Increased performance through carbonitriding

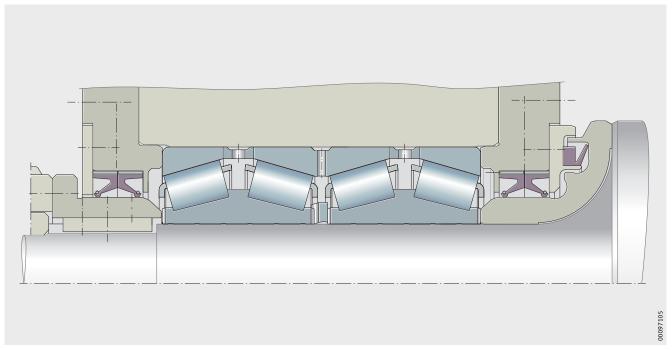
Work roll bearing arrangement in a 6-stand hot strip mill





Plant operator: PAO Severstal, Standort Cherepovets, Russland

Plant manufacturer: NKMZ, Ukraine



Tapered roller bearings for the support of work rolls (schematic)

Operating data

Rolling force	29 MN
■ Max. rolling velocity	11,5 m/s
Work roll diameter	677 mm
■ D.III	4 700

Roll body length max. 1700 mmCounterbending 230 kNLubrication of bearings Grease

Four-row tapered roller bearing FAG F-802264.TR4-W72D-M15WZ

■ Bore 395,0 mm
■ Outside diameter 545,0 mm

■ Width 268,7/288,7 mm

Basic dynamic load rating 4 250 kN

■ Basic static load rating 8 700 kN

Axial internal

clearance 0,3 mm to 0,4 mm

Increased performance through carbonitriding

In this special heat treatment, the surface layer of the bearing rings is enriched with carbon as well as with nitrogen. The bearings thus offer high wear resistance and higher surface hardness. As a result, the bearings have a significantly extending operating life.

Customer benefits

- Approximately twice the operating life due to higher wear resistance
- Longer fatigue life under good lubrication conditions
- Increased equipment availability

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