siegling
belting

THE FULL BELTING SCOPE FOR THE **GYPSUM INDUSTRY**

Siegling – total belting solutions

forbo
MOVEMENT SYSTEMS

A ONE-STOP SOURCE OF THE FULL BELTING RANGE FOR THE GYPSUM INDUSTRY

When you need to produce top quality despite pressure on costs, Forbo Siegling delivers a one-stop source of products and services.

Reliable, state-of-the-art belting products in excellent quality help you to achieve the potential of your production machinery to the full and minimize scheduled and unscheduled downtime.

Additional products, such as splicing tools, make handling easier and the application more efficient.

From advice to fitting to after sales service, Forbo Siegling offers a comprehensive range of services and consistent supervision by experienced engineers with thorough knowledge of the application concerned.

A one-stop shop means you benefit from innovative, high quality products from four outstanding product groups, dedicated, reliable employees and a tool range with an excellent track record.

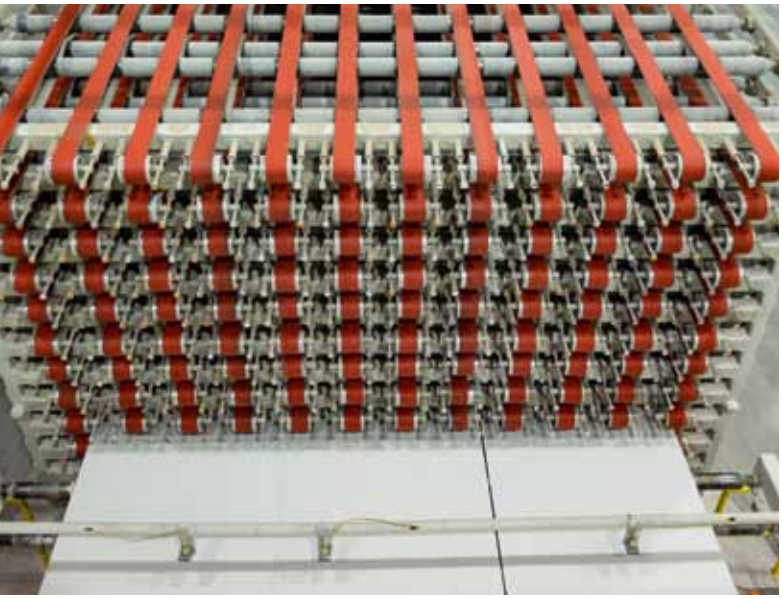
Innovative, reliable belting products

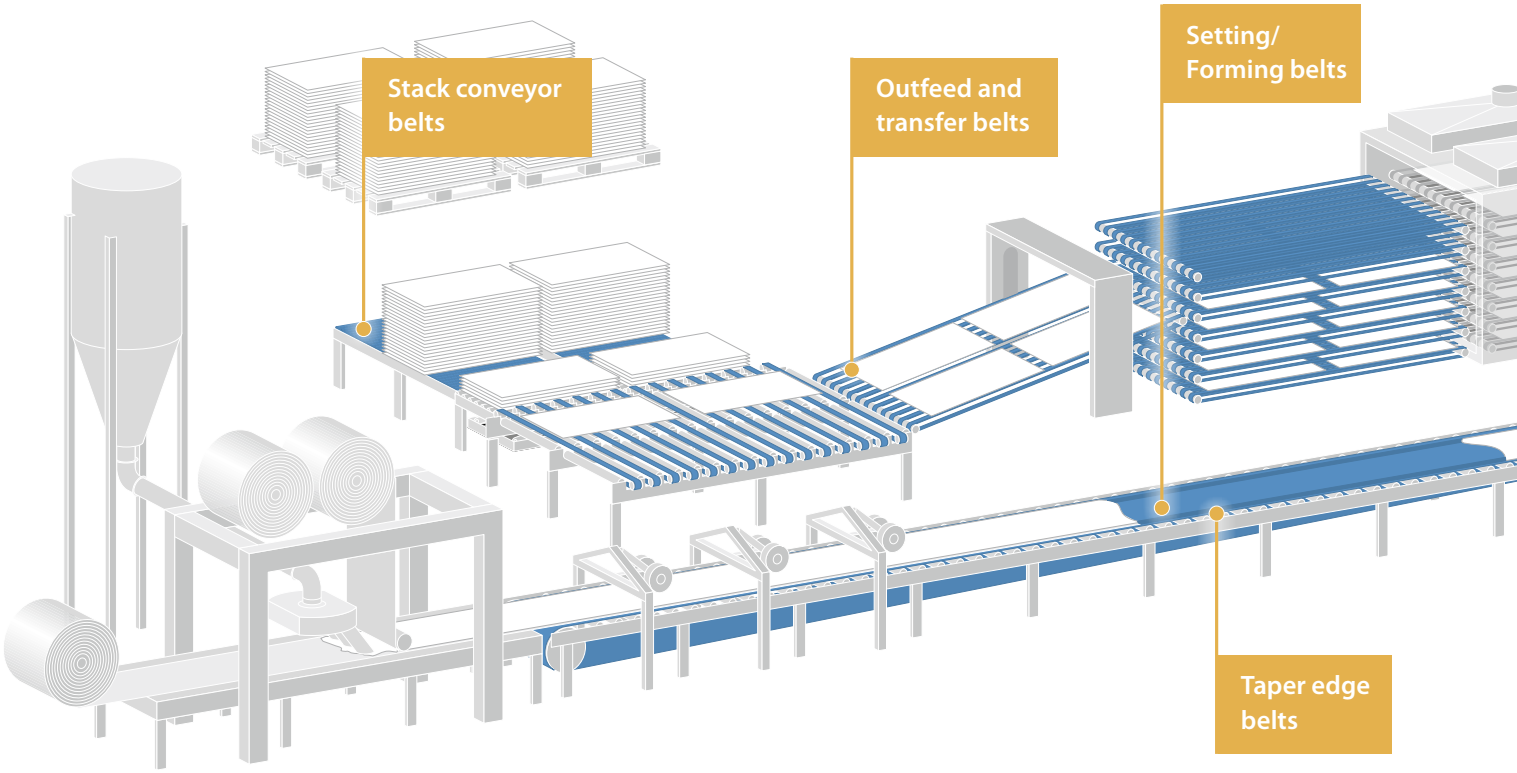
Tools, processes and instructions

Comprehensive application-driven expertise

A whole host of services

ISO 9001 certified

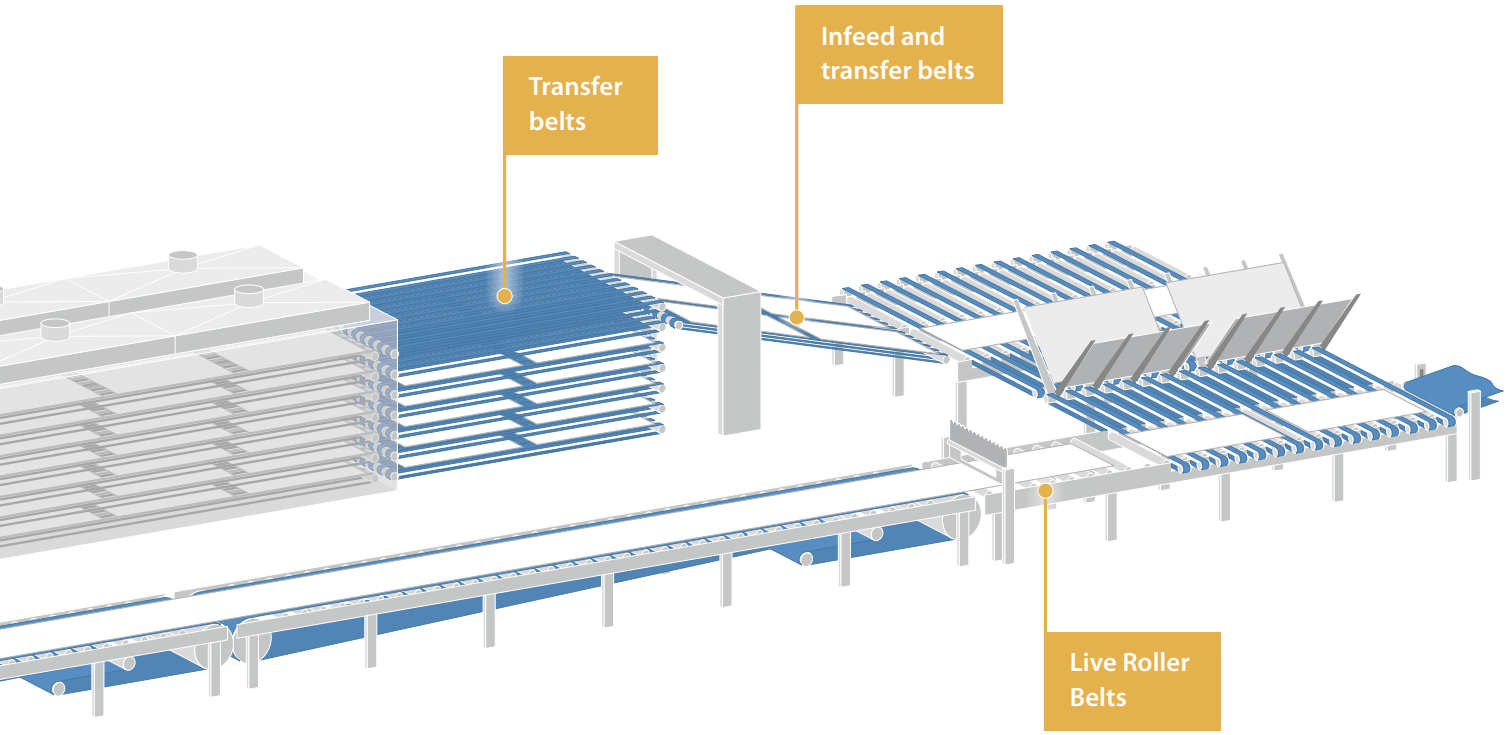



Stack conveyor belts
Outfeed and transfer belts
Setting/ Forming belts
Taper edge belts

