

CONVEYOR SYSTEMS



Belts with EP and NN textile carcass and with steel cord (ST), carrying, return and impact idlers, frames, drive and tail pulleys, lagging and liners, splices and belt cleaning systems. Components sized by belt width, speed, tonnage and particle size, with sealed bearings and reinforced seals for continuous operation in wet, abrasive fines. Supplied as a complete assembly or piece by piece, with on-site measurement, installation and vulcanising.

SYSTEM COMPONENTS

BELT · IDLERS · FRAMES · PULLEYS



CONVEYOR BELTS

EP (polyester/nylon), NN and steel cord carcass, with covers resistant to abrasion, impact and temperature.

- Smooth, rough top and chevron
- RMA, DIN W/X/Y and special covers



IDLERS

Steel tube with sealed bearings and machined shafts; rubber or polyurethane covering.

- Carrying, return, impact, guide and traction
- Diameter and length to suit belt width



IDLER FRAMES

Structures bolted to the stringer, in flat, two-roll and three-roll trough configuration.

- Carrying, impact, return and self-aligning
- Trough angles 20°, 35° and 45°



PULLEYS

Drive, tail and bend pulleys with machined shaft and non-slip lagging.

- Plain, diamond or chevron lagging
- Wing and plain configurations

ACCESSORIES AND PROTECTION

LOADING, CLEANING AND FLOW CONTROL



IMPACT BEDS

Impact bars on an elastic base for loading and transfer points.



MAGNETIC SEPARATORS

Removal of ferrous contaminants over the belt, without interrupting the flow.



WEAR LINERS

Vulcanised rubber on a steel backing for chutes, hoppers and pipework.



VULCANISING CEMENTS

R2600 two-component adhesive for cold splicing and lining.

Service On-site measurement · installation and vulcanising on site · belt repair · spare parts for running lines

CONVEYOR BELTS

EP (polyester/nylon) and NN (nylon/nylon) textile carcass, with rubber covers selected by tensile strength, elongation and abrasion loss. Smooth, rough top and chevron versions, with antistatic (ISO 284) and flame retardant (ISO 340) options. Width, number of plies and top and bottom cover thickness are set by tonnage, particle size and drop height at the loading point.

SMOOTH

Horizontal transport and moderate inclines; the flat surface makes discharge cleaning easier.

ROUGH TOP

More grip on inclines and with fine or wet material that tends to roll back.

CHEVRON

V-shaped profile for steep inclines and loose material, with no load roll-back.

COVER GRADES

RMA · DIN 22102 · ISO 10247

Grade	Tensile strength	Elongation at break	Abrasion loss (mm ³)	Application
RMA-1	17 MPa	400 %	150	Aggregates and moderate abrasion
DIN Y	20 MPa	400 %	150	General purpose, mixed abrasion and impact
DIN X	25 MPa	450 %	120	Heavy duty: sharp material and high impact
DIN W	18 MPa	400 %	90	Severe abrasion, fines and sharp material
Grado M	24 MPa	450 %	120	Mining and heavy duty (equivalent to DIN X)

Minimum values per cover grade. The final selection is set with tonnage, particle size, drop height and material temperature.

SPLICING AND REPAIR

IN THE SHOP OR ON THE LINE

MECHANICAL FASTENERS

Splicing and repair of longitudinal tears without dismantling the line. Sealed joint with no build-up over the pulley.

HOT VULCANISING

Stepped splice by number of plies: highest joint efficiency and the longest splice life.

COLD VULCANISING

Repair of cuts and holes, and pulley lagging with two-component adhesive.



R2600 CEMENT

Two-component adhesive for industrial use: cold splicing, belt repair and bonding of rubber lagging and liners.

- 1 kg / 700 ml tin + 25 g hardener
- UN 1993 · hazard 33 · made in Brazil



SPLICING SERVICE

On-site measurement, cutting, installation and vulcanising in place, plus corrective and preventive maintenance of the line.

- Installation and vulcanising on site
- Belt repair on running lines



STEEL CORD CONVEYOR BELTS

Carcass of galvanised steel cords laid in a single longitudinal plane and embedded in high-adhesion rubber. Service elongation below 0.25 %, which shortens take-up travel and the length of the tensioning station. Suited to long centre distances, high working tension and elevating conveyors, where a textile carcass would need a ply count that stiffens the trough.

