



# FLOTTWEG BELT PRESSES

High yields and cost-effective operation  
thanks to efficient and robust design



 **Flottweg**

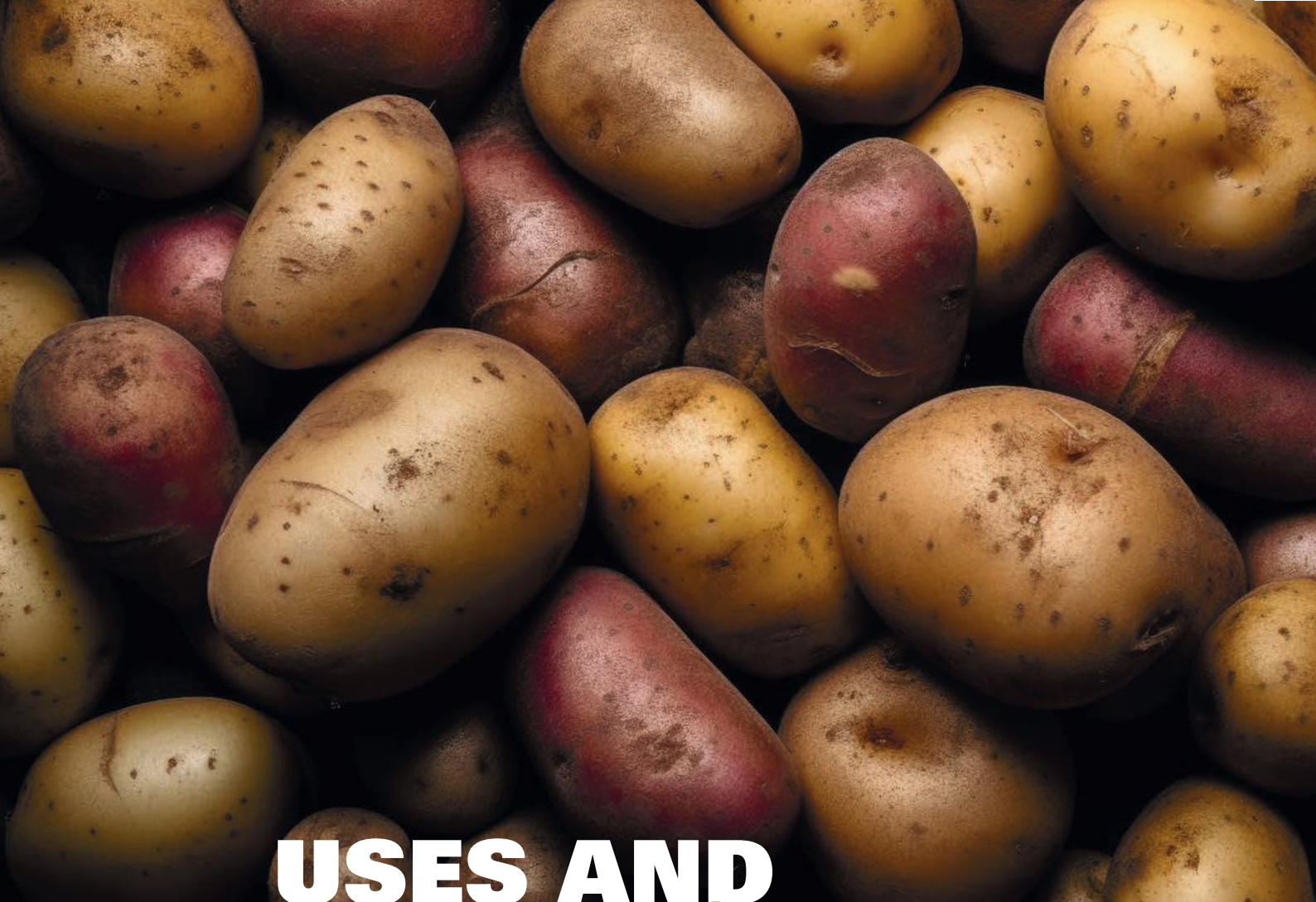
Engineered For Your Success



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# USES AND BENEFITS

## **Flottweg belt presses – for effective and economical solid/liquid separation in the food industry**

Belt filter presses are an economically attractive solution for the effective separation of liquid/solid suspensions. By combining dewatering and shearing with special filter belts, Flottweg belt presses can also be used to process products in which the liquid phase is bound in the cell tissue (e.g. organic fruit pulp, plant fibers, etc.). This process increases the separation efficiency, the yield of liquid, and the dry solid content in the pressed-out material.

