

Logistics


siegling
belting



Siegling – total belting solutions

forbo

MOVEMENT SYSTEMS



A reliable, quick route to the market

Due to the widespread reduction in traditional warehousing and much lower stock levels in supply chains, lead times from production to the consumer are increasingly shorter.

So accurate order picking and distribution are increasingly playing a key role in a company's success.

This places high demands on the performance and reliability of systems and requires first-class components.

Specialised research in close co-operation with users and OEM's, ensures that Forbo Siegling products give maximum performance in the logistics industry.

- They are totally reliable for all types of conveying.
- They can cope with very high demands when conveying different types of goods.
- They are particularly economical to operate.

They are used in all sorts of very different applications. So please draw on the competent experience with applications your Forbo Siegling contact person has to offer.

24 hour service
24

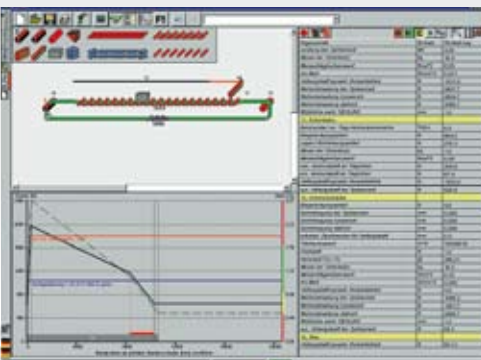


Reliable fitting: With the B_Rex calculation programme

B_Rex means that designers and users can simulate nearly every possible conveyor configuration using Forbo Siegling conveyor and power transmission belts.

So calculating how to fit conveyors and belt drives is much easier, quicker and more accurate.

The B_Rex page under www.forbo-siegling.com provides more detailed information on this.



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Detailed information on special applications and extra products can be found in the following Forbo Siegling brochures:

Siegling Belting at Airports

Ref. no. 242

Siegling Transtex Conveyor belts

Ref. no. 214

Siegling Transilon Round belts

Ref. no. 229

Siegling Transilon · Siegling Proposition

Conveyor and timing belts

for drag band conveyors

Ref. no. 232

ATEX-compliant Processing belts

Ref. no. 112

Amp Miser™ · Energy-saving Conveyor belts

Ref. no. 238

Siegling Prolink Modular belts

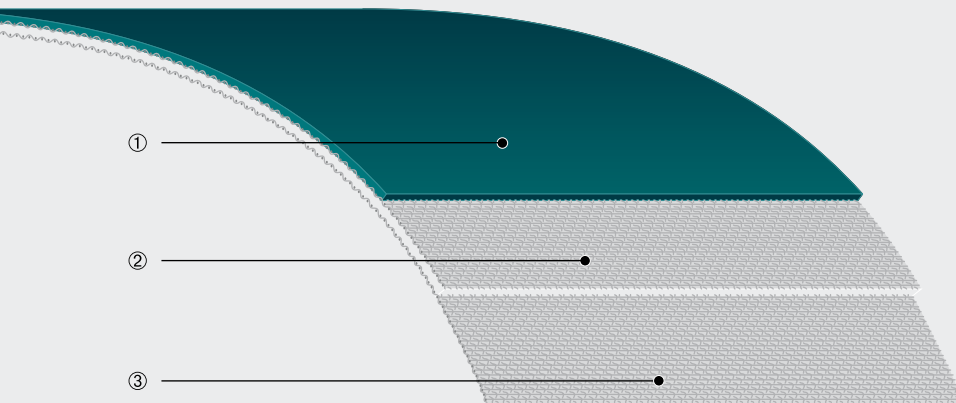
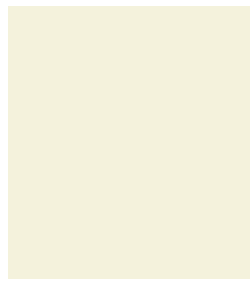
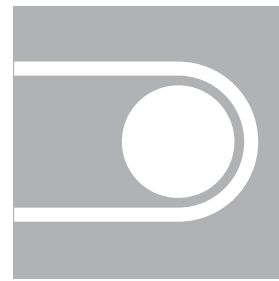
Ref. no. 800



MOVEMENT SYSTEMS

siegling transilon

Conveyor and processing belts
for dependable conveying



Siegling Transilon product structure

① **Top face** | Various coating materials, thicknesses and patterns, as well as the chemical, physiological and mechanical properties of the belt influence the grip on the goods conveyed.

