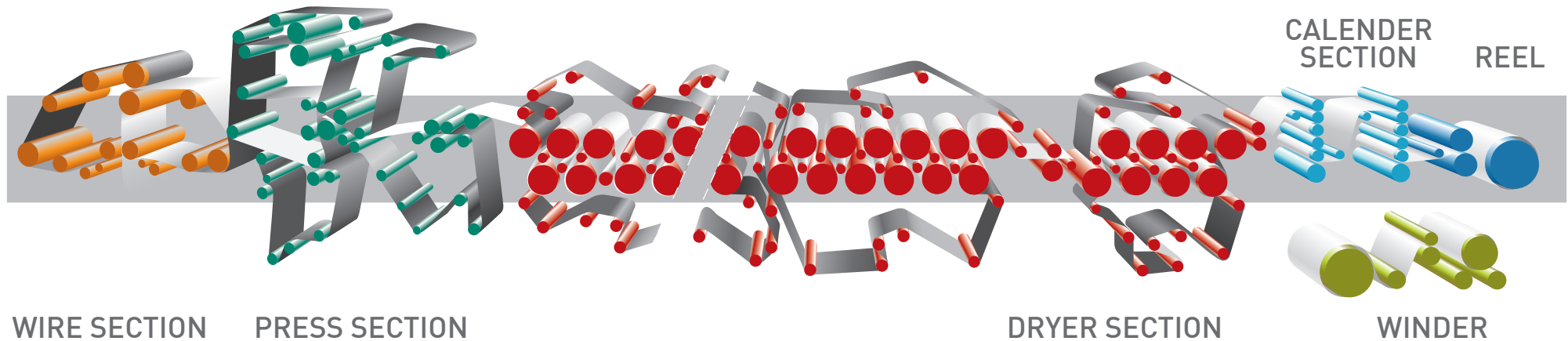


THE PAPER MAKING PROCESS

NSK

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, CALENDER



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, CALENDER SECTION



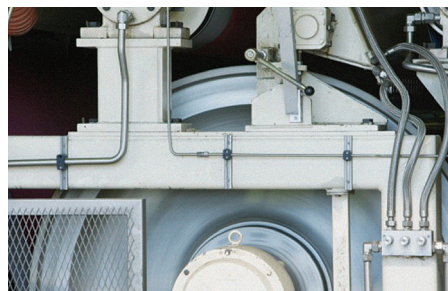
SAF HOUSING

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

USED IN: ALL SECTIONS

NOMENCLATURE – SPHERICAL ROLLER BEARINGS

Material Prefix TL: Tough and Long Life HTF: High Tough STF: Super Tough 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	Lubrication Features E3: Holes only, outer E4: Groove & holes, outer E7: Groove & holes, outer & inner E8: Outer ring with tapped holes in both faces for lifting Blank: No relubrication feature	Internal Clearance C2: Tight Blank: Normal C3: Greater than Normal Clearance C4: Greater than C3 Clearance				
TL	222	38	CAM	K	G3	E4	C3	P55S11
Basic Type 213xx: SRB, extra heavy 222xx: SRB, heavy 223xx: SRB, extra heavy, wide 230xx: SRB, light 231xx: SRB, medium 232xx: SRB, heavy, wide 233xx: SRB, shaker Screen 239xx: SRB, extra Light 240xx: SRB, light, wide 241xx: SRB, medium, wide 292xx: Spherical thrust, light 293xx: Spherical thrust, medium 294xx: Spherical thrust, heavy			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: Thru hardened bearing steel		Other Features: P52: Outer ring accuracy P53: Inner ring accuracy P55: Both ring accuracy S11: Inner and Outer Ring Heat stabilized to 200°C W31: Special Inspections Measures W507: E4, W31, S11 W509: E7, W31, S11	



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	Extra 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, Spherical Thrust	292xx	292xx	292xx	292xx
	Medium, Spherical Thrust	293xx	293xx	293xx	293xx
	Heavy, Spherical Thrust	294xx	294xx	294xx	294xx
	Shaker Screen	233xx	4533xx	233xx	233xx
Part number suffix	TL Premium Material	TL	-	-	-
	High Capacity Steel Cage	EA	-	-	-
	Brass Cage, One Piece, Guide Ring	CAM, AM	CA,CACM	YM	M, MB, MA
	Brass Cage, Two Piece, Guide Flange	M	MC	BR	-
	Steel Cage, Two Piece, Guide Ring	C,CD	CJ,CC	CJ,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 and Inner Ring	E7	W513	W33W94	SHA40AB
	Holes Only Outer Ring	E3	W20	W20	SY
	Plugs Provided For Outer Ring Holes	E42	W77	W84	H40
	Combination S11, E4, W31	W507	W507	W33W4W31	-
	Combination W33, W31	E4U22	W506	W33W31	-
	Combination S11, E7, 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 200°C	S11	SI	-	-
	Tight Clearance	C2	C2	C2	C2
	Normal Clearance	-	-	-	-
	Greater than Normal Clearance	C3	C3	C3	C3
	Greater than C3 Clearance	C4	C4	C4	C4