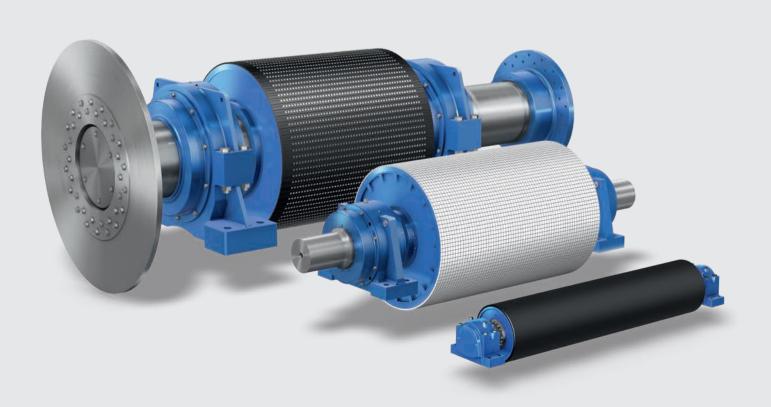


Engineered to perform. Trusted worldwide. Voith Pulleys



Your benefits

Voith Pulleys operate in the world's most demanding conveyor systems. With over 10 000 pulleys handled globally, Voith combines German engineering precision with proven performance in extreme conditions.

Through the acquisition of renowned conveyor and pulley specialists like Steller and Hese, Voith draws on more than a century of expertise in conveyor design and operation.



We offer efficient and technically optimized engineered pulleys to meet your requirements. Designs and calculations are carried out individually and depend on the ambient conditions of the areas of application.



Benefits at a glance



Precision engineering for reliable performance



Designed for extended service life to increase your ROI and maximize uptime



No project too large with diameters up to 3 000 mm and weight of 100 t



Over a century of mining expertise with industry experts in conveyor design and operation



Premium quality using highest-grade materials and components



Existing global network for immediate support when needed

Solutions for every need Our pulley portfolio

Voith offers a complete range of pulley designs, from standard to highly engineered solutions, built to meet specific system layouts, drive concepts, and operating environments. Our portfolio covers all application demands and all sizes. Engineered for maximum uptime, reliability, and long service life.

Standard



Diameter: up to 3 000 mm (9.8 ft)
Length pulley: up to 2 500 mm (8.2 ft)
Length incl. shaft: up to 6 200 mm (20.3 ft)
Shell thickness: up to 80 mm (3.5 in)

Weight: up to 100 000 kg (220 460 lb)

Engineered and full custom



Engineered pulley with custom bearing housings and calculated to fit your application. Connects easily to couplings, drive packages or brakes.

Dead-shaft



The shaft is fixed; bearings are mounted inside the pulley body. The compact design reduces installation space, lowers costs and simplifies alignment.

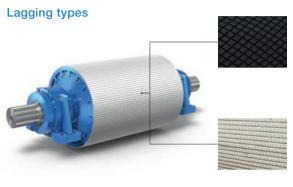
Gearless



Pulley with extensions that allow motor to be integrated directly onto the shaft. We can provide the pulley with brakes, couplings, and other accessories at the shaft ends.

Optimized for your application Lagging options

Voith offers a wide selection of lagging types to match your operational and environmental requirements. From hot vulcanized rubber to high-performance ceramic and polyurethane coatings, each option is designed to maximize grip, wear life and belt protection for your application.



Rubber: Plain or grooved

- High elasticity & good friction coefficient
- · Gentle on belt

Full ceramic

- Long service life, longterm cost efficiency
- Higher friction coefficient & best wear life



Rubber-ceramic

- High friction coefficient
- Improved abrasion resistance, enhanced wear life



Polyurethane

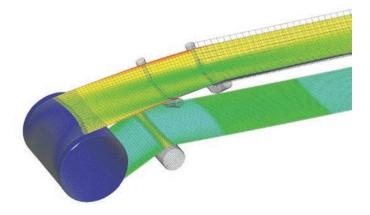
- Ideal to avoid material build-up
- Lower friction, gentle on belt

Special qualities available: no lagging, anti-static, flame-resistant, ATEX-certified

