

Homogeneous Belts



REOclean

Robust. Effizient. Original.

Narviflex[®]
BELTING

REOClean – an Introduction

THE MOST INNOVATIVE PRODUCT IN THE INDUSTRY



Poultry



Swine



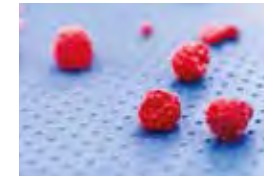
Beef



Cheese



Seafood



Fruits & Vegetables

Background

In recent years, consumers have become more and more aware of industrial food production processes and their importance to obtain food safety. The increased transparency draws attention to every step of production, resulting in higher scrutiny by official associations and increased cost of sanitation. The conveyor belts used in production plants play a very important role in the hygienic process.

REOClean is the Future

REOClean is an innovative conveyor belt that was originally designed to improve hygiene and lower cleaning cost in industrial food production. The product materials contain no plasticizers and do not contaminate the goods during transport. The cut and abrasion resistant characteristics also make REOClean applicable to many different industrial sectors other than food processing.

REOClean DB (dark blue) line uses the latest poly-ether based TPU compound, which features both anti-hydrolysis and anti-microbial characteristics, and is able to tolerate extreme temperatures from -30°C to 100°C .

REOClean is a very versatile product. Popular use-cases today are in the sub-dividing processes of the meat industry, cheese production, seafood processing, as well as frozen foods handling. Industries are Poultry, Swine, Beef, Cheese, Fish, and Vegetables, but the material characteristics allow for much broader use in other applications as well.

REOClean

Robust. Effizient. Original.

REOClean delivers a cutting-edge conveying solution to the world of food processing. By using the latest materials and unique production processes, this product range helps increase efficiency, lower bacteria counts and save water.

The vision is to achieve the highest standards in food safety while lowering the industry's impact on the environment.

The Case for REOclean

THE TREND OF FOOD PROCESSING

EVALUATING OPTIONS

The two traditional solutions for food processor's conveying needs: fabric based PVC / PU belts and plastic modular belts.

Fabric based belts and their construction carry major threats to modern food production facilities.

The fabric layers are prone to contamination from blood and other liquids during product processing, which provide a perfect breeding ground for bacteria.

Modular belts have eliminated the fabric layers and allow for no absorption of any liquids by the belt. However, the modular system entails many gaps, hinges and dead spots, which makes perfect cleaning impossible.

The high water consumption, the manpower involved in the sanitation process and the high costs for BOD (Biochemical Oxygen Demand) & COD (Chemical Oxygen Demand) are the main challenges for processing plants.

The Solution

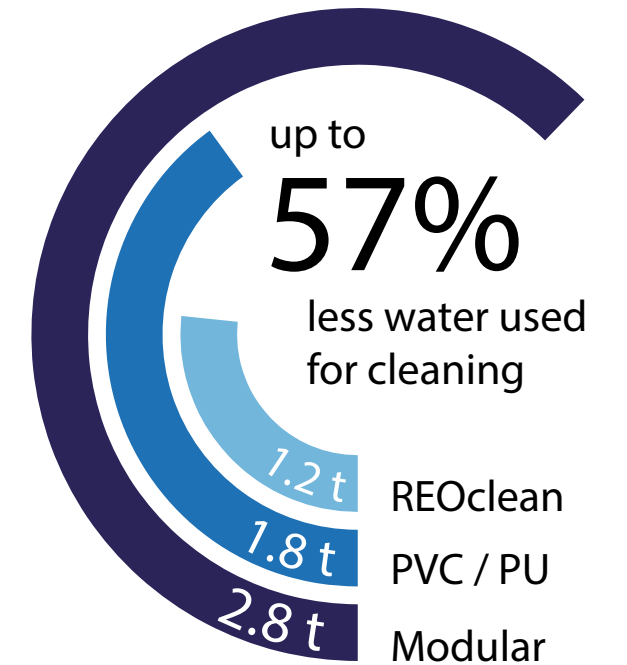
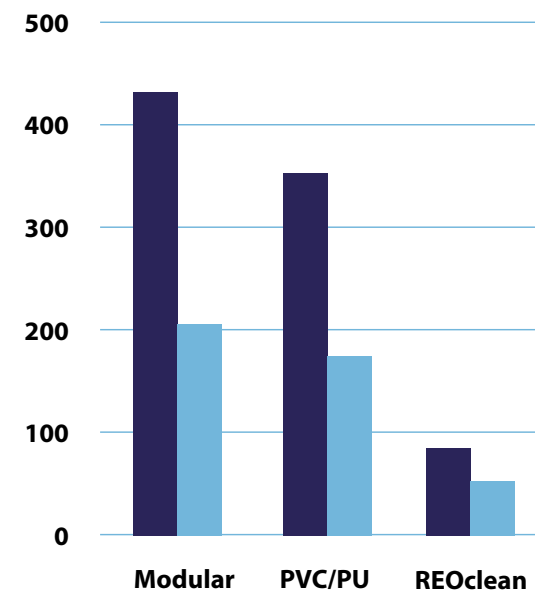
REOclean is an advanced homogeneous conveyor belt that solves these shortcomings. The unique belt design features tensile members, sealed by thermoplastic polyurethane based materials. REOclean is easy to clean, carries heavy loads without stretching and cuts down sanitation time and cost tremendously.

