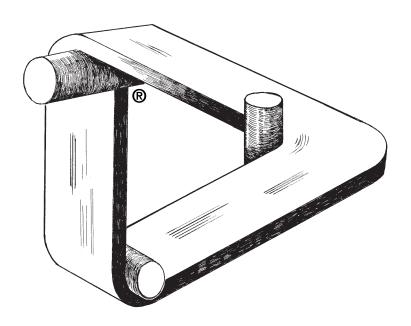
# **germanBelt**®



germanBelt ... beyond expectations







# We support your performance

germanBelt — quality without compromise

We offer a comprehensive range of conveyor belts. Our products always adhere to the highest standards. This is why quality assurance and quality management are particularly important to us. Extensive inspection, test and development methods ensure perfect service quality and excellent product properties.

Based on decades of experience in developing and manufacturing conveyor belts, german-Belt conveyor belts and conveyor systems are designed in a manner that satisfies any user's high quality and performance requirements. The germanBelt range of conveyor belts comprises fabric, steel cord, chevron and germanWell plastic belts as well as a complete range of efficiency enhancing equipment. This we guarantee with our seal of quality, "certified by germanBelt".

Quality is our promise. There can be no compromise. We provide you with high quality advice on applications, professional planning by our engineers and, of course, full service at any time. In all phases of the process, we pay the highest attention to unconditional efficiency and the best benefits for our customers.

We know how to optimise material handling processes. See for yourself!



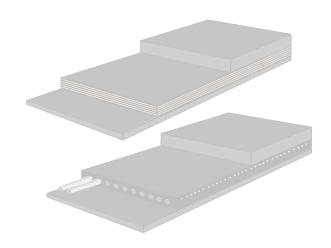


We support your performance and do not compromise on quality: our laboratory in Halle/Leipzig.

# germanBelt® conveyor belts

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Conveyor belt systems fulfil important functions in all industrial sectors. Although every conveyor system is different customers seek and require the most efficient and technically perfect solution. Tailor made to fit the user's individual requirements.

germanBelt's promise and service is, together with the user, to find, commission, maintain and repair the optimal conveyor belt solution.



# Possible fields of application

Hard rock quarries
Sand and gravel pits
Concrete factories
Cement plants
Power plants
Silos
Foundries
Salt mining
Sugar refineries

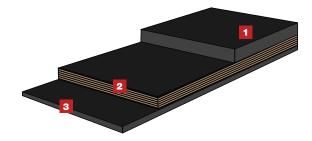
# germanBelt® fabric conveyor belts

#### **Fabric reinforcement**

Our fabric conveyor belts are reinforced by 2-5 rot-resistant plies made of synthetic EP or PP fabric. These fabrics possess a good tensile strength/weight ratio; have excellent flexibility and troughability, low elongation and high impact and chemical resistance.

#### **Structure**

- 1. Cover, load-carrying side
- 2. Carcass
- 3. Cover, return side



The Illustration shows the structure of a germanBelt fabric belt.

#### **Covers**

The carcass is protected by covers. Cover qualities or grades are defined by the belts' chemical and physical properties. Inclined systems require cleats or belts with grooved surfaces. Cover thickness depends on the properties of the transported material and loading conditions.

#### **Skim layers**

Rubber skim layers provide excellent adhesion between plies and covers, efficient force transmission and distribution of tension between the plies. They also absorb impact stress caused by falling material.



# **Highest requirements**

### Essential characteristics of germanBelt fabric belts

germanBelt conveyor belts are designed for the transport of heavy abrasive materials such as rock, ore or gravel. The covers of these belts are made of rubber that is extremely resistant to wear, abrasion and cutting. In the vulcanising process, these belts are specially treated in order to ensure low elongation properties. germanBelt conveyor belts are anti-static. Their surface resistance is far below the maximum permissible EN 20284 thresholds. They are manufactured in strengths of up to 3,150N/mm and widths of up to 3,000 mm in order to cover the widest possible field of application. Belts that are exposed to high amounts of stress are available with breakers. We support your performance.



germanBelt – certified excellence

## **Quality assurance**

As manufacturer and supplier of components for material handling and wear protection technology, we ensure that our products and services always meet the highest standards. This is why quality assurance and quality management are particularly important to us. Extensive inspection, test and development methods ensure perfect service quality and excellent product properties.

With our seal of quality, "certified by germanBelt" we guarantee to provide our customers with exemplary products and high class workmanship.



