

# **SHX Steel**

SHX is a heat-resistant & wear resistant steel resulting from NSK's special proprietary materials & heat treatment technology; it offers unrivalled ultra high-speed performance and extended fatigue life ideally suited for machine tools running to their maximum capacity.

#### **Product Features**

- NSK's Patented special steel
- Special heat treatment process offering superior hardness
- SHX material for angular contact bearings is complemented with ceramic balls as standard
- SHX material rollers available for cylindrical roller bearings; a cost effective solution over the use of ceramic rollers whilst delivering up to 85% of the ceramic speed (Over 2 Million dmn (= Bearing mean diameter (mm) X speed (rpm))

#### **Benefits**

- Sub surface & surface fatigue life resistance increase by 4 times
- 20% higher speed compared to standard bearing steel
- Enhanced service life under low / poor lubrication regime
- Similar heat resistance to Aerospace M50 steel (300°C)
- Lower friction performance & indentation resistance
- Superior wear resistance is especially important for high speed applications

## **Condition Description**

- High Temperature
- Low Friction

### **Industries**

Machine Tools



80	BNR	10	Х	TYN	DBB	EL	P4
		Description					
80		Bearing Bore					
BNR		Bearing Type					
10		Dimension					
Χ		SHX Material					
TYN		Cage Type					
DBB		Arrangement					
EL		Preload					
P4		Accuracy					