

No more premature bearing failures in continuous casters

The sealed spherical roller bearings turned out to be the ideal solution for Huta KATOWICE's new continuous caster. These bearings solve previous problems with grease washout and water ingress. The prolonged bearing life contributes to total cost savings.

Huta KATOWICE, located in Dabrowa Gornicza, is the biggest Polish steelworks, with an annual capacity of 4 500 000 tonnes. It produces rails and sections of different types.

When the new 6-strand bloom continuous casting machine was set into operation in October 1995, the segments were fitted with the open spherical roller bearings 22209 CC/W33. There was no relubrication during operation (initial only) and the rollers were cooled down

with splashing water. Almost immediately problems with premature failures of the bearings occurred. The bearings failed due to grease washout and water ingress. During the first year of operation approximately 1 000 open bearings 22209 were replaced. At the end of 1996 Huta KATOWICE decided to try to solve the problems by using the SKF sealed spherical roller bearings BS2-2209 C-2CS5/C4. In April 1997 the first pieces were mounted. After some weeks operation, inspections showed that all of the bearings were in perfect condition – no traces of wear or grease washout. Later that year Huta decided to exchange all open spherical roller bearings for SKF sealed spherical roller bearings. This proved to be the ideal solution, and the caster is still running perfectly.

Operating conditions

Position:	Roller ends in continuous casting machine
Bearing:	BS2-2209 C-2CS5/C4
Bearing load:	High
Speed:	~2 r/min
Operating temperature:	+100 °C
Lubrication:	Klüber Petamo GHY 443

Sealed Explorer advantages

- Longer service life
- Less bearing replacements
- Minimized maintenance
- Ready to mount unit



Continuous casting is an environment with high loads, high temperatures and low speed. The low speed makes bearing lubrication difficult since the lubricant can be pressed out instead of forming a film. The lubricant can also be washed out by the cooling system. Read about how we solved it.

This testimonial demonstrates the outstanding capabilities of SKF spherical roller bearings prior to the new Explorer execution. The customer should experience additional performance with the new Explorer series.