIL® thread inserts of all time in the dimensions 204x16x282 mm, 260x20x330 and 320x25x420 mm.

sions with HELICOIL®!



The HELICOIL® thread insert is screwed on

About HELICOIL®

Simple – fast – long-lasting:

HELICOIL® *plus* thread inserts create high-strength and wear-resistant threads of highest precision while also being corrosion- and heat-resistant. Due to practical tests and continuous optimisations over the last 60 years, the installation of the current HELICOIL® *plus* has been simplified apparently. By reason of the reduced diameter in the first thread, the thread insert can be screwed in like a screw.

HELICOIL® *plus* thread inserts are produced according to standardised material and quality regulations. They are the basis for national standardisation, aerospace norms, military standards as well as for factory-owned norms of leading manufacturers.

“The HELICOIL® thread technology has significantly improved the service life of our tools.”

Thorsten Schulokat, Plant manager Expander, Degreed engineer

Customer benefits

- Constant load and stress distribution
- Thread reinforcement
- Increased quality

Product characteristics

- Corrosion and temperature resistant
- Wear-resistant



60 YEARS
HELICOIL®
made by **BÖLLHOFF**

Böllhoff International with companies in:

Argentina	Korea
Austria	Mexico
Brazil	Poland
Canada	Romania
China	Russia
Czech Republic	Slovakia
France	Spain
Germany	Switzerland
Hungary	Turkey
India	United Kingdom
Italy	USA
Japan	

Apart from these 23 countries, Böllhoff supports its international customers in other important industrial markets in close partnership with agents and dealers.

Kel
BULGARIA

KEL Bulgaria Ltd.
Please find your local contact on www.kelbulgaria.com
or contact us under info@kelbulgaria.com
Telephone: +359 877008832
Fax: +359 24922552


BÖLLHOFF