② **Tension member** | The use of different special fabrics substantially influences the belt's suitability to the application. Belt tracking, elongation under force behaviour, electrostatic properties, how flat the belts are, knife edges and how much they curve all depend directly on the fabric's structure.

③ **Underside** | Different underside types determine the level of noise, energy consumption as well as wear and tear in the belt and whether it can be used for sliding or rolling support.

The properties

The advantages

low elongation	▶	short take-up ranges, space-saving
longitudinally flexible	▶	small drum diameters possible
Dimensions do not alter	▶	maintenance-free, no re-tensioning
low noise during operation	▶	improved working conditions
durable	▶	economical operation
lightweight with low overall thickness	▶	easy to handle/to put into operation

From robust all-rounders to
high-tech specialists:

The Siegling Transilon range for
logistics has a huge selection of types
for the most varied of conveying tasks.

High performance and economical to
use, they support smooth operation in
all logistics processes.

Horizontal conveying

Even seemingly simple conveying jobs require numerous different belt properties.

For different goods to be conveyed, speeds, types of reversing, stop and go and accumulation operation and other operating conditions, Forbo Siegling supplies ideal belt types.



Telescopic conveyors
(at the top left)
are suitable for counter bending and can also cope with high point loads.

Accumulation
(bottom left)
requires very smooth, durable surfaces.

Curved conveying

Forbo Siegling's curved belts are suitable for all types of belt tracking systems and are used on the conveyors of many renowned manufacturers. Due to almost completely automatised manufacturing processes Forbo Siegling can guarantee that geometric accuracy is adhered to when supplying fabricated belts.

The manufacture of **curved belts** from several segments means optimum load distribution in the belt so that even heavy goods can be conveyed reliably.





In **cross belt sorters** high acceleration means extremely high friction coefficients in the belt's top face.

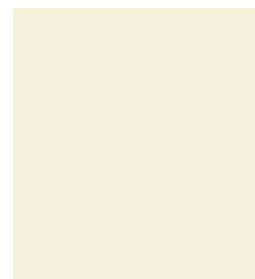
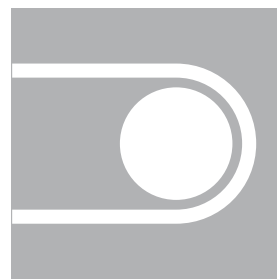
Collection and distribution

When using pushers and dischargers, the lateral stiffness of the belt guarantees it is flat and is directionally stable. Very smooth, tough surfaces make transferring and discharging the goods conveyed possible.

By contrast, cross belt sorters require very thin, flexible belts with high surface friction coefficients. With a special type of tension member, power consumption is very low.



In **merges** the belts that operate in a set, are usually tensioned in one go. This requires particularly low length tolerances. High friction coefficients on the top face guarantee precise transfer to the sorter.

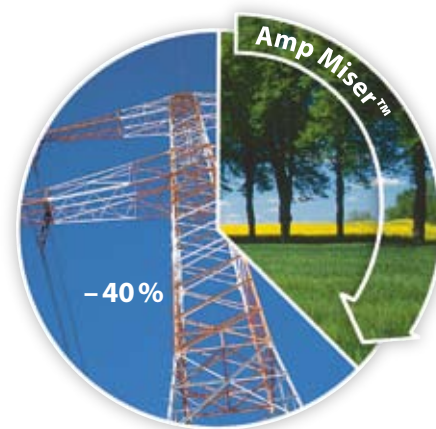


Energy-saving conveyor belts

Forbo Siegling's new Amp Miser™ conveyor belts have an innovative smooth layer and are particularly flexible.

Depending on the conveyor's design and load placed on it, you can reduce your conveyor's energy consumption by up to 40%.

- Lower operating costs
- Fewer CO₂ emissions
- Longer conveyors with just one drive possible
- Lower noise emissions, by about 3 dB



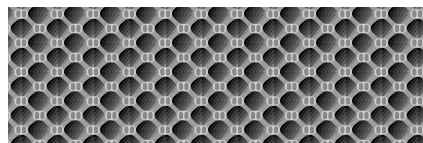
Inclined conveying

Even with smooth belt surfaces the goods can be conveyed on a slope. The conveying angles that can be used here depend on the type of goods, the top face coating and external influences such as dust, moisture etc.

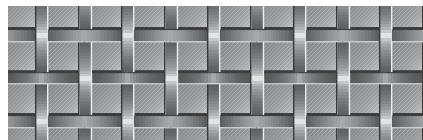
For larger conveying angles and when conveying small components and bulk goods, Forbo Siegling supplies belts with patterns or lateral profiles.