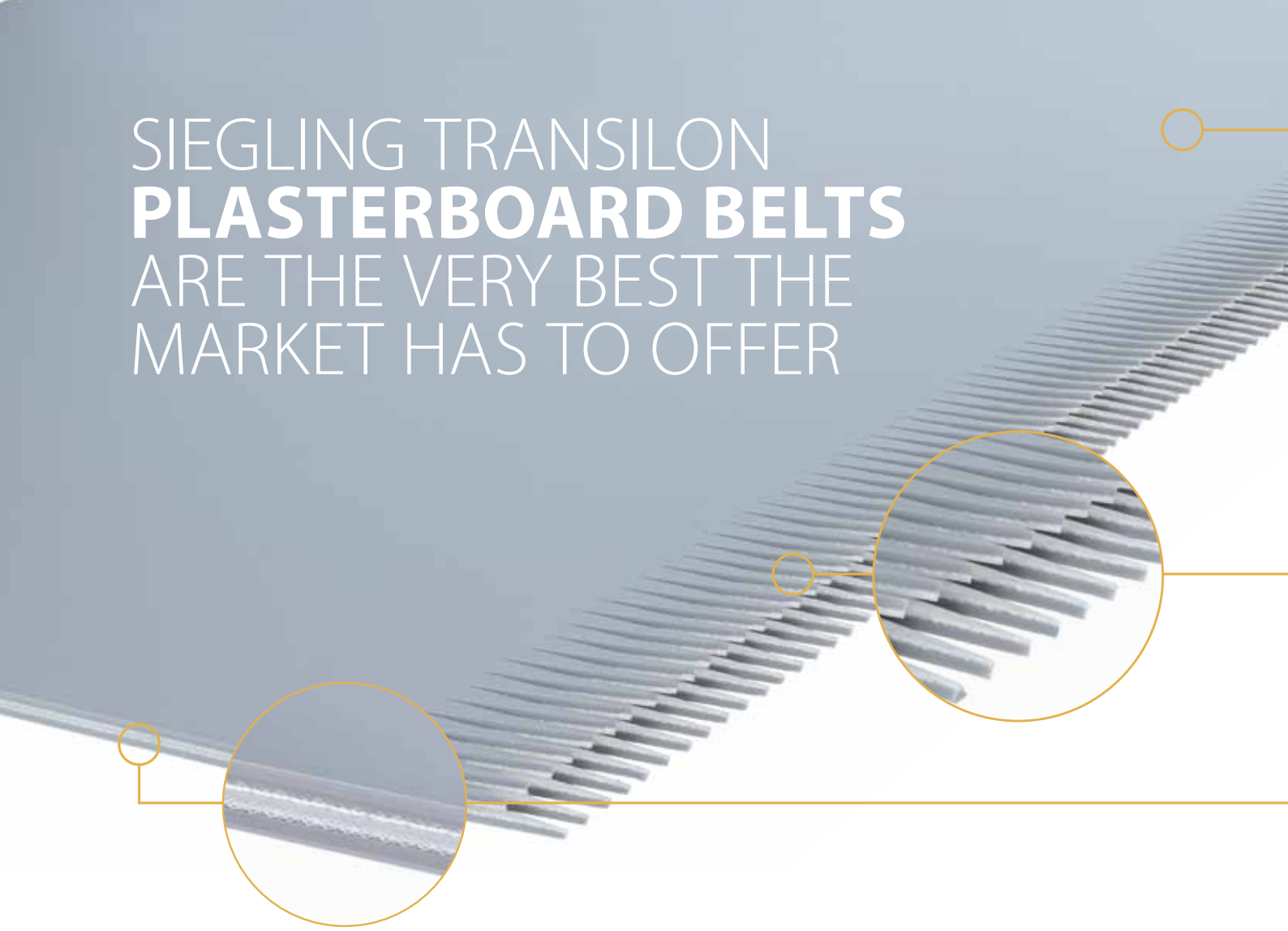
SIEGLING BELTING
THE RIGHT SPECIALISTS
FOR EVERY STEP

As experts in material flow and intralogistics we have an extensive portfolio of belting products for industrial applications. Standard products and special developments (such as our plasterboard belts) are part of a wide range geared to the industry to help you get the best out of your machinery.

We have numerous belts with different characteristics for each plasterboard and gypsum fiberboard manufacturing process – tailored to your technology and processing parameters. Our engineers can advise you in more detail.



SIEGLING TRANSILON **PLASTERBOARD BELTS** ARE THE VERY BEST THE MARKET HAS TO OFFER



At first glance you might think this is a bold claim to make. But we're not only confident it's true, we have proved it with dozens of installations on all continents. After the market launch in 2012 most of the major players in the gypsum board industry – both OEMs and end-users – trust in Forbo's expertise.

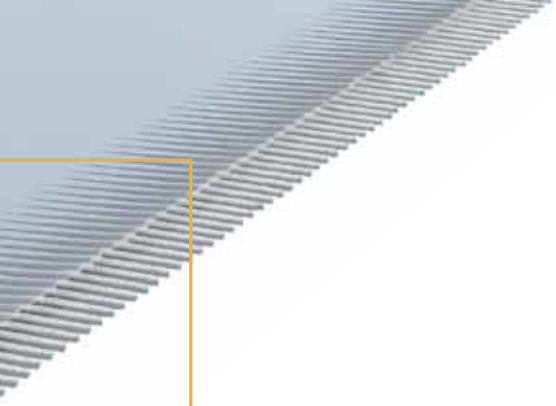
In the past, rubber belts and thick high-maintenance PVC belts were used as forming belts in plasterboard production. Forbo Siegling has replaced these thick belts with a 9 mm maintenance-free Siegling Transilon PVC belt including high-tech fabric tension members.

