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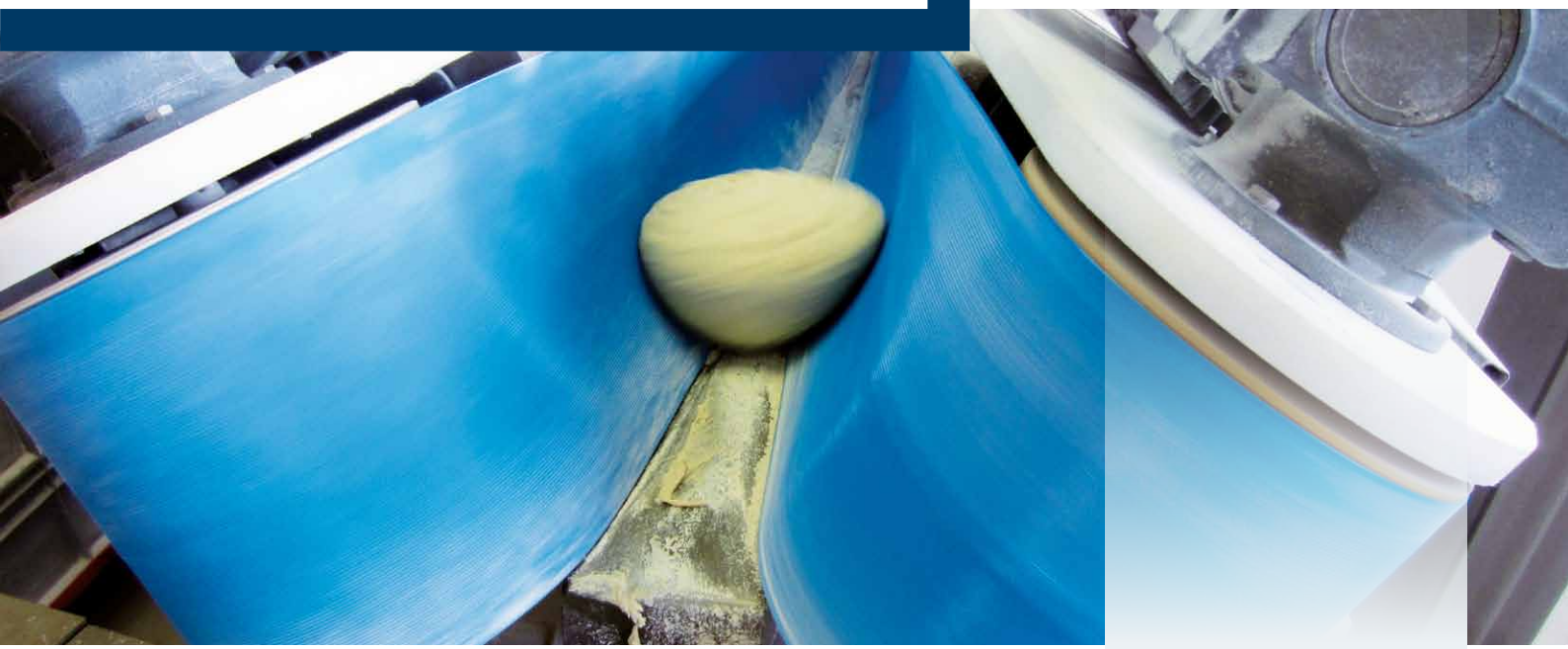
Forbo MOVEMENT SYSTEMS

benefit!

Information for our customers from the food industry Issue 2/2013



Polyurethane belts

First large bakery without felt belts

For a long time, cotton or felt conveyor belts used to be the first choice for dough processing. But it's precisely these materials that tend to be a hygiene problem. Now the first large bakery has proved that there's an alternative.

Felt's special surface qualities meant moist, sticky dough released itself easily from the belt. On the other hand, felt belts are very hard to clean because they quickly absorb moisture and pieces of dough can then stick to the fine surface structure. Unwelcome growth of bacteria and mould on the conveyor belt are the frequent results. Another disadvantage is that felt belts distort quickly.

