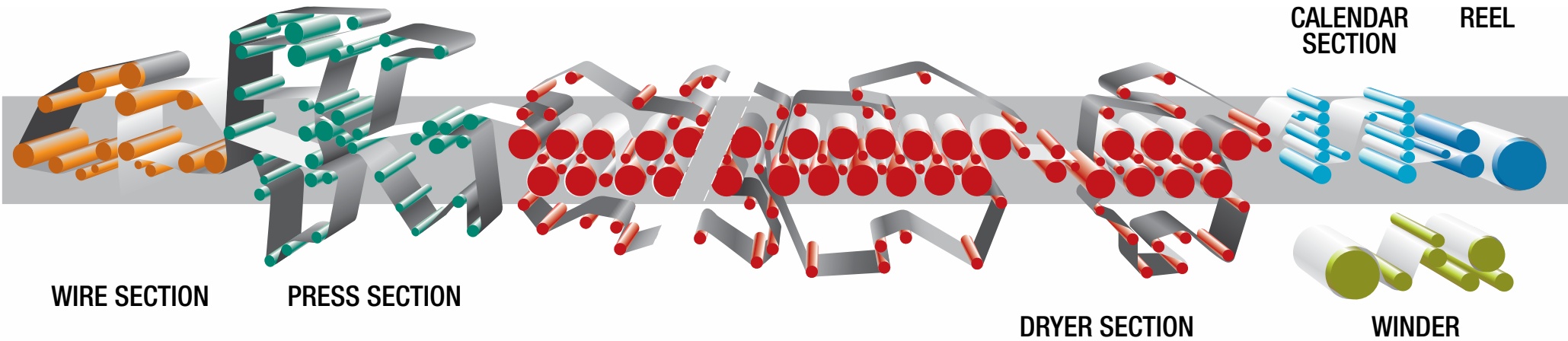


Through the entire paper making process you can rely on NSK's uncompromising commitment to superior products and unparalleled service. Upgrading to NSK ensures productivity and reliability for you and your entire operation. From high temperature resistance to heavy load capabilities, NSK delivers products that offer solutions in all mill applications.

Experience the NSK difference — upgrade to NSK.



HPS™

- 1. Longer bearing life.
- 2. High limiting speeds.

USED IN: BARKER, CHIPPER, REFINER, WIRE SECTION, WINDER, REEL



MOLDED OIL

- 1. Excellent performance in environments exposed to moisture or dust.
- 2. Easy to handle and environmentally safe.

USED IN: AGITATOR, CONVEYOR, WET SECTION, PRESS SECTION



SWR – ANTI WEAR

- 1. Heavy load capabilities.
- 2. Controlled outer ring wear.

USED IN: PRESS ROLL



TRIPLE RING

- 1. Long life.
- 2. High precision.
- 3. Optimal inner ring design for lubrication.

USED IN: PRESS ROLL, CALENDAR



TL

- 1. Suitable for high temperature equipment with resistance to inner ring fracture.
- 2. Long life that boosts productivity and lowers maintenance costs.

USED IN: DRYER SECTION, CALENDAR SECTION



SAF HOUSING

- 1. Compatible with industry standards.
- 2. Large oil ports.