The success of this product is based on:

- Highly accurate thickness tolerances, also around the splice
- Superb belt tracking
- Extremely flat and hard surfaces
- Top abrasion resistance
- Superb friction values
- Maintenance-free, low elongation
- Excellent lateral stiffness

These characteristics are essential for the curing process and make this belt a unique product for the market. What's more, fast and reliable splicing and easy repair of the belt's surface are true solution-driven arguments for end-users. Scratches and holes from the production process in the old rubber belts led to vast quality problems occurring in the gypsum boards and were almost beyond repair. The new Siegling Transilon PVC belt means that repairs take only a matter of a few minutes without requiring any trained personnel.

The belts are tensioned and tracked only once during the run-in period. Due to the two-ply, high-tech fabric tension member there's no need to re-tension them every few days.



Easy to repair with repair-friendly, 2.8 mm thick hard PVC coating.

Fast and reliable splice with an excellent, flat surface. No special tools required.

Time required for a belt exchange:

2 days
Siegling Transilon plasterboard belt

Up to 5 days
Conventional rubber belts

Thin but strong double-ply, extremely strong special polyester fabric, low elongation and very laterally stiff.

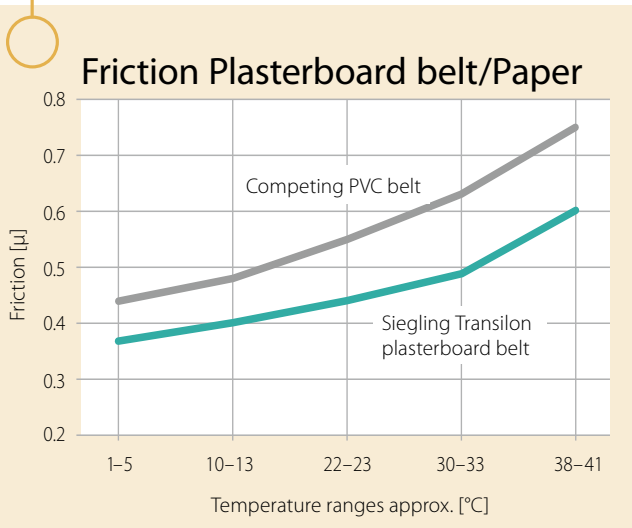
Technical information

Type designation		E X/2 V28/V28 MT/MT
Article number		906737
Colour		grey
Coating thickness	[mm (in)]	2.8 (0.11) on both sides
Number of plies		2
Total thickness approx.	[mm (in)]	9 (0.35)
Weight approx.	[kg/m² (lb/ft²)]	11 (2.2)
Belt tension at fitting	[%]	0.3 – 0.4
Tensile strength	[N/mm]	670
Elongation at break	[%]	30
d_{min} approx.	[mm (in)]	400 (15.7)
Width supplied max.	[mm (in)]	3100 (122) (wider width on request)
Max. length without splice	[m (ft)]	230 (754)
Permitted operating temperature	[°C (°F)]	-10/+70 (14/158)
Top-face coating		PVC homogenous
Surface hardness	[Shore A]	85
Tension member		low elongation, high-tech fabric
Endless splice (Type)		70 mm (Z-stepped)
Belt edges		cut

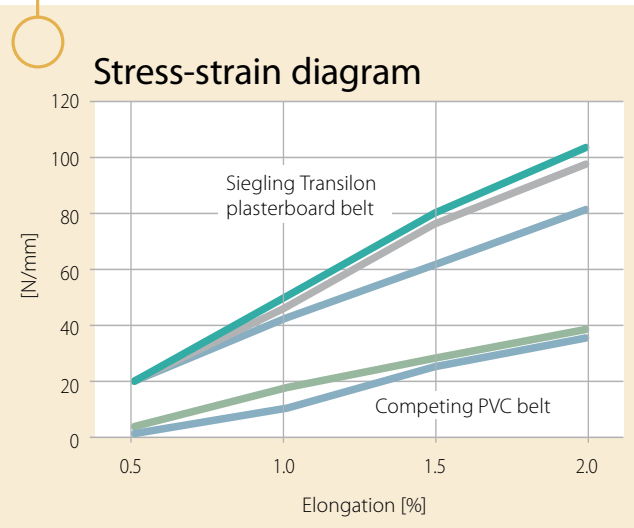
Additional information is available at www.forbo-siegling.com and in the following brochures:

No.	Title
305	Siegling Transilon – Recommendations for Machine Design
309	Siegling Transilon – Chemical Resistance Properties
317	Siegling Transilon – Technical Information 1 · Storage, Finishing, Fitting

Low friction
The surface of Siegling Transilon plasterboard belts has a particularly low friction coefficient.



Low sag, no re-tensioning, no shortening
Siegling Transilon plasterboard belts are dimensionally stable and offer optimum stress-strain values.



SIEGLING TRANSILON **PLASTERBOARD BELTS** BELT REPLACEMENT IN 48 HOURS

To fit the belts, Forbo Siegling can offer state-of-the-art equipment for rental, close to where our customers are based. A team of dedicated experts and local technicians are at our customers' disposal at all times.

Forbo Siegling offers customised support

- for fitting **endless belts** (belts spliced in our factory in Hanover),
- for fitting and splicing in the conveyor (belt delivered as **open roll material** to the customer's premises).

