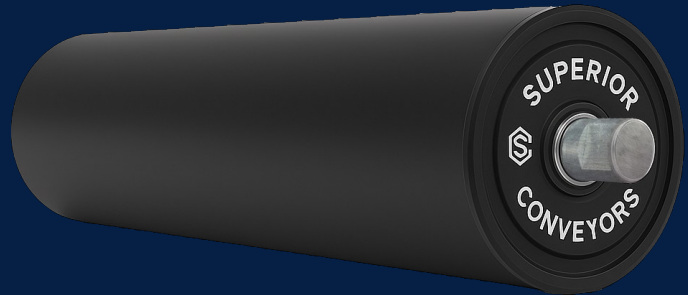




HDPE ROLLERS

High-density polyethylene
conveyor rollers



HDPE rollers are well suited to the wet, abrasive conditions on coal conveyors. They offer safer handling and quieter running, with a non-rusting shell that reduces the risk of belt damage from steel roller failures.

Run-out and noise

Radial run-out is 0.2 mm for rollers below 550 mm long. Low total indicator run-out (TIR) helps the belt travel smoothly and limits vibration. Page 2 lists the figures for longer rollers.

The HDPE shell also damps vibration at the belt contact surface. Noise levels still depend on belt speed, load and condition.

A shell that does not rust

HDPE takes up very little moisture. Its low-adhesion surface helps limit material build-up, which is useful in wet and abrasive conditions.

The shell is wear- and impact-resistant. Seals help keep water and dust out of the roller.

Handling & belt protection

HDPE designs can be around 50% lighter than steel.*

Compare complete roller weights in the sizes you use.

Less weight reduces lifting effort during change-outs and can reduce muscle-strain risk.

Seized steel rollers can wear through into razor-edged “potato-peelers”. Corroded shells can split into “pizza cutters”, leaving a sharp edge spinning.

If an HDPE roller fails, the belt may keep running until the next maintenance opportunity, subject to site assessment and monitoring.

Invest in the small components that protect your big-ticket assets.

Special specifications

Flame-retardant and antistatic rollers are available to order.

*The 50% figure is indicative of HDPE design potential, not a verified weight saving for Superior assemblies. Confirm the complete roller weights for your selected configuration.

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REQUEST A QUOTE

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ROLLER DATA & SIZES

RUN-OUT, RESISTANCE & SEALING

MEASURE	SIZE / CONDITION Dimensions in mm	GB/T 10595 REFERENCE	SUPERIOR HDPE
Radial run-out (mm)	Roller length <550	0.5	0.2
	Roller length ≥550–950	0.7	0.3
	Roller length ≥950–1600	1.3	0.7
	Roller length >1600	1.7	1.3
Rotational resistance (N)	Roller diameter ≤108	2.5	1.5
	Roller diameter >108	3	2
Axial load (kN)	Shaft diameter d ≤20	10	15
	Shaft diameter 25 ≤ d ≤35	15	20
	Shaft diameter d ≥40	20	25
Axial movement (mm)	Axial movement comparison	≤0.7	≤0.3
Water sealing (g)	Waterproof comparison	≤150	≤10

Manufacturer-supplied comparisons, not certification statements. Length bands are reproduced as published; confirm the applicable band for boundary sizes when ordering.

DIAMETER & BEARING COMBINATIONS

Pipe diameter (mm)

BEARING	89	102	108	114	127	133	152	159	194
6204	•	•	•	•	•				
6205	•	•	•	•	•	•	•		
6306						•	•	•	
6307							•	•	
6308							•	•	•
6309									•
6310									•

- Listed combination. Other specifications can be customised to customer requirements.

SPECIAL OPTIONS

Flame-retardant and antistatic rollers available to order.