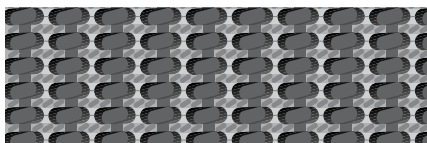
Rhomboid pattern (Scale 1:2)



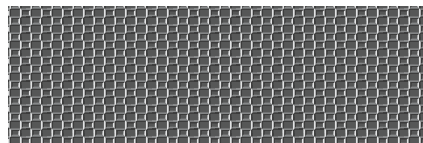
Coarse textured surface (Scale 1:1)



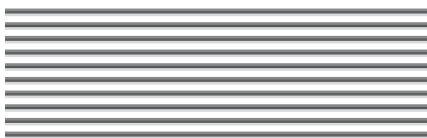
Lattice pattern (Scale 1:1)



Anti-skid pattern (Scale 1:1)



Normal textured pattern (Scale 1:1)



Longitudinal groove (Scale 1:1)



Check-in pattern (Scale 1:4)



Forbo Siegling has developed and optimised a variety of **surface patterns** for very different applications. With Siegling Transilon patterned belts an angle of incline of up to 30° can be achieved without profiles.

Greater safety with ATEX-compliant processing belts

If required Forbo Siegling can supply belts that are permitted for use in explosive atmospheres.

As we continually add to our ATEX product range, please ask your Forbo Siegling contact person about the types currently available.

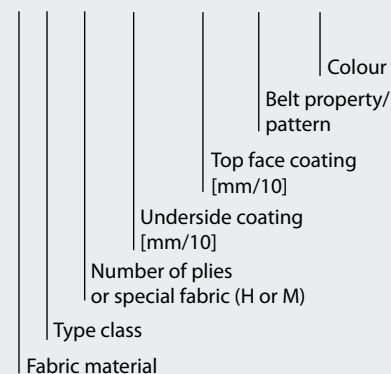
Of course we are also available to advise our customers personally on current and future aspects of ATEX.