USED IN: ALL SECTIONS

NSK Nomenclature – Spherical Roller Bearings

Premium Material HTF: Tough Steel Material STF: Tough Steel Material TL: TL Material Blank: Standard Materials	Bore Size (Multiply last 2 numbers by 5 to get bore in mm) 20: 100mm 96: 480mm 500 millimeters & larger written as: /500: 500mm /710: 710mm	Bore Type Blank: Cylindrical bore K: 1:12 Tapered bore K30: 1:30 Tapered bore	Internal Clearance C2: Tight Blank: Normal C3: Loose C4: Extra loose
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TL	222	38	CAM	K	G3	C3	P55W507
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NSK Type & Series 213xx: Spherical roller 222xx: Spherical roller 223xx: Spherical roller 230xx: Spherical roller 231xx: Spherical roller 232xx: Spherical roller 233xx: Spherical roller 239xx: Spherical roller 240xx: Spherical roller 241xx: Spherical roller 292xx: Spherical thrust 293xx: Spherical thrust 294xx: Spherical thrust	Cage Options CAM: One piece brass cage with guide ring C/CD: Two piece steel cage with guide ring H: Two piece polyamide cage EA: Two piece pressed steel, high capacity Spherical Roller Thrust M: Brass cage E/H: Pressed steel cage	Material Code G: Carburized, inner & outer ring rolling element G2: Carburized, outer ring only G3: Carburized, inner ring only G5: Carburized, inner and outer rings Blank: Vacuum degassed bearing steel	Other Features: New "W" Features W31: Special Packaging + S11 W507: E4+W31+S11 W509: E7+W31+S11 Z: Combines high speed and U22 P52: Outer ring accuracy P53: Inner ring accuracy P55: Both rings ABEC 5 running accuracy
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TL Steel Spherical Roller Bearings

- Designed for high temperatures
- Specialized TL Steel extends life and reduces the possibility of downtime
- Enhances inner ring strength and increases fracture resistance

Interchange – Spherical Roller Bearings

	Description	NSK	SKF	Timken	FAG
Part number	Very Light	239xx	239xx	239xx	239xx
	Light	230xx	230xx	230xx	230xx
	Light, Wide	240xx	240xx	240xx	240xx
	Medium	231xx	231xx	231xx	231xx
	Medium, Wide	241xx	241xx	241xx	241xx
	Heavy	222xx	222xx	222xx	222xx
	Heavy, Wide	232xx	232xx	232xx	232xx
	Extra Heavy	213xx	213xx	213xx	213xx
	Extra Heavy, Wide	223xx	223xx	223xx	223xx
	Light	292xx	292xx	292xx	292xx
	Medium	293xx	293xx	293xx	293xx
	Heavy	294xx	294xx	294xx	294xx
	Shaker Screen	233xx	4533xx	233xx	233xx
	Part number suffix	TL Premium Material	TL	-	-
Two Piece Pressed Steel High Capacity		EA	E,CC	-	E1
Brass Cage, One Piece, Guide Ring		CAM, AM	CA,CACM	YM	M
Brass Cage, Two Piece, Guide Flange		M	MC	BR	MB
Steel Cage, Two Piece, Guide Ring		C,CD	C,J,CC	C,J,VJ	-
Polyamide Cage, Two Piece		H	-	VCF	TVPB
Tapered Bore 1:12		K	K	K	K
Tapered Bore 1:30		K30	K30	K	K30
Carburized Steel, Complete Bearing		g	ECD	W40	W209
Carburized Steel, Inner Ring Only		g3	ECB	W401	W209B
Lube Groove & Holes Outer Ring		E4	W33	W33	S
Lube Groove & Holes Outer Ring, Holes Inner Ring		E7	W513	W33W94	SHA40AB
Holes Only Outer Ring		E3	W20	W20	SY
Holes Only Inner Ring		E5	W26	W94	H40AB
Plugs Provided For Outer Ring Holes		E42	W77	W84	H40
Combination W33, W4, W31		W507	W507	W33W4W31	-
Combination W33, W31		E4U22	W506	W33W31	-
Combination W33, W26, W31		W509	W509	W33W94W31	SH40A
Outer Ring with Extra Close Running Accuracy		P52	C04	C04	T52BN
Inner Ring with Extra Close Running Accuracy		P53	C02	C02	T52BE
Inner & Outer Ring w/ Extra Close Running Accuracy		P55	C08	C08	T52BW
Special Inspections Measures		W31	W31	W31	-
Inner Ring & Outer Ring Heat Stabilized To 200C		S11	SI	-	-
Tight Clearance		C2	C2	C2	C2
Normal Clearance	-	-	-	-	
Loose Clearance	C3	C3	C3	C3	
Extra Loose Clearance	C4	C4	C4	C4	