To ensure flawless, quick fitting, Forbo Siegling provides its skills at the planning phase already by carrying out **on-site pre-inspections.** The goal is to ensure the project is planned perfectly and production is commenced after only two days.

Wednesday, 8 a.m.
The fabrication equipment and plasterboard belt, provided by Forbo Siegling, have arrived at the production facility. It's time to unload.

Thursday, 8 a.m.
Our specialists are experienced and work with state-of-the-art equipment that's especially for plasterboard fitting. The stepped Z-splice is prepared carefully.

Wednesday, 2 p.m.
It's no easy feat, the belt is untensioned, cut, pulled out of the conveyor and wound up.

Wednesday, 5 p.m.
Now it's time to really get going. The new PVC belt is on the special winding device provided by us and is inserted into the conveyor.

Thursday, 11 a.m.
The splice is in the press. Ideal heating settings and control units ensure the splice is strong and leaves no markings.

Thursday, 3 p.m.
The belt is tensioned and tracked. After inserting the taper edge belts, production can start up again.

ISO 9001 certified

PRODUCTION ON SOLID FOUNDATIONS

Our customers have good reasons to rely on our consistently best-in-class quality standards. In the case of our plasterboard belts, you can inspect belts prior to delivery via **factory acceptance test.**
Furthermore all belts come with their **own test certificates** and **folders that include instructions** for handling, cleaning, repairs etc.

TRAINING AND REPAIRS

After each new belt is fitted, our experts train customers' staff on how to operate, clean and maintain the new Forbo Siegling belt in an excellent condition.

Forbo Siegling's optional repair kit enables customers to repair surface defects such as holes and small scratches within the shortest possible time reliably and by themselves. Therefore, they aren't forced to wait and pay for any external specialists. The tools and materials are chosen specifically for Forbo Siegling's unique PVC belt design.

Should serious damage occur and/or you require more advice please contact us directly or our global service network.

Plasterboard repair kit
Art.-No. 870064

SIEGLING BELTING **ALL CONVEYING AND PROCESSING JOBS** WELL UNDER CONTROL

Taper edge belts

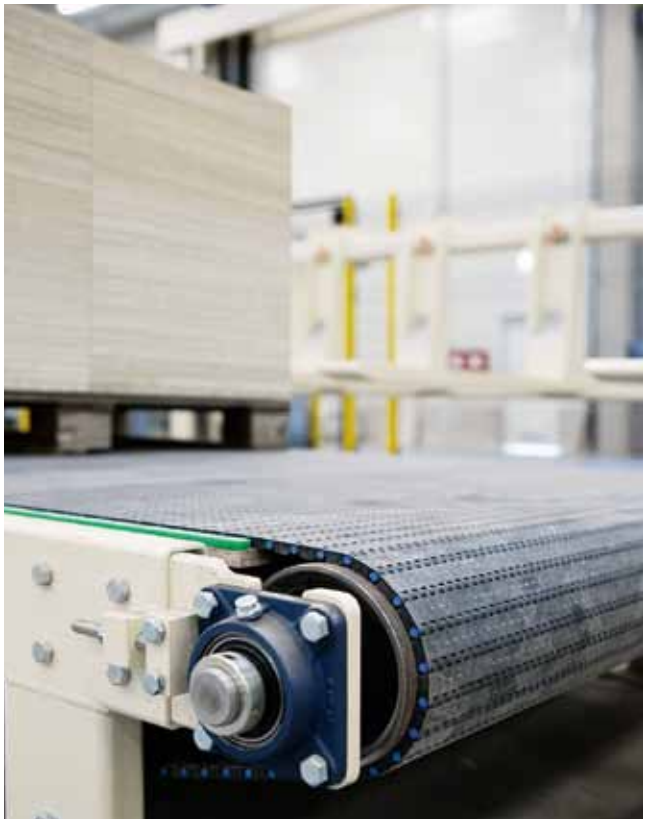
We offer almost any shape of taper edge belts based on a max. 2.0 mm basic thickness. Excellent flatness, long service lives, superior release characteristics and soft undersides with fabric to protect your forming belt and extend its lifespan are persuasive arguments for this for this reinforced stretch-free belt.

Infeed/outfeed, transfer belts

Reliable board conveying, especially in wet areas, is an essential criterion for ensuring waste-free board production. Exact positioning of the board without slippage on the belt protects the edges of belts from damage. Forbo Siegling offers customized solutions for hard-wearing transfer belts in the cross transfer, board flipper, dryer in-/out-feed, as well as stacking areas. Based on customers' requirements, the belt can be fitted in horizontal, inclining or declining positions.

Power transmission belts for live roller conveyors and processing machines

The combination of tension member and coating lend the belts their special profile of characteristics customized to the type of conveyor and drive task. Highly elastic elastomer or polyurethane as coating materials ensure smooth and reliable transmission at any time. The splicing method (Z-splice) for aramid and polyester reinforced types does not require any additional materials and has the necessary flexibility and durability required for their specific purpose of use.



Modular Belting

Because of their construction conventional conveyor belts are not suitable for certain applications. Siegling Prolink plastic modular belts are an excellent solution in these cases: The material is rot-resistant, durable and physiologically safe. As a rule cleaning the belts is simple.