Product range Logistics

			Technical data, properties and recommendations, applications	Article no.	Overall thickness approx. [mm]	Weight approx. [kg/m ²]	Effective pull at 1% elongation (k _{1%} relaxed) [N/mm width]*	d _{min} approx. [mm]**	Permissible operating temperature [°C]
E	5/2	0/V5	green	900016	1.95	2.3	4.5	25	-10/+70
E	5/2	0/V5H MT	black	906176	1.9	2.2	4.5	40	-10/+70
E	5/2	0/V5 NP-SE	black	999802	2.2	2.2	3	40	-10/+70
E	8/2	0/U10 S/LG	green	904358	2.2	2.2	8	40	-30/+100
E	8/2	0/V5 S/GL	black	906343	2.1	2.35	8	60	-10/+70
E	8/2	0/V5H S/MT	black	996141	2.2	2.5	8	50	-10/+70
E	8/2	TX0/V10H MT-SE-AMP	black	906672	2.6	2.8	8	60	-10/+50
E	8/2	TX0/V15 LG-SE-AMP	black	906673	3.0	3.2	8	60	-10/+50
E	8/2	U0/R10 LG	black	906630	2.5	2.3	8	40	-30/+100
E	8/2	U0/U2 MT-C-SE ¹⁾	black	906391	1.2	1.4	6.5	40	-30/+100
E	8/2	U0/V/U2H MT	green	900170	1.6	1.8	8	40/60 ²⁾	-10/+70
E	8/2	U0/V/U2H MT-SE	black	906401	1.65	2.0	7	40/60 ²⁾	-10/+70
E	8/2	U0/V5	green	900025	2.2	2.5	8	40	-10/+70
E	8/2	U0/V5H MT	black	900026	2.2	2.5	8	50	-10/+70
E	8/2	U0/V5H MT-SE	black	999967	2.25	2.7	6.5	60	-10/+70
E	8/H	U0/V6 NP	black	906386	1.85	1.6	12	20	-10/+70
E	8/2	U0/V7 SG	black	906286	2.3	2.45	8	40	-10/+70
E	8/2	U0/V10 SG	green	900086	2.6	2.85	8	60	-10/+70
E	8/2	U0/V10H-M-SE ¹⁾	black	906538	3.1	3.6	7	60/90 ²⁾	-10/+70
E	8/H	U0/V10S LG	black	906446	2.15	2.1	12	40	-10/+70
E	8/2	U0/V15 LG	green	900199	3.1	3.4	8	60	-10/+70
E	8/2	U0/V15 LG	black	900275	3.1	3.4	8	60	-10/+70
E	8/2	U0/V15 LG-SE	black	906313	3.1	3.4	7.5	60	-10/+70
E	8/2	U0/V20 AR	green	900037	4.9	4.0	8	40/60 ²⁾	-10/+70
E	8/2	U0/V20 AR	black	900087	4.9	4.0	8	40/60 ²⁾	-10/+70
E	8/2	U0/V20 AR-SE	black	999532	4.9	4.2	7.5	60	-10/+70
E	8/2	U0/V80 CH-SE ¹⁾	black	906277	8.2	4.4	8	60/120 ²⁾	-10/+70
E	8/2	U0/V80 R80-SE	black	996121	8.2	4.7	8	60/120 ²⁾	-10/+70
E	12/2	0/UH	green	906509	1.45	1.5	14	40/60 ²⁾	-30/+100
E	12/2	0/U2 MT-C-SE	black	906479	1.85	1.9	6.5	40	-30/+100
E	12/2	U0/U0 FDA	transparent	900040	1.4	1.4	6.5	60	-30/+100
E	12/2	U0/U2-C FDA	green	900041	1.85	2.0	6.5	60	-30/+100
E	12/2	U0/0/U0	anthracite	906458	2.05	2.2	13	60	-10/+70
E	12/2	U0/V/U0 SE	black	999903	2.0	2.3	10	90	-10/+70
E	12/2	U0/V/U4 GSTR-C	black	999979	2.4	2.3	6.5	60	-10/+70
E	12/2	U0/V3-C	green	900044	2.3	2.7	6.5	60	-10/+70
E	12/2	U0/V3 MT-C	black	900264	2.3	2.7	6.5	60	-10/+70
E	12/2	U0/V6 GSTR-C-SE	black	906495	2.55	2.7	6.5	30/60 ²⁾	-10/+70
E	12/2	U0/V7	green	900045	2.8	3.3	11	60	-10/+70
E	12/2	V5/V10 STR/GL	green	900053	3.25	3.9	14	60	-10/+70
E	15/M	V1/V10H MT	green	900324	5.0	5.4	12	125	-10/+70
NOVO		25 HC	black	900195	2.5	1.3	12	40	-10/+120
NOVO		40 HC	black	900221	4.0	2.2	12	70	-10/+120
NOVO		60 HC	black	900286	5.5	3.1	12	120	-10/+120

Type key for Siegling Transilon conveyor and processing belts

E 8 / 2 U0 / V5H MT black



Tension member types

E Polyester

Construction

1, 2, 3 Number of fabric plies
H HiTech-fabric
M Solid-woven material
NOVO Polyester non-woven

Coatings

V PVC
VH Hard PVC
VS Soft PVC
U Urethane
UH Hard urethane
O Uncoated
U0 Impregnated
R High Grip
TX0 Texglide

siegling transilon

conveyor and processing belts

	Horizontal conveyors	Telescope conveyors	Live roller conveyors	Pre-sorters with in- and outfeed merges	Carrier cell belt sorters	Accumulation/discharge	Coding	Inclined conveying	Curved conveyors	Highly-conductive (HC)	Flame-retardant (SE)	Check-in
	●								●			
	●	●				●			●		●	
				●	●			●				
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For every type listed a data sheet with all relevant technical information is available on request.

Newly developed product innovations are being added to the Siegling Transilon product range constantly to meet the requirements of the market.

The adjacent table was correct at the time of going to press. Please visit www.forbo-siegling.com to check the latest data and application examples.

* Established in line with ISO 21181:2005

** Minimum drum diameters were determined at room temperature and do not apply to conveyor belts with mechanical fasteners. Lower temperatures require larger drum diameters. Belts with profiles or sidewalls may require larger drum diameters. Please see brochure ref. no. 318, Siegling Transilon Technical Information 2.