TOP COVER · DIN W / X / Y GRADE

ST STEEL CORD CARCASS

BOTTOM COVER

HIGH WORKING TENSION

ST 630 to ST 5000 N/mm grades with no increase in carcass thickness.

LOW ELONGATION

Under 0.25 % elongation in service: shorter take-up travel.

VULCANISED SPLICE

Stepped joint of 1 to 4 steps, with efficiency close to the rated strength.

LONG CENTRE DISTANCES

Fewer take-up stations and drive units on long conveyor runs.

DAMAGE MONITORING

Compatible with cord break monitoring and longitudinal rip detection systems.

PULLEY DIAMETER

Minimum pulley diameter set by ST grade and cord pitch.

ST GRADES

INDICATIVE · CONFIRMED WITH THE CONVEYOR DESIGN

Grade	Breaking strength (N/mm)	Cord Ø (mm)	Cord pitch (mm)	Splice (steps)
ST 630	630	3.0	12	1
ST 1000	1000	3.5	12	1
ST 1250	1250	4.1	15	1
ST 1600	1600	4.5	15	2
ST 2500	2500	5.8	17	2
ST 3150	3150	6.6	17	3
ST 4000	4000	7.7	20	3
ST 5000	5000	8.6	24	4

Indicative values per grade. Cord diameter, pitch and cover thickness are confirmed with working tension, pulley diameter and particle size. Usual covers from 5 + 5 mm up to 12 + 8 mm.

SPECIAL COVERS

OIL, FLAME, SPARK AND TEMPERATURE

Designation	Reference standard	Requirement	Application
MOR	ISO 1817	Limited swelling in mineral oil	Oily clinker, scrap, industrial waste
SOR	ISO 1817	High resistance to mineral and vegetable oils	Oilseeds, crushing plants, biodiesel plants
Flame retardant (K)	ISO 340 · DIN 22103	Self-extinguishing, limited flame propagation	Underground mining, coal grinding, cement plants
Antistatic	ISO 284	Surface resistance $\leq 3 \times 10^8 \Omega$	Combustible dust atmospheres with spark risk
Spark resistant	—	Cover not punctured by incandescent particles	Slag, sinter, foundry, metal recycling
T1 / T2 / T3	ISO 4195	Material at 100 °C / 125 °C / 150 °C in continuous duty	Clinker, lime, sinter, foundry sand
LT	ISO 4646	Flexibility down to -40 °C without cover cracking	Outdoor operation in cold climates

Special covers combine with the wear grade: for example DIN X flame retardant and antistatic, or DIN W oil resistant. State the material, its temperature and the operating atmosphere on the order.



IDLERS AND FRAMES

Idlers with steel tube, sealed bearings and machined shafts, balanced for continuous operation. Reinforced labyrinth seals against wet fines, and rubber or polyurethane covering options according to impact and material carry-back. Diameter, length and spacing set by belt width, trough angle and load per idler.



IDLER TYPES

CARRYING

Supports the loaded belt, in light and heavy duty versions.

RETURN

Plain or with rubber rings to shed material carried back on the clean side.

IMPACT

Rubber rings that absorb discharge energy at the loading point.

GUIDE AND SELF-ALIGNING

Corrects belt mistracking on the carrying and return runs.

TRACTION

Ribbed surface for curved conveyors and better belt steering.

HPVC

Flame retardant, antistatic compound: 30-50 % lighter, no corrosion or carry-back build-up.

IDLER FRAMES

BOLTED TO THE STRINGER



CARRYING

Flat, two-roll and three-roll trough at 20°, 35° and 45°.

IMPACT

Reinforced frame with ring idlers in the transfer zone.

RETURN

Single or V-return frame for the return run.

SELF-ALIGNING

Pivoting frame that corrects belt tracking in operation.

SIZING REFERENCE

INDICATIVE · CONFIRMED BY LOAD AND SPEED

Belt width (mm)	Idler Ø (mm)	Typical bearing	Trough configuration
500 – 800	89 – 108	6204 / 6205	Flat or two-roll trough
800 – 1200	108 – 127	6205 / 6305	Three-roll trough 20° / 35°
1200 – 1600	133 – 159	6306 / 6308	Three-roll trough 35° / 45°
1600 – 2000	159 – 194	6308 / 6310	Three-roll trough 45°

Indicative values per belt width. Diameter, idler spacing and bearing series are set with load per idler, belt speed and particle size.