Microbial Count [cfu/g/ml]

This analysis has been conducted in a major poultry processing plant in Asia. All belts were tested on the same conveyor and under the same conditions.

80% Reduction of the germ count

■ Before Cleaning ■ After Cleaning



Water Consumption

The test shows water (in tons) used to clean three of the same conveyor setups under the same conditions, only equipped with different belts.

- ✓ **INCREASED HYGIENE** – homogeneous polyether-TPU makes cleaning easy and leaves no room for bacteria to grow
- ✓ **LOWER COST** – shorter maintenance & cleaning times with less water consumption and BOD cost
- ✓ **ZERO ELONGATION** – Aramid cords guarantee „no stretch“
- ✓ **IMPROVED TRACKING** – belt stays in line under all loads

Modular Belts' Challenges

- ✗ Hinges & gaps are extremely difficult to clean
- ✗ Possible contamination by chipped plastic
- ✗ Labor intensive cleaning with high costs

Fabric Based Belts' Challenges

- ✗ Fabric layers provide perfect breeding ground for bacteria
- ✗ Plasticizers of PVC belts contaminate the food
- ✗ Fabric structure prevents perfect cleaning

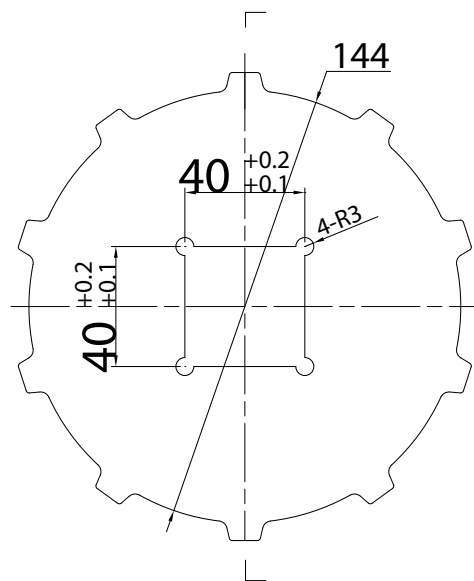
REOClean Accessories

ALL REQUIRED SUPPLEMENTARY PRODUCTS

The REOClean product lines are supported by tailor made sprockets, cleats, wearstrips and other accessories. If you require more in depth information, please check our REOClean engineering manual.

Sprockets

Different sprocket sizes are provided as standard for the positively driven models REO-T50, REO-M25 and REO-AT40 with different bores for installation.



REO-SP10 (T50)

Wearstrips

Three different models are provided that can be interchanged but have different parameters when it comes to belt load and coefficient of friction.

Cleats, V-Guides & Sidewalls

Cleats, V-guides and sidewalls are used to accommodate inclined applications and general conveying. The materials are extruded from the same TPU compounds to guarantee perfect welding results. Please see the REOClean accessories table for more details.

Retrofit

In general, changing any existing conveyor system to support the sustainable and efficient REOClean solutions is fast and easy. One key point is the additional need for wearstrips on conveyors running on slider beds, which is needed to reduce the coefficient of friction. Another point is the installation and adjustment of REOClean's sprockets. When retro-fitting, it is essential to ensure an uniform level of transport between support rails and sprockets.