- Yes
- On request

- 1) On request
- 2) Without/with counter-bending

Top face patterns

AR	Anti-skid pattern
CH	Check-In pattern
GL	Smooth surface
GSTR	Coarse textured pattern
LG	Longitudinal groove
MT	Matt surface
NP	Inverted pyramid pattern
R	Rhomboid pattern
SG	Lattice pattern
STR	Normal textured pattern

Belt properties

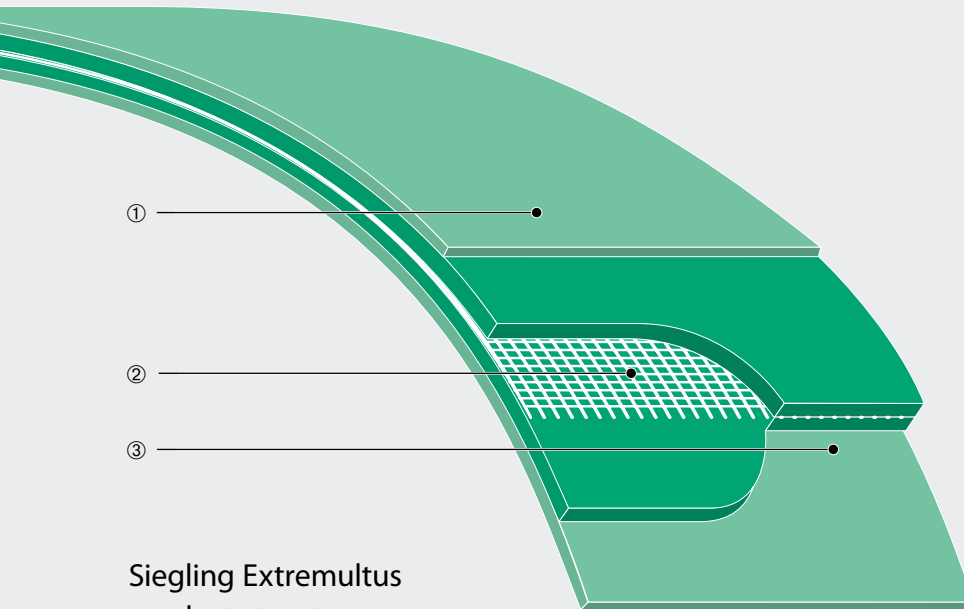
AMP	Amp Miser
C	Laterally flexible, suitable for curved belts
FDA	FDA-compliant
HC	Highly-conductive
M	Particularly stiff laterally
S	Very low noise
SE	Flame-retardant



MOVEMENT SYSTEMS

siegling extremultus

Power transmission belts for live roller conveyors



Siegling Extremultus product structure

- ① **Friction layer** | Rubber elastomer or urethane.
- ② **Tension member structure** | with tension member made of polyester or aramide fabric or polyamide belt (not shown).
- ③ **Friction layer** | Rubber elastomer or urethane.

The properties

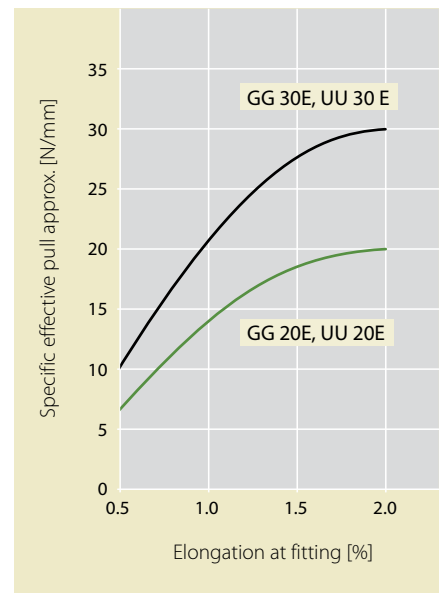
endless splicing without adhesives*	▶	short fitting times
extremely flexible	▶	very small drum diameters possible
does not absorb moisture*	▶	consistent tension, independent of ambient conditions
minimal flexing	▶	low energy consumption

Siegling Extremultus live roller drives are easy to clean and resistant to most oils, grease and many solvents. *Applies to A and E types.

The advantages

The combination of tension member and coating gives the belts its special profile of properties – customised to the type of conveyor and each type of drive task.

The tension member consists of polyamide or alternatively of polyester or aramide fabric embedded in a thermoplastic intermediate layer. Highly elastic elastomer or urethane provide the coating materials.



