## **Airports**

# **siegling** belting









Throughout the world, Forbo Siegling conveyor and processing belts are usually involved wherever air cargo and baggage are being handled.





## siegling transilon conveyor and processing belts

## Baggage Handling at international Airports

When it comes to equipping international airports with conveyor and processing belts, there are good reasons why Forbo Siegling is the market leader. With over 50 service centres worldwide and the experience gathered in numerous major projects, we are the partner for OEMs and airport authorities when it comes to planning, construction and after-sales service.

Our product range is tailored to meet the needs of modern airports and undergoes constant improvement in cooperation with OEMs and users. As the volume of baggage and cargo continues to increase, so do the demands for speed and reliability. With our experience, the results of ongoing research and development and our high quality standards, our products are always "one step ahead". And that's why handling systems throughout the world use Siegling Transilon conveyor and processing belts to convey baggage and cargo.

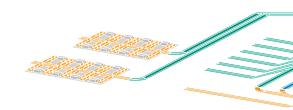
Safely, reliably and efficiently.

## The Properties The Advantages

extensive range of types	product range perfectly suited for all conveying, transferring and processing functions
flame-retardant types	additional safety
top product quality	long belt life
dimensionally stable	can be used even where temperatures and humidity fluctuate
light and thin	belts are easy to fit, low energy consumption
low noise	environmentally friendly thanks to low noise emissions







## From the check-in ...

The demands placed upon conveyor and processing belts in modern airports are as varied as the stations through which the baggage and cargo pass.

And that's why our Siegling Transilon product range for airports includes numerous belt types which are well suited for the various applications.

They enable efficient and rapid handling and make existing conveyors even more effective:

- in the check-in area
- for safety screening (CBS)
- for collecting, accumulating and distributing
- on curved conveyors
- for inclined conveying
- for aircraft loading





### Check-in

Special surface patterns mean good grip in the check-in section. The photo shows the newly developed Forbo Siegling pattern which even conveys awkward baggage on wheels.



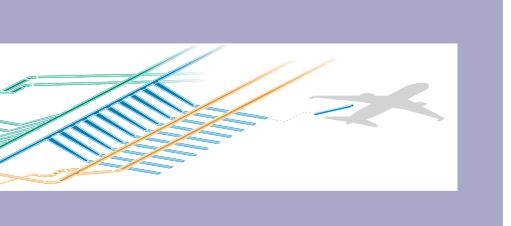
## X-ray systems

X-ray systems place high demands on the conveyor belt. Special conveyor belts from Forbo Siegling are used successfully on carry-on X-ray machines as well as in CBS systems.



## Collecting belts

Good flatness and the surface of the belt types used ensure problem-free lateral discharge of the pieces, even on wide belts.





## Aircraft loading

When used outside, conveyor belts are subjected to extreme fluctuations in moisture and temperature. For this type of conveying, robust belt types from the Siegling Transilon and Transtex product ranges are available.

## ... to loading



## Merging

For applications on belt junctions, very narrow dimensional tolerances must be maintained due to short take-up ranges. Reliable transfer of baggage and cargo requires small drum diameters.



## Curved conveying

Forbo Siegling makes sure the shape you require in finished belts is perfect. Fabrication from several segments results in favourable belt forces, so that even heavy pieces can be conveyed reliably.



## Belly loading systems

This loading concept requires a wear-resistant top face and a special fabric bundle as tension member. The belt must withstand high effective pull and, at the same time, it must be troughable.

## Inclined conveying

For reliable inclined conveying, Forbo Siegling provides patterned belts or belts with lateral profiles.

## Flame-retardant belts





Flame-retardant belts cease to burn in seconds (green section) as soon as the gas flame is removed.

In tunnels connecting terminals or levels, normal belt material can become a moving source of fire. Flame-retardant Siegling Transilon (SE) belts prevent this danger.

In accordance with EN 20340/ISO 340, after being subjected to an open flame these belts extinguish and do not re-ignite when a current of air is applied.

Siegling Transilon SE belts provide additional safety in baggage and cargo handling and for the conveying of hazardous materials.

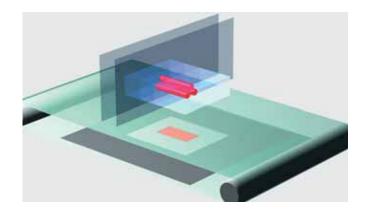
## Belts for Checked Baggage Screening (CBS) Systems

New CBS systems for the reliable, efficient and thorough inspection of baggage were developed to meet the safety regulations of international aviation organisations.