# Standard range of germanBelt fabric belts

Type N/mm	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
Number of	2											
plies		3	3	3	3	3	3	3				
				4	4	4	4	4	4	4		
						5	5	5	5	5	5	5

# **Cover grades**

Grade	Application
	Belts with defined mechanical parameters
W	anti-abrasive cover with good mechanical properties
Х	abrasion and cut resistant cover for sharp-edged or lumpy material, highest requirements
Υ	cover with good mechanical properties for standard applications
Z	cover for minor applications
	Underground mining
K	flame-retardant and anti-static for above ground and underground deployment
S	flame-retardant and anti-static for above ground and underground deployment
V	self-extinguishing and anti-static for the highest safety requirements in underground mining
	Oil and fat resistance
G	transport under conditions affected by oil or fat
A	food quality (oil, fat and temperature)
	Heat and cold resistant
R	for application at temperatures below 0°C, down to -60°C
Т	heat resistant, transport of hot material
	Acid resistant
С	transport of acidic material
Other cover materials a	nd details on request.



# germanWell® corrugated sidewall belts

By using sidewalls of heights from 40 mm to 300 mm and cleats from 35 mm to 280 mm, belt systems can be adjusted to any field of application. germanWell corrugated sidewall belts are therefore indispensable in any industry where bulk materials are to be transported vertically. Possible applications range from the transport of fine sand to lumpy materials in any field.

germanWell conveyor belts offer economic benefits and ensure safe and reliable transport. In some fields of application, their properties are superior to grooved flat belts.

Inclined transport with germanWell conveyor belts requires laterally stable conveyor belts. Lateral stability makes it possible to change a horizontal direction of travel to vertical and vice versa.



Sidewalls

This means optimal transport on the smallest place.

- VERTICAL TRANSPORT
- OPTIMISED MATERIALS TRANSPORT PROCESS
- SIGNIFICANT COST BENEFITS
- HIGH RELIABILITY





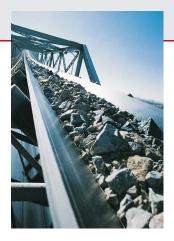


# germanWell® deflection discs

Wear resistant rubber components with dampening effect for belt gently directional control.

including precision axis, clamping sets and high-quality, low-maintenance bearings

We know the enormous stress caused by high output. High performance conveyor systems which are permanently exposed to considerable stress and work at large centre distances and slope, require reliable and wear resistant reinforcement with low elongation. germanBelt steel cord conveyor belts make it possible to build long conveyor systems with low tension. They have many advantages and have excellent tensile strength and lateral elasticity allowing deep troughs. Your benefit: increased efficiency and higher reliability.



Steel cord designs



7×7



7x19

# Possible fields of application

Underground mining Above ground mining Steel plants Power plants Hard rock quarries Tunnelling Ports

# germanBelt® steel cord belts

#### **Steel cord reinforcements**

The standard cords have been hot-dip galvanised and have diameters from 2.6 to 12.8 mm. They are manufactured in 7x7 or 7x19 designs (other designs are possible). Their design allows good rubber saturation and distribution.

#### **Structure**

- 1. Cover, load-carrying side
- 2. Steel cord carcass
- 3. Lateral reinforcements
- 4. Cover, return side



The Illustration shows the structure of a germanBelt steel cord belt.

#### **Skim layers**

A special chemical process provides excellent rubber/metal adhesion. The design of the cords leads to outstanding adhesion that surpasses any standards. Good rubber saturation and the excellent adhesion of each cord provide germanBelt conveyor belts with extraordinarily high longevity.

#### Covers

Abrasion resistance, tensile strength and elongation value of the covers depend on the cover combination's chosen quality.

### **Lateral reinforcements**

Reinforcements either consist of specific lateral steel cords with very high elasticity, or of fabric. The lateral reinforcements are worked into the carcass or the cover.



# **Cover grades**

Grade	Application
W	anti-abrasive cover with good mechanical properties
Х	abrasion and cut resistant cover for sharp-edged or lumpy material, highest requirements
Y	cover with good mechanical properties for standard applications
К	flame-retardant and anti-static for above ground and underground deployment
Other cover materials and	details on request.