Live roller drives specific effective pull as a function of elongation at fitting

Product range
Logistics

Technical data, properties and recommendations	Article no.	Overall thickness approx. [mm]	d _{min} approx. [mm]	Nominal effective pull, approx. [N/mm belt width]	Nominal working elongation [%]	Elongation at fitting [%]	Weight approx. [kg/m ²]	Permissible operating temperature [°C]	
E types – polyester fabric tension members									
GG 20E-20 NSTR/FSTR	grey/black	822145	2.0	24	20	2.0	0.3 – 2.0	2.2	-20/+70
GG 20E-20	green	822052	2.0	24	20	2.0	0.3 – 2.0	2.15	-20/+70
GG 30E-32 FSTR/FSTR	black	822118	3.2	40	30	2.0	0.3 – 2.0	3.55	-20/+70
GG 30E-32	green	822051	3.2	40	30	2.0	0.3 – 2.0	3.4	-20/+70
UU 20E-16 FSTR/FSTR	green	822055	1.6	30	14	2.0	0.3 – 2.0	1.85	-20/+70
UU 30E-20 FSTR/FSTR	green	822133	2.0	30	20	2.0	0.3 – 2.0	2.2	-20/+70
UU 30E-32 FSTR/FSTR	green	822105	3.2	60	20	2.0	0.3 – 2.0	3.55	-20/+70
TG 30E-30	black/green	822058	3.0	40		2.0	0.3 – 2.0	3.2	-20/+70
A types – aramide fabric tension members									
GG 25A-20	blue	822042	2.0	30	25	0.5	0.3 – 0.8	2.25	-20/+70
UU 15A-17 FSTR/FSTR	green	995473	1.7	24	15	0.5	0.3 – 0.8	1.9	-20/+70
P types – polyamide belt tension members									
GG 14P-30	green	850324	3.0	30	14	2.0	1.5 – 3.5	3.4	-20/+80

E Power transmission belts with polyester fabric tension members can transmit high levels of effective pull and have a very good price/performance ratio.

With different fittings, they are the optimum solution for almost all applications.

- They are the ideal combination of elastic modulus and damping,
- are made endless without any adhesives (short fitting times),
- are simple to handle,
- have short take-up ranges.

A Power transmission belts with aramide fabric tension members are designed for heavy duty service.

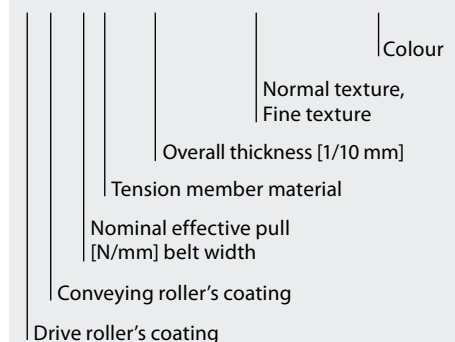
- The high elastic modulus means maximum power transmission,
- very short take-up ranges,
- are made endless without adhesives,
- require special design and specific handling.

P Power transmission belts with polyamide tension members are laterally stiff and have good damping properties.

- They have maximum damping properties,
- are made endless with adhesive,
- strong edges.

Type key for Siegling Extremultus high efficiency flat belts

UU 15A - 17 FSTR/FSTR green
GG 20E - 20 NSTR/FSTR grey/black
GG 14P - 30 green

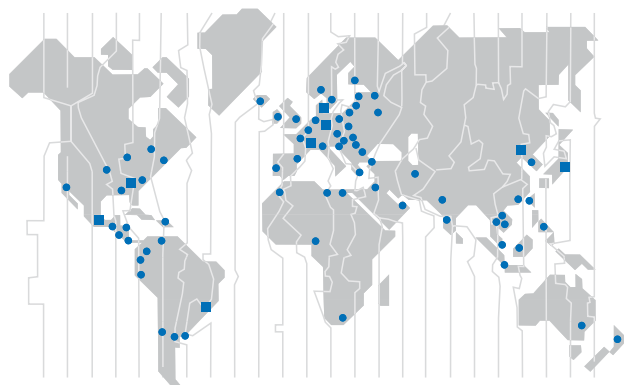


- A** Aramid
- E** Polyester
- G** Rubber/elastomer
- P** Polyamide
- U** Urethane

Siegling – total belting solutions

Committed staff, quality-orientated organisation and production processes ensure the constantly high standards of our products and services. The Forbo Siegling Quality Management System is certified in accordance with DIN EN ISO 9001.

In addition to product quality, environmental protection is an important corporate goal. Early on we also introduced an environmental management system, certified in accordance with ISO 14001.



Forbo Siegling Service – anytime, anywhere

In the company group, Forbo Siegling employs more than 1800 people worldwide. Our production facilities are located in eight countries; you can find companies and agencies with stock and workshops in more than 50 countries. Forbo Siegling service centres provide qualified assistance at more than 300 locations throughout the world.