

Higher performance with Mancrodur

Work roll bearing arrangement in a 7 stand hot strip mill



Operator: ThyssenKrupp Steel Europe, Bochum

Equipment manufacturer: SMS group GmbH (SMS Siemag)

ThyssenKrupp Steel Europe AG (TKSE)

TKSE is a leading worldwide supplier of flat carbon steel.

With a workforce of approximately 27 000 employees, it produces innovative, sophisticated steel products for applications in many different industrial sectors.

The Bochum site has one of TKSE's largest hot rolling mills.

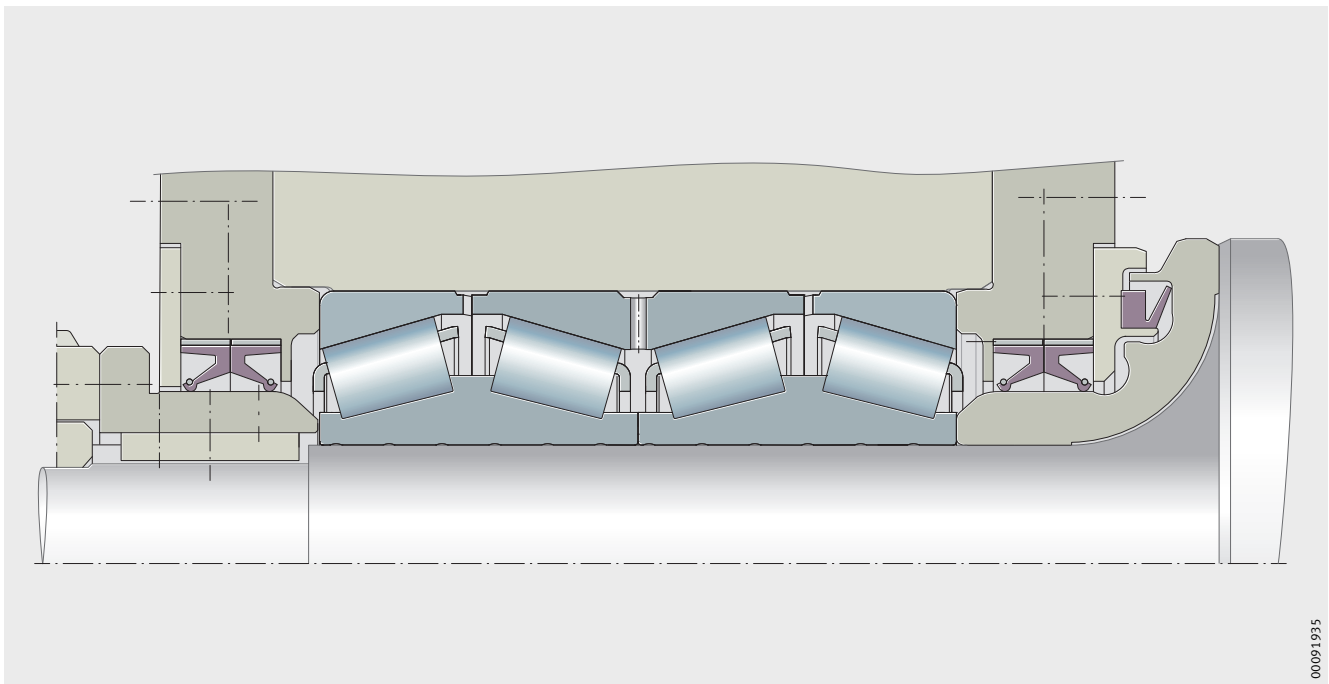
The wide hot strip mill, due to its high drive power level, is particularly suitable for the rolling of high strength quality steels.

Mancrodur

The Schaeffler high performance steel Mancrodur is, in combination with carbonitriding heat treatment, the perfect combination for the extreme operating conditions in rolling mills.

SCHAEFFLER





00091935

Tapered roller bearing for the work roll bearing arrangement in stand F6-F7

Operating data

■ Rolling force	45 MN
■ Max. roll speed	16 m/s
■ Work roll diameter	677 mm
■ Roll barrel length	max. 2 050 mm
■ Lubrication of bearings	grease

Four-row tapered roller bearing

FAG F-802434.TR4-D-H122AA

■ Bore	406,400 mm
■ Outside diameter	546,100 mm
■ Width	288,925 mm

■ Basic dynamic load rating	4 450 kN
■ Basic static load rating	9 300 kN
■ Axial internal clearance	0,3 mm to 0,4 mm

Higher performance with Mancrodur

The carbonitrided high performance steel Mancrodur gives a significant improvement in the operating life of multi-row tapered roller bearings.

Carbonitrided

In this special heat treatment, the surface layer of the bearing rings is enriched not only with carbon but also with nitrogen. The bearings thus offer higher wear resistance and higher surface hardness.

Customer benefits

- Operating life at least twice as long due to higher wear resistance
- Longer fatigue life under favourable lubrication conditions
- Increase in availability of operating equipment.

Schaeffler Technologies AG & Co. KG

Georg-Schäfer-Straße 30

97421 Schweinfurt

Germany

Internet www.fag.com

E-mail faginfo@schaeffler.com

Phone +49 9721 91-3490

Fax +49 9721 91-54-3490