### **Hence, Flottweg**

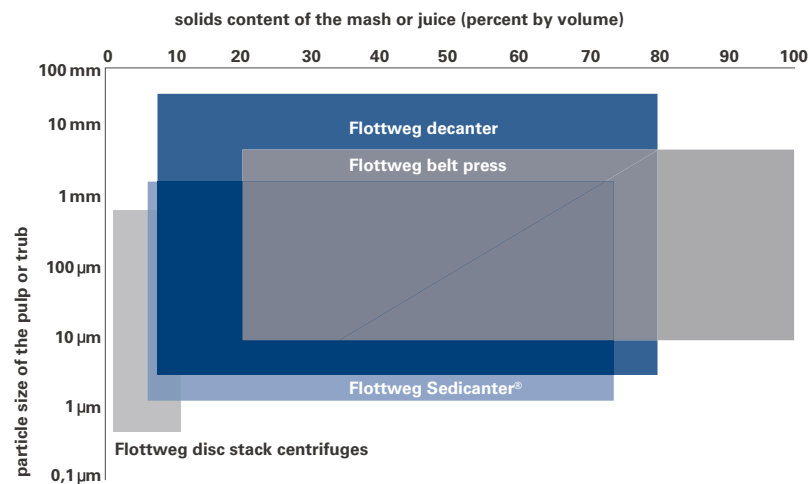
The Flottweg range of belt presses consists of several machine sizes covering a wide range of capacities. Depending on the area of application, the type of raw material, and the process, a high yield and dry solids content can be achieved thanks to the special design. The advantage of the belt press is its flexible range of possible applications. This means that in many cases, the processing of smaller product batches can also be carried out profitably.



## Complete machine portfolio

With our complete machine portfolio of separators, decanter centrifuges and belt presses, we offer an optimal separation unit for every application or the best combination of various systems for your application.

The diagram provides a simplified overview of applications for Flottweg decanter, separators and belt presses.



### Improving recovery and yields in the fruit and vegetable juice industry

- Apple juice (naturally cloudy)
- Berry juices
- Juices from stone fruit
- Juice from tropical fruits, e.g. pineapple
- Beet juices, e.g. beetroot, carrot juice
- Cucurbits, e.g. cucumber juice, watermelon juice
- Green juice, e.g. spinach juice

### Manufacture and processing of basic and by-products in the food industry

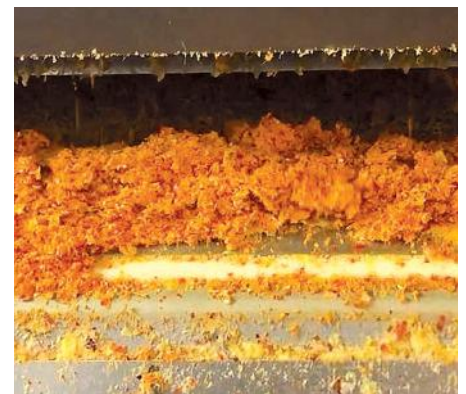
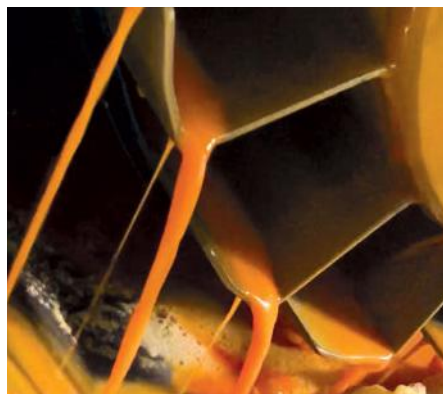
- Pectin production
- Potato pulp
- Soy fiber (Okara)
- Pea fibers
- Tapioca fibers
- Algae extract
- Coconut milk
- Plant extracts from spice or therapeutic plants, e.g. ginger, nettle, echinacea
- Mushroom extracts, mushroom spawn