Belt type	Minimum tensile strength	Cord diameter, maximum	Cord pitch ±1.5 (mm)	Minimum cover thickness (mm)	Minimum pulley diameter (mm)	Belt width (mm)									
	in N/mm					650	800	1000	1200	1400	1600	1800	2000	2200	2400
									Nι	ımber	of cor	ds			
ST 500	500	2.6	14	3	400	45	56	70	84	99	113	128	142	156	169
ST 560	560	2.8	14	3	500	45	56	70	84	99	113	128	142	156	169
ST 630	630	3.0	14	3	500	45	56	70	84	99	113	128	142	156	169
ST 710	710	3.1	14	3	500	45	56	70	84	99	113	128	142	156	169
ST 800	800	3.3	14	3	630	45	56	70	84	99	113	128	142	156	169
ST 900	900	3.8	15	3	630	40	50	63	76	89	102	115	128	141	151
ST 1000	1000	4.1	12	4	630	51	64	81	97	114	131	147	164	181	197
ST 1250	1250	4.9	14	4	800	44	55	69	84	98	112	127	141	155	169
ST 1600	1600	5.6	15	4	800	40	50	64	77	90	104	117	130	144	157
ST 2000	2000	5.6	12	4	1000	51	64	81	97	114	131	147	164	181	197
ST 2500	2500	7.2	15	5	1250	40	50	64	77	90	104	117	130	144	157
ST 3150	3150	8.1	15	5.5	1250	40	50	64	77	90	104	117	130	144	157
ST 3500	3500	8.6	15	5.5	1400	40	50	64	77	90	104	117	130	144	157
ST 4000	4000	8.9	15	6.5	1600	40	50	64	77	90	104	117	130	144	157
ST 4500	4500	9.7	16	7	1600	37	46	59	71	84	96	109	121	134	146
ST 5000	5000	10.9	17	7.5	1600		43	55	66	78	90	102	113	125	137
ST 5400	5400	11.3	17	8	1600		43	55	66	78	90	102	113	125	137
ST 5600	5600	11.8	19	8	1600		45	50	60	70	81	91	101	111	119
ST 6300	6300	12.8	20	8.5	1600			48	50	68	78	88	98	108	116



# Possible fields of application

Mining
Hard rock quarries
Sand and gravel pits
Concrete plants
Animal feed
Grain silos
Ports
Sugar refineries

# germanBelt® chevron belts

Better performance through optimised profile heights

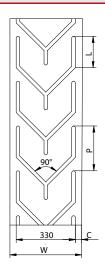
The 17 mm and 35 mm high profiles were designed to meet the specific requirements of steep angle transport.

- OPTIMISED PROFILE HEIGHTS
- OPTIMISED MATERIALS HANDLING PROCESS
- SIGNIFICANT COST BENEFITS
- WIDE RANGE OF APPLICATION
- HIGH RELIABILITY

# **Cover grades**

Grade	Application			
W	anti-abrasive cover with good mechanical properties			
X	abrasion and cut resistant cover for sharp-edged or lumpy material, highest requirements			
Υ	cover with good mechanical properties for standard applications			
G	transport under conditions affected by oil or fat			
Other cover materials and details on request.				

# **Chevron Typ GB 330**



### Profile height: 17 mm

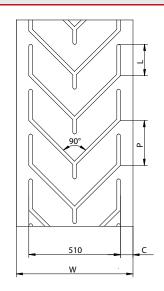
W (mm)	(mm) C (mm)		L (mm)
400	35	250	120
500	85	250	120
650	160	250	120

## Standard design:

EP 250/2 3.0 mm + 1.5 mm EP 400/3 4.0 mm + 2.0 mm



# **Chevron Typ GB 510**



# Profile height: 17 mm

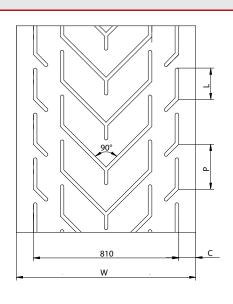
W (mm)	C (mm)	P (mm)	L (mm)
650	70	250	120
800	145	250	120
1000	245		

### Standard design:

EP 250/2 3.0 mm + 1.5 mm EP 400/3 4.0 mm + 2.0 mm

Other designs on request.

# **Chevron Typ GB 810**



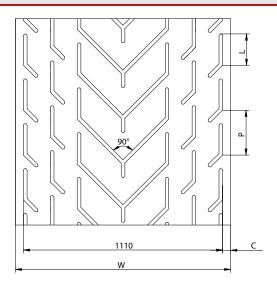
## Profile height: 17 mm

W (mm)	C (mm)	P (mm)	L (mm)
1000	95	250	120
1200	195	250	120

# Standard design:

EP 400/3 4.0 mm + 2.0 mm EP 500/4 4.0 mm + 2.0 mm EP 630/4 5.0 mm + 2.0 mm

# **Chevron Typ GB 1110**



# Profile height: 17 mm

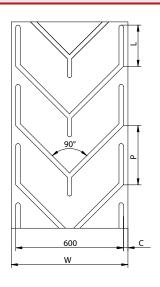
W (mm)	C (mm)	P (mm)	L (mm)
1200	45	250	120
1400	145	250	120
1500	195	250	120

# Standard design:

EP 400/3 4.0 mm + 2.0 mm EP 500/4 4.0 mm + 2.0 mm EP 630/4 5.0 mm + 2.0 mm

Other designs on request.