Designed with precision Voith engineering







Certified

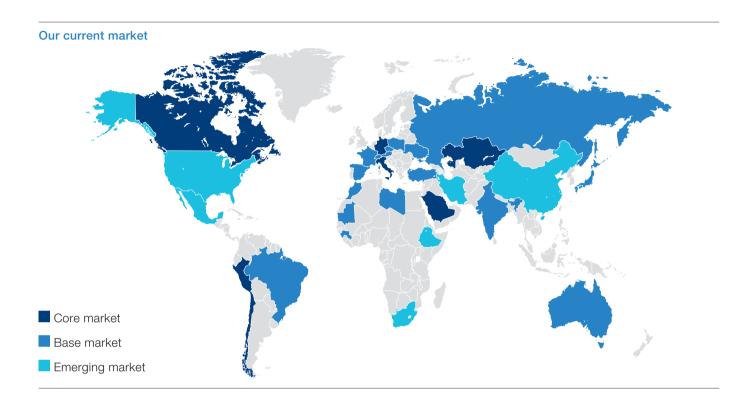
All Voith pulleys are designed in full compliance with CEMA standards and exceed them in key areas such as dimensional tolerances, weld quality, and structural safety. Our designs follow DIN engineering standards, incorporating higher safety factors for material stress and fatigue, as well as stricter weld classifications and inspection protocols.

Expertise

We have developed our own software for the calculation and engineering of our belt conveyor pulleys. It is based on over a century of expertise and various tension and deformation analysis carried out via FEM. Our software ensures reliable dimensioning and design of conveyor pulleys.

Our analysis provides an optimized pulley configuration for your requirements.

Trusted by mining operations worldwide Over 10 000 units handled and counting



Project highlights









2012 - Canada

Over multiple phases, Voith supplied 24 pulleys for an iron ore operation, engineered for continuous operation at temperatures as low as -45 °C. The pulleys, with diameters up to Ø 1 400 mm and designed for tensions up to 600 kN, ensure mechanical integrity and reliable performance under severe thermal stress.

2017 - Germany

Voith provided repair and engineering services for a Ø 2 200 mm, 49 700 kg gearless drive pulley operating under belt tensions up to 1 805 kN (St 7800). Originally part of the first gearless conveyor built in 1986, the project highlights Voith's expertise in restoring and modernizing critical components for high-capacity conveying systems.

2022 - Uzbekistan

Voith delivered 32 pulleys, with diameters up to Ø 1 600 mm and weights up to 13 000 kg, for five copper ore conveyors operating under tensions up to 1 317 kN (St 4000). The project underscores Voith's capabilities in designing heavy-duty pulleys for high-load mining applications.

2024 - Chile

Gearless drive pulley Ø 1 962 mm, 60 000 kg, supplied for a 5 000 kW conveyor. Its size and manufacturing tolerances exceed the production capabilities of most competitors, highlighting Voith's expertise in large-scale engineered solutions.

Our global reference highlights

The following list highlights some of the countries in which Voith's engineered pulleys have ensured and still deliver reliable conveyor performance in demanding applications. Our client base includes OEMs and diverse end customers across

the material handling sector, with a focus on mining and other industries. Please feel free to contact us to learn more about specific projects, countries, or technical references.

Country	500 – 1 000 mm	1 000 – 1 500 mm	>1 500 mm
Abu Dhabi	17	42	4
Australia	4	29	_
Austria	9	13	_
Belgium	12	18	4
Brazil	182	138	42
Bulgaria	7	26	_
Canada	6	27	1
Chile	21	59	44
China	18	12	-
Cuba	22	14	_
Estonia	24	39	_
Ethiopia	-	2	_
Finland	2	4	-
Germany	422	757	81
Indonesia	17	19	-
Iran	80	44	-
Italy	76	29	1
Kazakhstan	22	67	9
Kuwait	21	55	_
Latvia	2	10	-
Macedonia	21	27	4
Netherlands	69	112	24
Peru	-	7	17
Poland	13	19	_
Russia	_	_	7
Saudi Arabia	37	49	_
Serbia	18	24	-
Switzerland	31	3	8
Turkey	8	48	2
USA	-	17	2
Uzbekistan	4	26	4



Expertise for design and performance BeltGenius Conveyor Consulting

Voith: experience and expertise from a single source

Voith is a leading manufacturer of key belt conveyor components and provides a range of dedicated tools to upgrade your operations. We not only offer holistic expertise of the complete drive system, pulleys and more, we are also your onestop shop for optimum belt conveyor design and swift resolution of any issues.

Planning and design

Simulation optimizes new belt conveyors

Expert simulation and analysis ensure the best possible design of new belt conveyors. Drawing on Voith's outstanding expertise as well as its range of sophisticated and proven tools, this comprehensive concept encompasses all aspects of the conveyor system on site.

- Exclusive proprietary simulation tools
- · Backed up by field installations and academic research
- · Accurate modeling of all drive system types
- · Best-in-class component definition for design

Troubleshooting and root cause analysis

Fast resolution of operational issues

Problem-solving must be quick and targeted. Expert support boosts performance and efficiency by saving precious hours that could otherwise be lost to downtime. This dynamic solution helps you manage expanded mining operations with confidence.

- Direct line to Voith experts for speedy response
- Cut costs of interrupted operation and service callouts
- Holistic troubleshooting for belt conveyor, drive system and controls

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