### (Energetic) optimization through dewatering

Post-dewatering of (fibrous) solids and mashes,

- Brewer's grains
- Coffee extract (coffee grounds)
- Distillery malt grains
- Fermentation residues

**Other applications on request. Our specialists will be happy to advise you!**







# DESIGN AND OPERATING PRINCIPLE

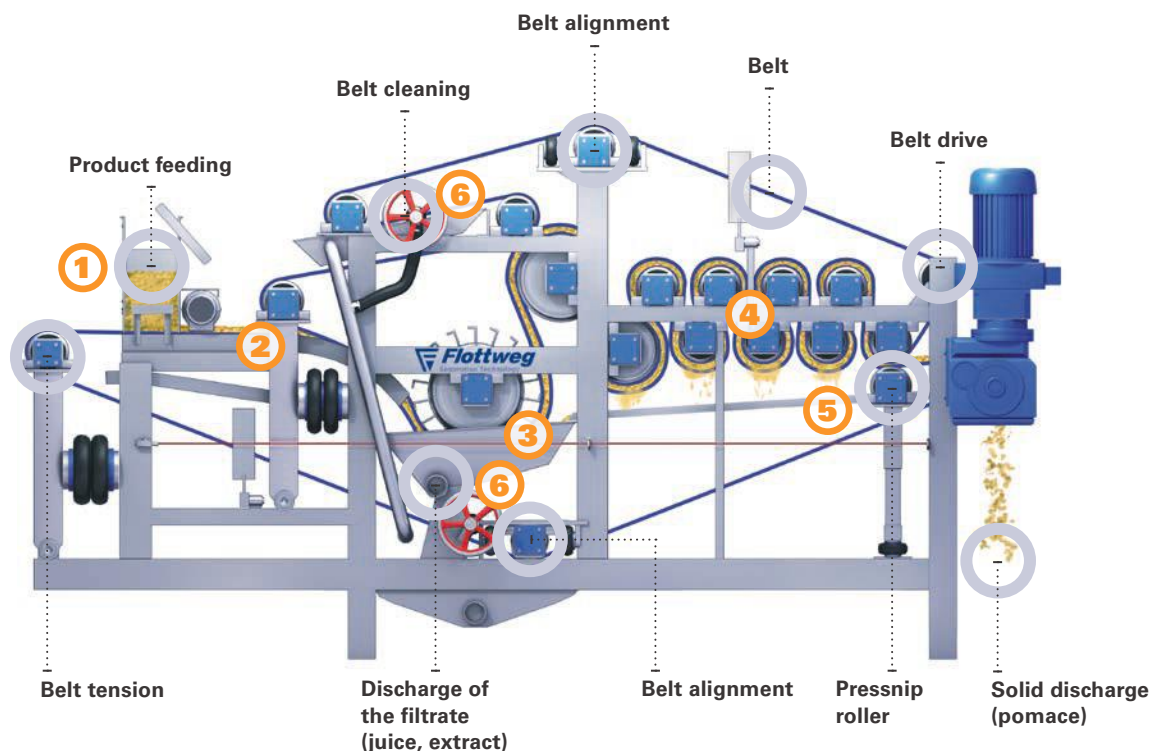
## Especially suitable for use in the food industry

The overall build of the Flottweg belt press is engineered for easy cleanability. No additional work platforms are required. All areas are easily accessible and in full view. This allows the operator to monitor the cleaning process at any time. Smooth, large surfaces in the filtrate area and the avoidance of inaccessible corners also promote easy cleaning. The consistent use of stainless steel and food-safe plastics allows the problem-free use of cleaning agents. The relevant standards and certificates are available on request.

Belt presses process products with a high solids content in the feed. Very good separation results can be achieved with solid/liquid mixtures of the same density. The high yield is guaranteed by the controlled build-up of pressing and shearing forces. Continuous belt cleaning maintains optimum compaction conditions.