Endless technology

As a leading manufacturer of conveyor and power transmission belts, Forbo Movement Systems has in-depth theoretical and applicational expertise in splicing technology. We keep procedures and equipment technology in tune with current belting developments through close cooperation with users and equipment manufacturers. We provide innovative and functional solutions.
All components are compatible with each other and from one source – for effective and reliable endless splicing:

- High quality tools with all the accessories
- Comprehensive service
- Detailed procedural instructions

Siegling Blizzard HP 160
The turbo-cooled light-weight combo press for belt width up to 1500 mm

The Siegling Blizzard is easy to use with fast cycle time. It sets new standards in splicing conveyor belts. Once you've set up the press and pressed the on button, the heating and cooling procedure in the press runs automatically.

The Siegling Blizzard press is supplied with a flight case on rollers. Because it's so compact and lightweight, it's quick and easy to set up. It's ready to use as soon as you've plugged it in because there's no need to connect it to external subsystems.

- The control unit,
- compressor and
- air cooling system are integrated in the press.

This saves time and costs, prevents errors during operation and ensures hygiene on site.

Siegling Blizzard HC 120/40
The new benchmark in efficient heating of splices up to 40 mm belt width

The Siegling Blizzard HC is a new benchmark in quality and speed when heating splices for Siegling Extremultus belts in the aramide, polyester and polyamide lines as well as narrow Siegling Transilon belts. It's easy to handle and has very short cycles.

After entering the heating temperature, hold-down time and cooling temperature, the process starts automatically as often as you like at the touch of a button.

Automatic heating and air cooling in one single tool

- prevents mistakes made during handling
- saves having to put the belts and splicing guide into a cooling clamp after heating
- is highly efficient due to short cycles
- delivers excellent splicing results with superior repeat accuracy.

SIEGLING BELTING **FOR GYPSUM FIBERBOARD PLANTS**

Due to its broad range of high quality lightweight conveyor belts, Forbo Siegling products are well established in gypsum fiberboard plants. They are found in raw material preparation for conveying gypsum and paper fibers, to bunker bottoms, feeding and extracting belts, to spreading bin belts and spreading belts. These are followed by press belts, upper press belts, forming belts and various belts for board conveying, such as in-/out-feeders for the dryers and stackers, as well as stack conveyors.

All these different processing tasks require specific belt characteristics such as durability, lateral stiffness, optimized surface patterns and so on.

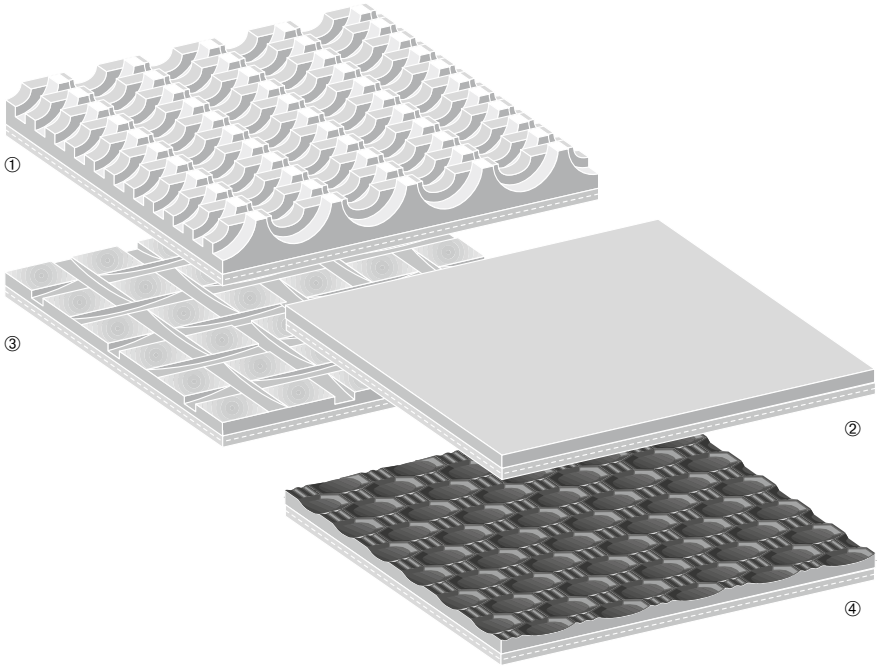
Forbo Siegling offers specialised belts for almost any application and professional technical support during fitting and maintenance. Please contact our sales organization for a specific solution.