Forbo Siegling's conveyor and processing belts with polyurethane coatings provide a solution at last. They can completely replace cotton and felt belts, as a major bakery from Austria impressively demonstrates.

Depending on the function in the process, homogeneous elastic belt types (Siegling Extremultus) or polyurethane belts with fabric tension members (Siegling Transilon) are the solutions. The dough releases superbly from special surface patterns like the inverted pyramid, DIA or quartz sand patterns. The belts can also be cleaned swiftly and without leaving any residue. In contrast to cotton and felt belts, these belts comply fully with EU 1935/2004, EU 10/2011 and FDA regulations for plastics in direct contact with foodstuffs.

Continued on page 2:

In brief

Sustainability online: thinking, planning and acting sustainably. We've launched an online portal to document our sustainability policy. It contains information on business, social and ecological responsibility and explains how we live up to our pledges. To give you a current example: none of Forbo Siegling's production facilities worldwide uses DOP plasticizers.

Polyurethane belts

First large bakery without felt belts

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Smartseal, our belt edge sealing, offers extra protection on the edge of the belt. This prevents bacterial or mould growth.

The excellent quality of the blue polyurethane types as hygiene troubleshooters impressed the well-known bakery. All cotton and felt belts were gradually replaced by elastic or fabric-based polyurethane belts. The last felt belt on the round moulder was switched for the Transilon E 8/H U0/U5 NP-HACCP blue FDA type with Smartseal belt edge sealing (see cover photo). Even where felt wasn't used as a conveyor belt, for example on pressure rollers, winders or stamping cups (see photo below), it was substituted for fabric-based or permanently elastic polyurethane material. The advantages offered won the day.

Worldwide it's the first large bakery that has consistently changed all cotton and felt belts to the hygiene-safe Forbo Siegling polyurethane belts. This makes the bakery a true pioneer in its industry.

■ **The benefit:** clean and safe solutions in hygiene-critical areas of dough processing.

A winner – even where the polyurethane material wasn't used as a traditional belt.

Innovations for the bakery industry

From 6 to 9 October 2013 we presented innovations for the bakery industry at the International Baking Industry trade show – which are now online too.

At the stand in Las Vegas we showcased products that:

- enhance food safety;
- increase production efficiency substantially;
- cut production costs;
- support sustainability.

If you didn't have the opportunity to see us at the trade show in Las Vegas, why not visit us online at Food/Dough processing? You'll find the most important solutions for the bakery industry there.

About this publication

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New Prolink designs

More applications for plastic modular belts

Plastic modular belts are often used in food production and processing. Forbo Siegling has now launched four new module designs.

An open, smooth module design (-36 FLT) with 36% open area has been added to Siegling Prolink series 6.1 – the series with 50 mm pitch. Large openings of 11.7 mm x 15.2 mm guarantee superb circulation of air in drying, freezing or thawing processes, for example of fish or seafood. Very good drainage is also ensured when cleaning fruit or vegetables for example.

At the same time, the products conveyed only have contact to 20% of the belt surface. The circulation of air and drainage has been significantly improved compared with the existing modular belt design (-23 FLT) and a contact area of 61%. On the eyelets, the new modules also have a special aligning tab every 20 cm which makes inserting the hinge pin easier and fitting simpler and quicker.

The Siegling Prolink series 10 – the one-inch-pitch series – also now features a modular belt design (-36 FLT) with 36% open area (the biggest opening here is 5.7 mm x 13.3 mm). The surface of the module is also smooth and offers a contact area of 26% to the product.

In addition to the open surface, another new modular type in this series (-36 LRB) also features 5 mm high lateral ribbing on the top face. If the products conveyed (e.g. frozen fish) only lie on the lateral ribbing, the contact area to the product is merely 5%. This guarantees maximum circulation of air. The -36 LRB modules can be combined with any smooth belts (-36 FLT), so that lateral ribbing can be used to grip sensitive products like small pieces of fruit or vegetables when conveying at a slight gradient. These two new modules are also fitted with the service-friendly aligning tab.