PULLEYS AND LAGGING

Drive, tail and bend pulleys of welded construction, with machined shaft and taper locking bushes. Plain, diamond or chevron grooved rubber lagging to raise the friction coefficient and shed water in wet duty. Diameter, face length and lagging thickness set by installed power and belt tension.



DRIVE

Transmits torque to the belt; grooved lagging for traction under load.

TAIL

Closes the circuit at the conveyor tail, with plain lagging.

BEND

Changes the wrap angle and the belt tension.

PULLEY LAGGING

PROFILE BY TRACTION AND DUTY

PLAIN

General duty on tail and bend pulleys, at the lowest replacement cost.

DIAMOND

Diamond grooving that sheds water and fines, with a good friction coefficient.

CHEVRON

Directional V grooving for maximum traction on the drive pulley in wet duty.

WEAR LINERS

VULCANISED RUBBER ON A STEEL BACKING



PIPEWORK AND DUCTS

Internal lining that reduces wear in pipework carrying aggregates, grain and abrasive material.

- Antistatic ISO 284 · flame retardant ISO 340
- Standard thicknesses 5 mm and 8 mm

CHUTES AND HOPPERS

Vulcanised rubber plates on a steel backing for transfer and impact zones, bolted or welded onto the existing structure.

- High abrasion and impact resistance
- Lower operating noise level

SKIRTING AND GUIDES

Rubber and polyurethane profiles for sealing the loading point and guiding material on the belt.

- U profiles and double-lip skirting
- Replaced without removing the chute



PROTECTION, CLEANING AND SERVICE

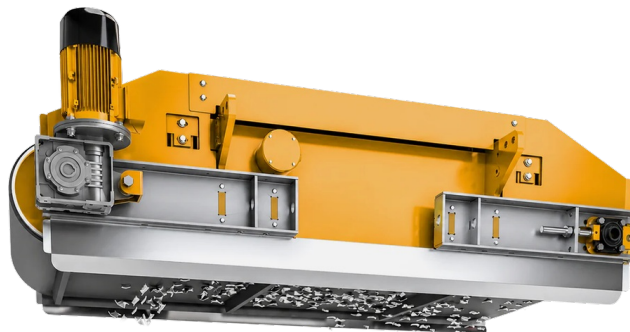
Protection, cleaning and control components for the loading point and discharge: impact absorption, metal removal, belt scraping and contaminant detection ahead of the crusher. Selection by belt width, speed and type of material conveyed.



IMPACT BED

Impact bars on an elastic base at the loading point: absorbs discharge energy, stabilises the belt and allows the skirt to seal.

- Continuous support for heavy loads
- Compatible with CEMA standards



MAGNETIC SEPARATOR

Automatic removal of ferrous contaminants over the belt, in suspended or self-cleaning motorised versions.

- Protects crushers and mills downstream
- Continuous duty, no flow interruption

BELT CLEANERS

Primary in polyurethane or tungsten carbide tipped and secondary V type, spring or torsion tensioned, for large diameter pulleys at high belt speed.

- Primary, secondary and return cleaners
- Blade replaced without removing the assembly

METAL DETECTORS

Detection of ferrous and non-ferrous metal mixed with the conveyed material, with a line stop signal before the crusher.

- Ferrous and non-ferrous detection
- Integrates with the plant control system

ON-SITE SERVICE

- On-site measurement survey
- Installation and vulcanising in place
- Belt cutting, repair and adjustment

- Idler and pulley alignment
- Liner and skirting replacement
- Corrective and preventive maintenance

SURVEY, INSTALLATION AND MAINTENANCE

- Loading and transfer point audit
- Supplied by assembly or by piece
- Spare parts for running lines

Industries Mining · Quarrying · Cement · Ports · Agribusiness · Steel · Pulp and paper

WHICH LINE DO YOU NEED TO KEEP RUNNING?

Tell us the belt width, the speed and the material you convey. We quote within 24 hours.

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WHEN THE ROCK DEMANDS MORE

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