SIEGLING GYPSUM PRODUCT RANGE
TRANSILON

siegling transilon conveyor and processing belts	Article number	Total thickness approx. [mm]	Weight approx. [kg/m²]	Effective pull at 1% elongation ($k_{1\%}$ relaxed) [N/mm width]*	d_{min} approx. [mm]**	Permissible operating temperature [°C]	Hardness of the top face coating [Shore A]	Top face pattern	Splice	Mechanical splice
Siegling Transilon										
E 6/1 V1/V14 MT-NA white	906639	2.00	2.25	5.50	40	-10/+70	62	Matte	Z	HS
E 8/2 U0/V5 green	900025	2.10	2.50	7.50	30	-10/+70	75	Smooth	Z; ZS; S	KS; HS; CS
E 8/2 U0/V2H MT green	900208	1.50	1.60	7.50	40	-10/+70	85	Matte	Z; ZS; S	KS; HS; CS
E 8/2 U0/V5H MT black	900026	2.20	2.50	7.50	40	-10/+70	85	Matte	Z; ZS; S	KS; HS; CS
E 8/2 V5/V5 STR/GL green	900030	2.70	3.20	6.50	40	-10/+70	75	Normal texture	Z; ZS; S	KS; HS; CS
E 8/2 U0/V7 SG black	906286	2.30	2.50	6.00	40	-10/+70	45	Lattice	Z	HS; CS
E 8/2 U0/V10 SG green	900086	2.60	2.80	7.00	40	-10/+70	45	Lattice	Z; ZS; S	KS; HS; CS
E 8/2 U0/V20 AR green	900037	4.90	4.00	6.00	40	-10/+70	45	Rough-top	Z; ZS; S	KS; HS; CS
E 8/2 U0/V20 AR black	900087	4.90	4.00	6.00	40	-10/+70	45	Rough-top	Z; ZS; S	KS; HS; CS
E 8/2 U0/V30 STR red	906668	5.60	6.00	5.50	60	-10/+70	68	Normal texture	Z	KS; HS; CS
E 10/M V1/V20 AR black	900069	5.00	4.10	5.00	60	-10/+70	45	Rough-top	Z; K	KS; HS; CS
E 12/2 U0/G20 AR green	906217	5.50	4.00	8.00	90	-30/+100	–	Rough-top	Z	KS; HS
E 12/2 U0/V7 green	900045	2.80	3.40	10.50	60	-10/+70	75	Smooth	Z; ZS; S	KS; HS; CS
E 12/2 V5/V10 STR/GL green	900053	3.20	3.90	11.50	60	-10/+70	75	Normal texture	Z; ZS; S	KS; HS; CS
E 12/2 U0/V20 green	900262	3.30	4.10	10.50	60	-10/+70	75	Smooth	Z; ZS; S	KS; HS; CS
E 12/2 U0/U2 MT blue	906782	1.70	1.80	12.50	20	-30/+100	85	Matte	Z; ZS	
E 18/H U0/U2 MT white FDA	906420	1.80	1.80	17.50	24	-30/+100	85	Matte	Z	KS; CS
E X/2 V28/V28 MT/MT grey	906737	9.00	11.00	20.00	400	-10/+70	85	Matte	ZS	
Scraper for setting belt	882155									

Scraper

Material:	Polyurethane co-extruded, EU and FDA compliant
Lip:	Shore A75
Body:	Shore D 60
Color:	RAL 3012
Art.no.	882155



Gypsum plasterboard							Gypsum fiberboard							
Setting/Forming belts	Transfer belts horizontal	Transfer belts inclining/declining	Infeed-/outfeed belts dryer	Taper edge belts	Live Roller Belts	Scrap discharge belt	Spreading belt	Setting/Forming belts	In feeder/outfeeder belt	Press belt	Accelerator belt	Infeed-/outfeed belts dryer	Transfer belts horizontal	Transfer belts inclining/declining
				●										
	●					●			●				●	
	●		●			●			●	●	●	●	●	
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Please note: the values stated are nominal and can fluctuate in a belt whose width is a result of production processes. Our products are constantly adapted to market requirements. Consequently, changes in technical parameters can occasionally occur.
Therefore, please see the current product data sheets for specific information on designs and calculations.

E 4/2 U0/U2 MT - HACCP white FDA

NOVO 60 HC - SE black

- Colour
- Belt property
- Pattern
- Top face coating [mm/10]
- Underside coating [mm/10]
- Number of plies, special fabric (H or M) or total thickness (NOVO)
- Type class
- Tension member fabric

Legend

Tension members

E = Polyester
NOVO = Polyesterfelt

Coatings

U = Polyurethane
U0 = Polyurethane impregnation
V = Polyvinyl chloride
V…H = Polyvinyl chloride hard

Patterns

① AR = Rough-top
② GL = Smooth
② MT = Matte
③ SG = Lattice
④ STR = Normal texture

Belt properties

NA = Non-antistatic

Splicing

K = Wedge splice
S = Overlap splice
Z = Z-splice
ZS = Stepped Z-splice

CS = Clamp fasteners
HS = Hook fasteners
KS = Plastic fasteners

* Established in line with ISO 21181:2005
** The smallest permissible drum diameters were established at room temperature with z-splices and counter bending and do not apply to conveyor belts with mechanical fasteners. Lower temperatures, profiles and side walls can require larger drum diameters. On this point, see our brochure "Technical information 2" (ref. no. 318)
rX is the radius of a fixed knife edge
dX is the diameter of a rolling knife edge
● Yes

SIEGLING GYPSUM PRODUCT RANGE
TRANSTEX, EXTREMULTUS, PROLINK

siegling transtex
conveyor belts

	Article number	Total thickness approx. [mm]	Weight approx. [kg/m²]	Effective pull at 1% elongation ($k_{1\%}$ relaxed) [N/mm width]*	Standard width supplied [mm]	d_{min} approx. [mm]**	Permissible operating temperature [°C]	Elongation at fitting [%]	Top face pattern	Features underside	Splice	Mechanical splice
Siegling Transtex												
PVC200 OFR-OSHA CxC white FDA	908308	6.1	7.8	11.5	1828	89	-18/+82	0.6–1.5	Smooth	Smooth	Z; K	HS; CS
PVC120 MRTxB-NA black FR	908799	4.1	3.9	8.5	1828	51	-18/+82	0.6–1.5	Rough-top, mini	Coarse fabric, brushed	Z; K	HS; CS
PHR2-90MF GRADE II RTxBB black	908214	7	6.4	4.5	1828	89	-29/+107	0.4–2.0	Rough-top	Fabric, RFL impregnated	K	HS; CS