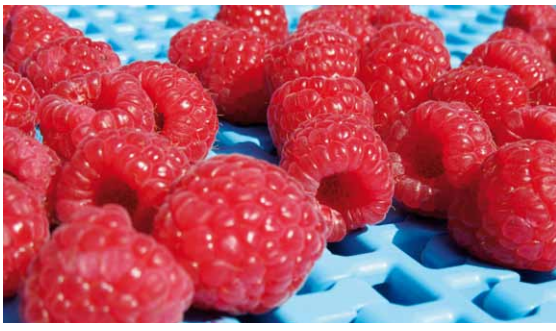
Another new module from series 10 has been especially developed to convey moist products such as fruit, vegetables, meat, fish or sticky products like confectionery. This is a closed modular belt with a nub top (NTP = Nub Top) on the top face. This special surface pattern reduces the contact area to the product to 5% and therefore makes release from the belt significantly easier. This module is also available as a version with an indent of 38 mm, where there is no pattern at the edges. This makes the belt easy to track.

■ **The benefit:** new plastic modular belts with large open areas, or special surface patterns, reduce contact areas to the product, creating ideal production conditions.

From fish to fruit - the new Prolink modular belts tap into new applications

Fish: Siegling Prolink series 6.1 -36 FLT

Sugar-coated sweets: Siegling Prolink series 10 -0 NTP



Raspberries: Siegling Prolink series 10 -36 FLT

Olives: Siegling Prolink series 10 -36 LRB

Fluff-free belt edges

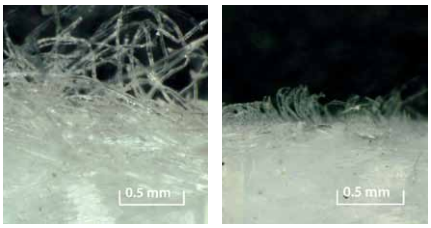
Much bigger Frayfree range

Five years ago Forbo Siegling launched Frayfree, a fluff-free belt design. And showed it had its finger on the pulse of food industry demands. Since then, the product range has been expanded considerably.

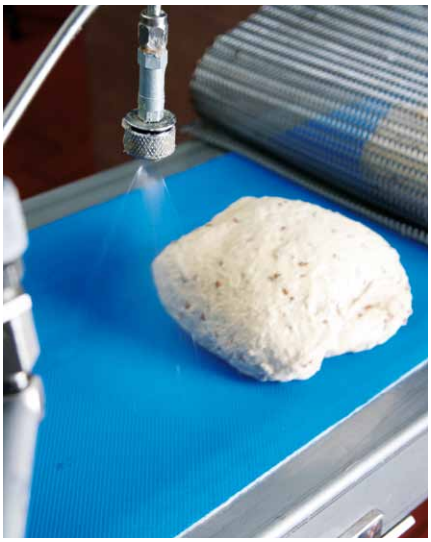
An increasing number of customers are requesting Frayfree products and they use them too. As specifications can be very different, the Frayfree range has now grown from an original five to 11 belt types. Fluff-free fabrics are also of course used in future new product developments to minimise the risk of belt edges that fray or where lint protrudes from the edges. The risk of product contamination from lint or fabric threads is particularly high in hygiene-critical areas. Long fabric filaments – usually warp threads – can even stop the conveyor from working properly, if for example they get caught around drums.

In Frayfree products on the other hand, the fabric is designed in such a way that fraying virtually doesn't occur – even when massive mechanical stress is placed on the belt edge (i.e. during acceleration). Special fabric, special weave and fibres with an enhanced length are the three keys to the success of Frayfree belts. Only belt edges sealed with Smartseal surpass the safety of these belts. However, the subsequent expense required to apply the seal is high. Therefore, Frayfree types are often the more cost-efficient solution in delivering top hygiene and process reliability.

■ **The benefit:** There's an info flyer (ref. no. 246) with more details on the advantages of the Frayfree design. This is available online at www.forbo-siegling.com.



Under the microscope, the difference is clear after a defined force is applied.



Request more info

Please tick your requirements and send this section back to us.

- ☐ Polyurethane belts
- ☐ Prolink series 6.1
- ☐ Prolink series 10
- ☐ Frayfree belts in the food industry
- ☐ General information on the company

☐ German ☐ English

First name, surname

Company

Position

Road, number

Postcode, place

Country

Telephone

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