REOClean Applications



REOClean belts used in meat processing industry (6°C) and on oceanographic survey ship (-10°C)

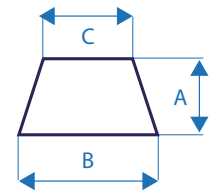


REOClean belts used in meat processing industry (6°C)

REOClean Accessories

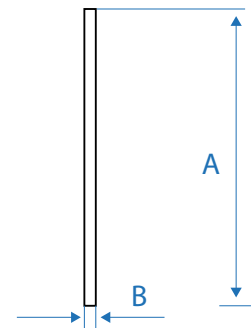
GUIDES, SIDEWALLS & CLEATS OVERVIEW

Guides



Name	A mm	B mm	C mm	Hardness Shore A	Color
R6	4	6	4	85	
R8	5	8	5	85	
R10	6	10	6	85	
R13	8	13	8	85	
R17	11	17	11	85	

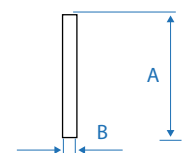
Sidewalls



PB30	30	1.7	90	
PB40	40	1.7	90	
PB60	60	1.7	90	
PB80	80	1.7	90	
PB100	100	1.7	90	
PB120	120	1.7	90	

*other heights upon request

Cleats



AC-200 C4	200	4.0	90	
AC-200 C6	200	6.0	90	

*other heights, thicknesses and hardness upon request

REOClean Jointing Options

FLEXIBLE JOINTING OPTIONS TO SUIT EVERY APPLICATION

Jointing REOClean belts is quick & easy. On-site jointing and adjusting of the conveyor system limit downtimes.

Butt Joint

All REOClean types can be joined easily using a butt / head-to-head welding machine. The two ends of a belt are prepared and secured onto the machine where a heating rod is used to melt the ends to weld the belt together. The excess material is then removed using a scrapper.

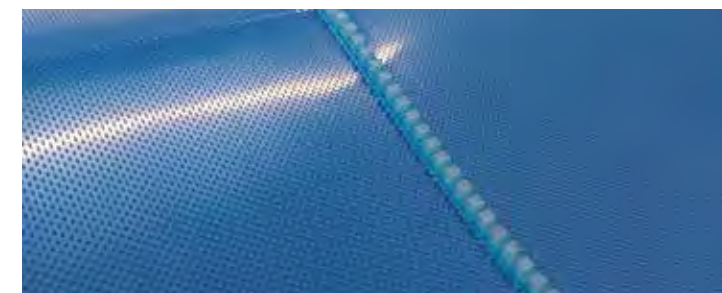
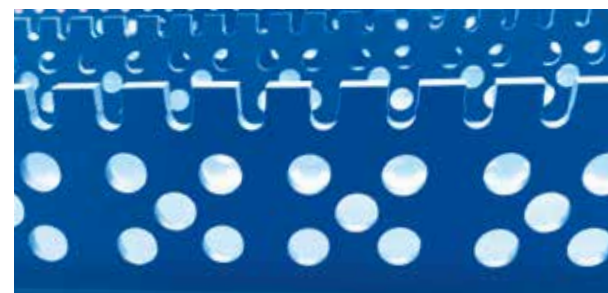
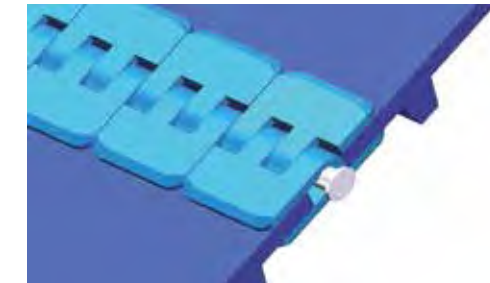
Finger Joint

REOClean F13 S/W, F20, and F30 can be made endless using a single finger joining method (80 x 20 mm fingers) with standard vulcanizing machine. Be cautious that there may be

shrinkage on both edges after joining. Make sure REOClean materials are applied to both sides during this process.

Mechanical and Plastic Fasteners

Mechanical and plastic fasteners can be applied to our REOClean products to avoid any possible on-site heat welding headaches. A special machine is needed to apply the fasteners.





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