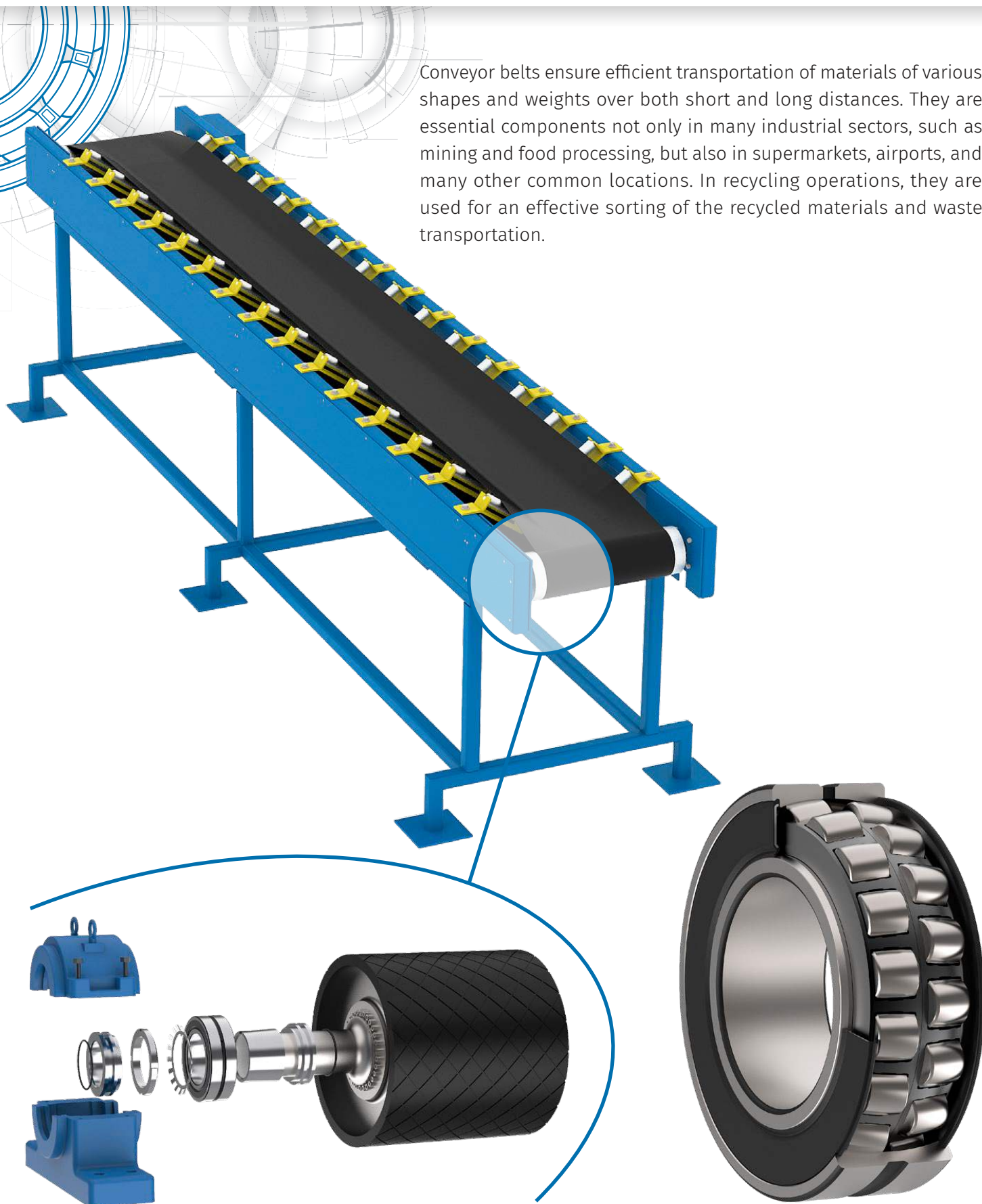


ZKL bearings for conveyors belts



Conveyor belts ensure efficient transportation of materials of various shapes and weights over both short and long distances. They are essential components not only in many industrial sectors, such as mining and food processing, but also in supermarkets, airports, and many other common locations. In recycling operations, they are used for an effective sorting of the recycled materials and waste transportation.



ZKL bearings for conveyors belts

Tension rollers of industrial conveyor belts are typically mounted using double-row spherical roller bearings. Although these bearings are not exposed to extremely high speeds or loads, they often cause conveyor shutdowns due to the extremely harsh environmental conditions. To maximize the reliability of the conveyors' operation, ZKL offers sealed spherical roller bearings with up to three times longer service life compared to open bearings.

Sealed spherical roller bearings for conveyor belts

	Bearing dimensions			Load ratings		Speed	Mass
	Inner diameter	Outer diameter	Width	Dynamic	Static		
	d [mm]	D [mm]	B [mm]	Cr [kN]	COr [kN]	RPM	m [kg]
B2-2205-2RSN TM NF	25	52	23	47,5	50,2	3600	0,2
B2-2216-2RSN TM NF	80	140	40	246	295	1200	2,5
B2-2220-2RSN TM NF	100	180	55	417	510	900	5,8
22228-2RSHK TM NF	140	250	68	822	1080	670	14,1
22232-2RSHK TM NF	160	290	80	1080	1440	600	22,7
22252-2RSHK TM NF	260	480	130	2650	3690	340	103
23134-2RSH TM NF	170	280	88	1070	1620	480	21,5
23152-2RSH TM NF	260	440	144	2560	4130	320	90,5
23164-2RSH TM NF	320	540	176	3560	6150	250	166

The bearings listed above are the most used ones for such application. To get more information regarding the entire production range of ZKL's spherical roller bearings contact your local sales representative.

Sealed double-row spherical roller bearings have the same internal geometry as their open variants. They can bear large radial and axial loads and allow limited misalignment between the inner and outer rings. Compared to open bearings, some sealed bearings have a larger width (prefix B2), which must be considered while choosing the bearing's housing or during planned replacements.

Thanks to the seal, external contamination does not enter the bearing, which significantly increases the service life. The ideal solution for the maximum service life of ZKL bearings is a three-barrier protection, which consists of:

1. sealed double-row spherical roller bearing,
2. bearing housing filled with high-quality grease,
3. external labyrinth seal.

ZKL supplies bearings already filled with high-quality plastic grease SHELL (suffix TM), so immediate assembly is possible. In many applications, it is not even necessary to change or refill the lubricant. The sealing is made from NBR (max. 120 °C, suffix 2RSN) or HNBR (max. 150 °C, suffix 2RSH). The disadvantage of the sealing is the contact between the inner ring and the sealing edge, which reduces maximum revolutions compared to standard open bearings. Maximum permissible revolutions are in the table section. ZKL sealed spherical roller bearings are available with both cylindrical and tapered bores.