FAG Bearings in a Sendzimir Mill

Examples of Application Engineering
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Backup roll axle with support rollers and support saddles

Due to the narrow production tolerances and highly precise measuring methods, FAG support rollers are delivered in specific cross section height classes in a narrow tolerance range.

Only support rollers of the same cross section height class may be mounted onto each backup roll axle.

Technical data

Maximal rolling force: 6 400 kN
Work roll diameter: 61 to 47 mm
Intermediate roll diameter: 96 to 106 mm
Intermediate roll diameter: 169 to 178 mm
Rolling speed: 500 m/min
Number of support rollers per backup roll axle 5

Lubrication

The unsealed support rollers are lubricated with a low-viscosity rolling oil.
Very high flow rates are needed to ensure sufficient lubrication of the support rollers under the prevailing critical operating conditions. This prevents the bearings from heating up excessively and keeps foreign particles out.

Triple-row support roller in a multi-roll cold rolling stand

Support roller Z-512497.03.WGTR with the dimensions:
Bore d = 130.00 mm
Outside diameter D = 300.02 mm
Width B = 172.64 mm