Specially-developed products from Forbo Siegling are decisive components when it comes to the operation of "Explosive Detection Systems":

- Precise belt tracking and good flatness make excellent image definition and high-quality image transmission possible.
- High uniformity of material and splice minimizes the influence of the belt on the X-ray image.
- Thanks to the homogeneous splice area, shadows or dark X-ray images resulting from the splice are practically eliminated.
- Our high quality coating materials ensure top quality x-rays.

Forbo Siegling is your competent partner when it comes to advanced CBS systems.



#### Available as

- endless belts
- open belts prepared for hot or cold pressing on site
- roll material for customer to finish
- belts with mechanical fasteners
- belts with edge sealing (ProSeal)
- belts with welded profiles

#### Belt junctions (depending on system) Product range (Selection) Fotal thickness, approx. [mm] Effective pull at 1% elongation (k<sub>1%</sub> relaxed) [ N/mm width]\* **Technical data, properties** and recommendations, possible applications Weight, approx. [kg/m<sup>2</sup>] Horizontal conveying d<sub>min</sub> approx. [mm] \*\* Check-in conveyors Telescopic conveyor nclined conveying Collecting belts Baggage wagon X-ray conveyors Start-stop belts **Braking belts Curved belts** Pusher belts Standard E 8/2 U0/V5 green 2.2 2.5 8 50 • E 8/2 U0/V5H MT black 2.2 2.3 2.5 2.5 8 E 8/2 U0/V7 SG black 8 50 • E 8/2 U0/V10 SG green 2.6 2.8 8 60 E 8/2 0/U10 S/LG green 8 40 E 8/2 U0/V15 LG green 3.1 3.4 60 8 E 8/2 U0/V20 AR black 4.9 4.0 8 60 E 8/2 U0/V20 AR green 4.9 4.0 60 8 E 10/M V1/V20 AR black 5.0 4.1 60 1.5 13 E 12/2 U0/V/U0 transparent 1.5 60 E 12/2 U0/U2-C green 1.8 2.0 6.5 60 E 12/2 U0/V3 MT-C black 2.7 6.5 60 2.3 2.3 E 12/2 U0/V3-C green 6.5 60 NOVO 25-HC black 2.5 1.3 9.5 40 NOVO 40-HC black 4.0 12 70 • NOVO 60-HC black 5.5 3.1 12 120 PVC line (flame-retardant) E 8/2 U0/V5H MT-SE black 2.2 2.7 6.5 • • 60 E 8/2 U0/V10H-M-SE black 3.1 3.6 60/901) 3.1 3.4 7.5 E 8/2 U0/V15 LG-SE black 60 E 8/2 U0/V15 LG-M-SE black 3.6 3.9 60/901) F 8/2 U0/V20 AR-SF black 4.9 4.2 E 8/2 U0/V80 R80-SE black 8.2 4.7 6 60/1201)

Numerous other belt types and designs are also available.

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

#### Legend

E 8/2 U0/V80 CH-SE black

E 12/2 U0/V/U0 SE black

PU line (flame-retardant) E 8/2 U0/U2 MT-C-SE black

E 8/2 U0/U2 MT-SE black

E 8/2 U0/V/U2H MT-SE black

E 12/2 0/U2 MT-C-SE black

F 8/2 U0/U10 I G-SF black

E 12/2 U0/V10 STR-SE black

E 12/2 U0/V6 GSTR-C-SE black

- \* Established in line with ISO 21181:2005
- \*\* Minimum drum diameter was determined at room temperature and does 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.
- 1) Without/with counter-bending

AR = Anti-skid pattern
GL = Smooth surface
GSTR = Coarse textured pattern
M = Particularly stiff laterally

4.4

3.8

2.3

2.7

1.4

1.6

2.0

1.9

2.0

8.2 3.1

2.0

2.5

1.2

1.4

1.6

1.8

2.1

8

12

10

6.5

6.5

6.5

7.5

8

60/12013

90

90

60

40

30

60

40

40

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MT = Matt surface
NP = Inverted pyramid pattern

STR = Normal textured patternSG = Lattice patternLG = Longitudinal groove

R = Large diamond patternCH = Check-in patternC = Laterally flexible,

= Laterally flexible, suitable for curved belts

HC = Highly-conductive
S = Very low noise
SE = Flame-retardant



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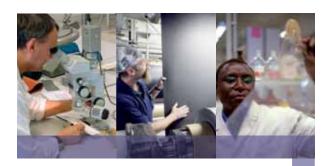
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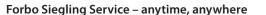
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Committed staff, quality-orientated organisation and production processes ensure the constantly high standards of our products and services.

The Forbo Siegling Quality Management System is certified in accordance with DIN EN ISO 9001:2000.

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.





In the company group, Forbo Siegling employs more than 1900 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.





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