# **Chevron Typ GB 600 HC**

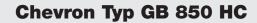


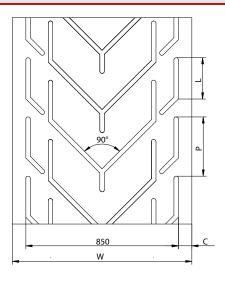
# Profile height: 35 mm

W (mm)	C (mm)	P (mm)	L (mm)
650	25	330	170
800	100	330	170
1000	200	330	170

## Standard design:

EP 400/3 4.0 mm + 2.0 mm EP 500/4 4.0 mm + 2.0 mm EP 630/4 5.0 mm + 2.0 mm





## Profile height: 35 mm

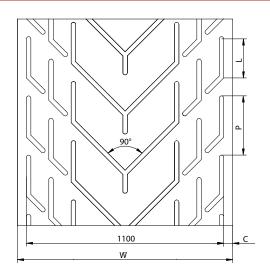
W (mm)	C (mm)	P (mm)	L (mm)
1000	75	330	170
1200	175	330	170

# Standard design:

EP 400/3 4.0 mm + 2.0 mm EP 500/4 4.0 mm + 2.0 mm EP 630/4 5.0 mm + 2.0 mm

Other designs on request.

# **Chevron Typ GB 1100 HC**



# Profile height: 35 mm

W (mm)	C (mm)	P (mm)	L (mm)
1200	45	330	170
1400	145	330	170
1500	195	330	170

## Standard design:

EP 400/3 4.0 mm + 2.0 mm EP 500/4 4.0 mm + 2.0 mm EP 630/4 5.0 mm + 2.0 mm

# **General view**

# **Services**

- Installing conveyor belts with self-supporting mobile equipment worldwide
- Installing conveyor belts and wear protection materials worldwide
- Engineering and advice
- Training of workers on installing conveyor belts
- Assignment of supervisors worldwide
- International emergency stand-by and damage elimination
- Repairs on conveyors worldwide

# **Conveyor belts**

■ Rubber conveyor belts with fabric reinforcements according to DIN 22102

#### With special covers

- Heat resistant
   Oil, grease and acid resistant
- According to FDA-standardsDirt repellent
- Flame retardantSelf-extinguishing
- High abrasion resistant

## With patterned surface for inclining conveying

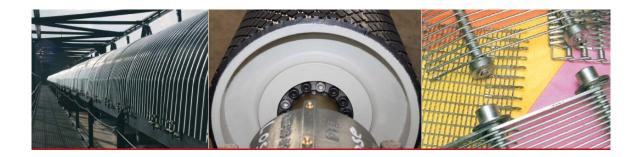
- Chevron belts with cleats 17 to 35 mm high
- Roughtop belts

#### With special carcasses

- Crossrigid conveyor belts
- Bare back conveyor belts up to 3.000 mm width
- Conveyor belts with steel and textile breakers
- Steel cord belts according to DIN 22131

#### With special covers

- Dirt repellentFlame retardant
- Self-extinguishingHigh abrasion resistant
- Elevator belts
- Pipe conveyors
- Filter belts
- Chain belts for the recycling industry
- Corrugated sidewall belts with edges up to 300 mm height
  - With fabric reinforcements
  - With steel cord carcasses
- Magnet belts
- Plastic conveyor belts
  - With various covers, e.g. PVC, PU, silicone, Teflon
  - With various surface structures, e.g. roughtop, negative pyramid, nap pattern
  - With special carcasses, e.g. crossrigid, sliding belts
  - With welded-on profiles, e.g. cleats, guiding wedge ridge, corrugated sidewalls
  - With modular structure



- Metal conveyor belts
  - Wire mesh belts
  - Eyelink belts

- Special wirelink belts
- Plate conveyors

# **Accessories and systems**

- Covering systems for conveyors
  - Galvanised steel

- Polyester fiberglass
- Rubber scraper and skirting (germanLine®)
- Drive motors and gears
- Impact bars and wear resistant components (germanShock®)
- Elevator buckets and accessories
- Deflection discs (germanWell®)
- Belt guiding systems (germanLine®)
- Splicing and repair materials for conveyor belts (germanBond®)
- Rubber profiles (germanWell®)
  - Cleats up to 280 mm height
  - Sidewalls up to 300 mm height
  - Guiding wedge ridges
- Small conveyors and feeding conveyors for bulk material and piece-goods
- Mechanical fasteners
- Screening panels
  - Wire screens
- Polyurethane screens
- Rubber screens
- Accessories for screening machines
- Pulleys (germanBelt® Steel)
  - Drive pulleys
- Link pulleys
- Bend pulleys
- Snub pulleys
- Pulley lagging materials, smooth and patterned (germanGrip®)
  - Rubber
  - Ceramics
  - Polyurethane
- Idlers and idler sets (germanBelt® Steel)
- Wear resistant materials (germanLine®)
  - Rubber
  - Ceramics
  - Polyurethane



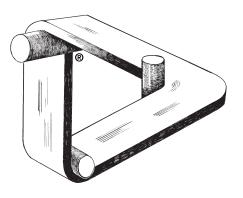
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