

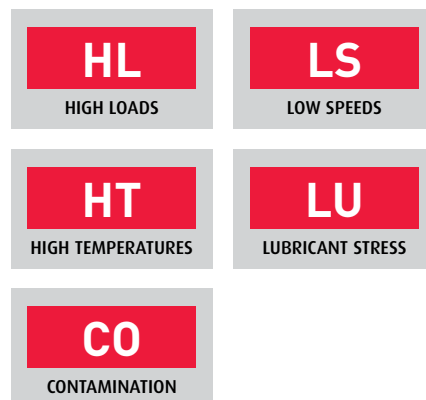
## SWR™ SPHERICAL ROLLER BEARINGS

NSK SWR™ Spherical Roller Bearings are designed to meet the challenges of operating bearings in the harsh environment of continuous casting machines. Utilizing innovative material and heat-treatment technology, they offer superior resistance to wear and the onset of progressive bearing damage. With extreme durability and core toughness, SWR™ Spherical Roller Bearings are an advanced solution that promote extended operating life and reduce unexpected maintenance downtime and costs.

### PROVEN BENEFITS

- › Superior wear resistance – three times that of conventional bearing steel
- › Improved flaking life property – five times that of conventional bearing steel
- › Higher toughness of material core (prevention of crack damage) – five times that of conventional bearing steel
- › Improved bearing durability extends roll segment operation, reducing maintenance costs and preventing unplanned downtime

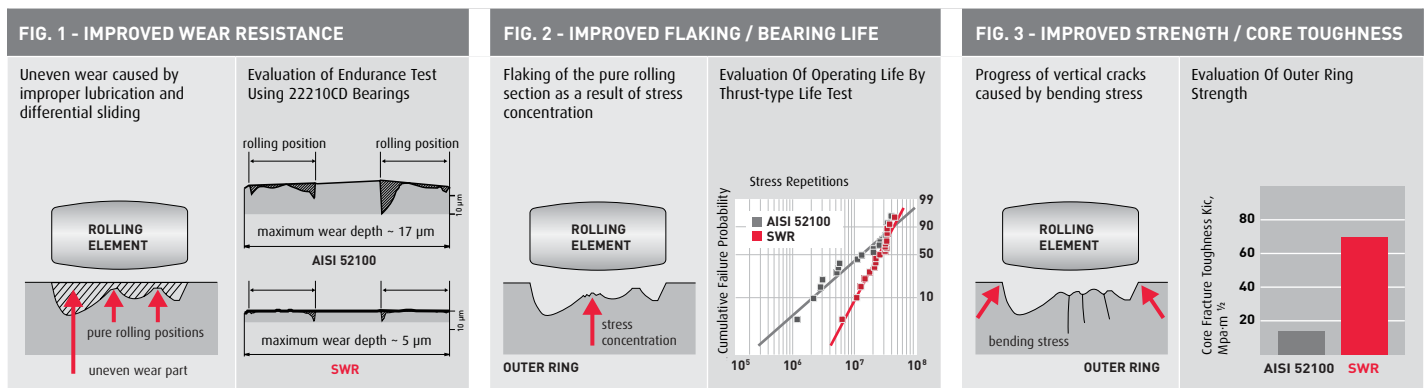
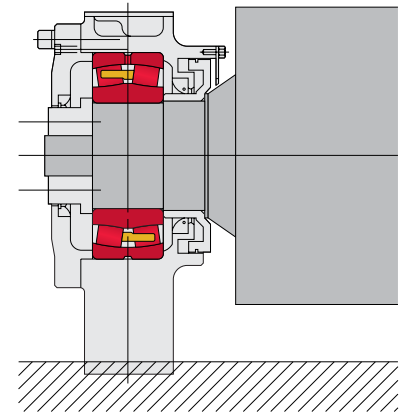
### CONDITIONS:



## DESIGN FEATURES

- › Manufactured with an innovative steel composition
- › Applied proprietary heat-treatment process
- › Available in a wide range of sizes with high strength pressed steel (EA, CD) or one-piece machined brass (CAM) cage
- › Superior wear resistance – 3 times that of conventional bearing steel (Fig. 1)
- › Improved flaking life property - 5 times that of conventional bearing steel (Fig. 2)
- › High toughness of material core (prevention of crack damage) – 5 times that of conventional bearing steel (Fig. 3)

Improved bearing durability achieved by using SWR spherical roller bearings extends roll segment operation, reducing maintenance costs and preventing unplanned downtime.



## DESIGN SPECIFICATIONS

230	40	SWR	CA	g2	M	E4	C3
DIMENSIONAL SERIES	BORE REFERENCE NO.	MATERIAL	INTERNAL DESIGN	CARBURIZATION	CAGE	LUBRICATION FEATURES	INTERNAL CLEARANCE
* DIMENSIONAL SERIES	222, 230, 231, 240, 241			CARBURIZATION	g2: outer ring g5: inner and outer ring g: complete bearing		
* BORE DIAMETER	40 to 240 mm			CAGE	Blank, CD: high strength pressed steel M: heavy duty machined brass		
MATERIAL SERIES	SWR: Super Wear Resistant			LUBRICATION FEATURES	E4: groove and holes, outer ring		
INTERNAL DESIGN	EA, CA: high load capacity			INTERNAL CLEARANCE	Blank: normal C3: > normal C4: > C3		

\* additional series / sizes are available - contact NSK