siegling extremultus
flat belts

	Article number	Total thickness approx. [mm]	Weight approx. [kg/m²]	Nominal effective pull approx. [N/mm belt width]**	Standard width supplied [mm]	d_{min} approx. [mm]*	Permissible operating temperature [°C]	Elongation at fitting [%]	Specific shaft load [N/mm belt width] at 1 % elongation***	Surface pattern underside	Surface pattern top face	Splice
Siegling Extremultus												
RR 20E-60 grey FDA	822155	6	6.65	14	500	60	-20/+70	0.8–1.5	23	Normal texture	Normal texture	Z
GG 14P-60 green	850327	6	6.8	14	510	50	-20/+80	1.5–3.0	14	Normal texture	Normal texture	K
GG 25A-25 NSTR/FSTR grey/black	822130	2.5	2.7	25	500	40	-20/+70	0.2–0.5	100	Normal texture	Fine texture	Z
GG 30E-25 NSTR/FSTR grey/black	822126	2.5	2.75	30	500	30	-20/+70	0.8–1.5	30	Normal texture	Fine texture	Z
GG 20P-25 NSTR/FSTR grey/black	855606	2.5	2.8	20	510	60	-20/+80	1.5–3.0	20	Normal texture	Fine texture	K

siegling prolink
modular belts

	Total thickness approx. [mm]	Weight approx. [kg/m²] Plastic pins (Stainles steel pins)	Allowable belt pull [N/mm] Plastic pins (Stainles steel pins)	Permissible operating temperature [°C]
Siegling Prolink				
S7-0 FLT POM AT	18.0	18.3 (22.8)	50 (60)	-45/+90
S8-0 FLT POM-CR AT	10.5	11.0	40	-45/+90
S9-57 GRT G POM-CR UC	15.0	11.5	30	-45/+90

Legend

Gypsum plasterboard Gypsum fiberboard		
Live Roller Belts	Transfer belts inclining/declining	
●		
	●	
	●	

Product design
PVC = Interwoven PVC
PHR = Package-handling rubber

Tension member
MF = Monofilament fabric

Belt feature
FR = Flame Retardant, ASTM D-378
FDA = Conform to FDA 21 CFR
Grade II = Abrasion resistant
OFR = Oil, fat resistant
ORG = OSHA/MSHA Premium Oil Resistant to grain oils
P = Standard PVC
NA = Non antistatic

Top face/underside features
B = Brushed fabric
BB = Bareback fabric
C = Smooth Cover (approx. 1 mm coating)
MRT = Mini-rough top
RT = Rough-top

Splicing
Abbreviations see previous page.

* Established in line with ISO 21181:2005
** The smallest permissible drum diameters were established at room temperature and do not apply to conveyor belts with mechanical fasteners. Lower temperatures require bigger drum diameters. Belts with profiles or sidewalls might require bigger drum diameters.
● Yes

Gypsum plasterboard Gypsum fiberboard		
Live Roller Belts	Paper unwinding	Infeed-/outfeed belts dryer, Board transport
●	●	●
●	●	●
●		
●		
●		●

A = Aramide
E = Polyester
G = Elastomer G
P = Polyamide P
R = High Grip or Medium Grip

FSTR = Fine textured surface
NSTR = Normal texture

Splicing
Abbreviations see previous page.

The values stated were identified in standard ambient conditions (23 °C, 50 % rel. humidity).

* Lower temperatures require larger drum diameters. For the Polyamid line, this also applies in the case of low humidity.
** The nominal effective pull specifies the power transmission at the nominal elongation at fitting and 180° arc of contact in N/mm belt width.
*** Relaxed specific shaft load at 1 % elongation at fitting and 180° arc of contact in N/mm belt width.
**** As Live Roller Belts
● Yes

Gypsum plasterboard Gypsum fiberboard		
Palette-/Stacktransport	Board transport	Curved belts
●	●	
●	●	
		●

Series
S7 … 9 = Siegling Prolink Series X

Top face
FLT = Flat top (smooth)
GRT = Grid top

Materials
POM = Polyoxymethylene (Polyacetal)
POM-CR = POM cut resistant

Colors
AT = Anthracite
UC = Uncolored

● Yes

Please note: the values stated are nominal and can fluctuate in a belt whose width is a result of production processes. Our products are constantly adapted to market requirements. Consequently, changes in technical parameters can occasionally occur.
Therefore, please see the current product data sheets for specific information on designs and calculations.

Siegling – total belting solutions

Committed staff, quality oriented organization and production processes ensure the constantly high standards of our products and services.

Forbo Movement Systems complies with total quality management principles. Our quality management system has ISO 9001 certification at all production and fabrication sites. What's more, many sites have ISO 14001 environmental management certification.

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Our service – anytime, anywhere

Forbo Movement Systems employs around 2,500 people in its group of companies. Our products are manufactured in ten production facilities across the world.
You can find companies and agencies with warehouses and workshops in over 80 countries.
Service points are located in more than 300 places worldwide.

Sales contacts

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