- 1** The product is distributed continuously and evenly on the lower belt via the feeding box. The cake height and width can be customized according to the individual product. There are also various feeding systems to ensure optimum product infeed.
- 2** The product is pressed onto the wedge zone with the upper belt. A stable product cake is produced by slowly increasing pressure.
- 3** In the pressing area, cake dewatering is initially carried out via a special profiled roller, which ensures quick liquid drainage to both sides of the press cake.
- 4** The product is then efficiently dewatered via press rolls with decreasing roll diameter and continuously increasing pressure (pressure and shear forces).
- 5** The effectiveness of the machines can be further increased with the help of the optionally available line compression rollers.
- 6** Effective, continuous belt cleaning ensures that dewatering performance is maintained.







# FEATURES AND SPECIFICATIONS



## Safe production due to stringent hygiene standards

- The machine is made entirely of stainless steel and food-safe plastic.
- The rollers are held in encapsulated, robust stainless steel bearing brackets. Automatic grease lubrication is available as an option.
- Continuous belt cleaning with optional additional CIP cleaning ensures a high standard of hygiene.



## Inexpensive to maintain and operate

- Easy cleaning, operation and maintenance
- Very good durability and longevity due to the use of high-quality materials
- Standard drive motors, meaning high availability
- Regular maintenance can be carried out by the operator
- Pneumatic belt tension and belt alignment



## Highly cost-effective thanks to flexibility and performance

- Flexible processing of a wide range of products is possible thanks to infinitely variable speed control and adjustable compression pressure.
- The filter belts are held in position by an automatic pneumatic belt track control system.
- For best separation results, brush cleaning is available for the filter belts.
- High product yields of over 85% are possible.
- An overall gentle pressing process achieves the highest product quality.



## Performance and safety thanks to Made in Germany quality

- Sustainable due to very high durability, longevity, and excellent separation performance
- High production reliability, e.g. in seasonal operation
- Very good availability thanks to global service and sales network
- Reduced personnel costs due to automatic operation and cleaning



# TECHNICAL DATA

## Technical data for Flottweg belt press <sup>1</sup>

Type	B-800	B-1200	B-1500	B-1750	B-2500
Hourly output [t/h] <sup>2</sup>	2 - 6	4 - 8	6 - 12	8 - 14	14 - 22
Length, height, width [mm]	on request				
Belt width [mm]	800	1200	1500	1750	2500
Motor Power [kW]	1.5	1.5	2.2	4.0	4.0
Electrical connection [V/A]	depending on the country of installation				
Pneumatic connection [bar]	6	6	6	6	6

1) The figures given are for reference only! Subject to technical changes without notice.

2) The effective throughput rates depend on the product to be processed, the degree of ripeness, and many other parameters.

Please do not hesitate to contact our experts via our contact form on [flottweg.com](http://flottweg.com) with your detailed questions about possible benefits and your process!





# FLOTTWEG QUALITY AND SERVICE



## Guaranteed Flottweg quality

Made in Germany We have a clear vision of quality and make no compromises. Our customers often have to deal with aggressive materials. The components of Flottweg machines that come into direct contact with the medium to be processed are made exclusively from high-quality, rust- and acid-resistant stainless steels. This means higher strength and improved resistance.

Ideally equipped, our machines can continuously meet your requirements – in extreme cases 24 hours per day, 7 days per week. Additionally, product safety is ensured by our strict quality controls (DIN EN ISO 9001:2015) and the traceability of all critical components.



## Our service – we are always there for you!

Over 1100 employees around the world and a network of more than 60 sales and service centers are here to serve you. We are not only striving to provide first-class advice about selecting and designing our systems. We are available for you whenever you need us – in more than 100 countries around the world, 24 hours a day, 7 days a week.



## You can plan success. In just three steps.

Would you like to turn efficient separation or clarifying into your own success story?  
Then get in touch with Flottweg and benefit from our 3-step roadmap:

# 01

We will discuss the separation task with you and the desired business objectives.

# 02

In pre-engineering, we examine your raw materials in our laboratory and carry out customer-specific tests in the Flottweg technical center or on your premises. In this context, existing product samples can already be made available.

# 03

After design and detailed development, you will receive a concrete offer including all relevant key performance indicators for the realization of your individual Flottweg application.

**Make Flottweg the key player in your success:  
Our sales partners are looking forward to hearing about your ideas and challenges!**





Flottweg worldwide

**11**  
international  
subsidiaries

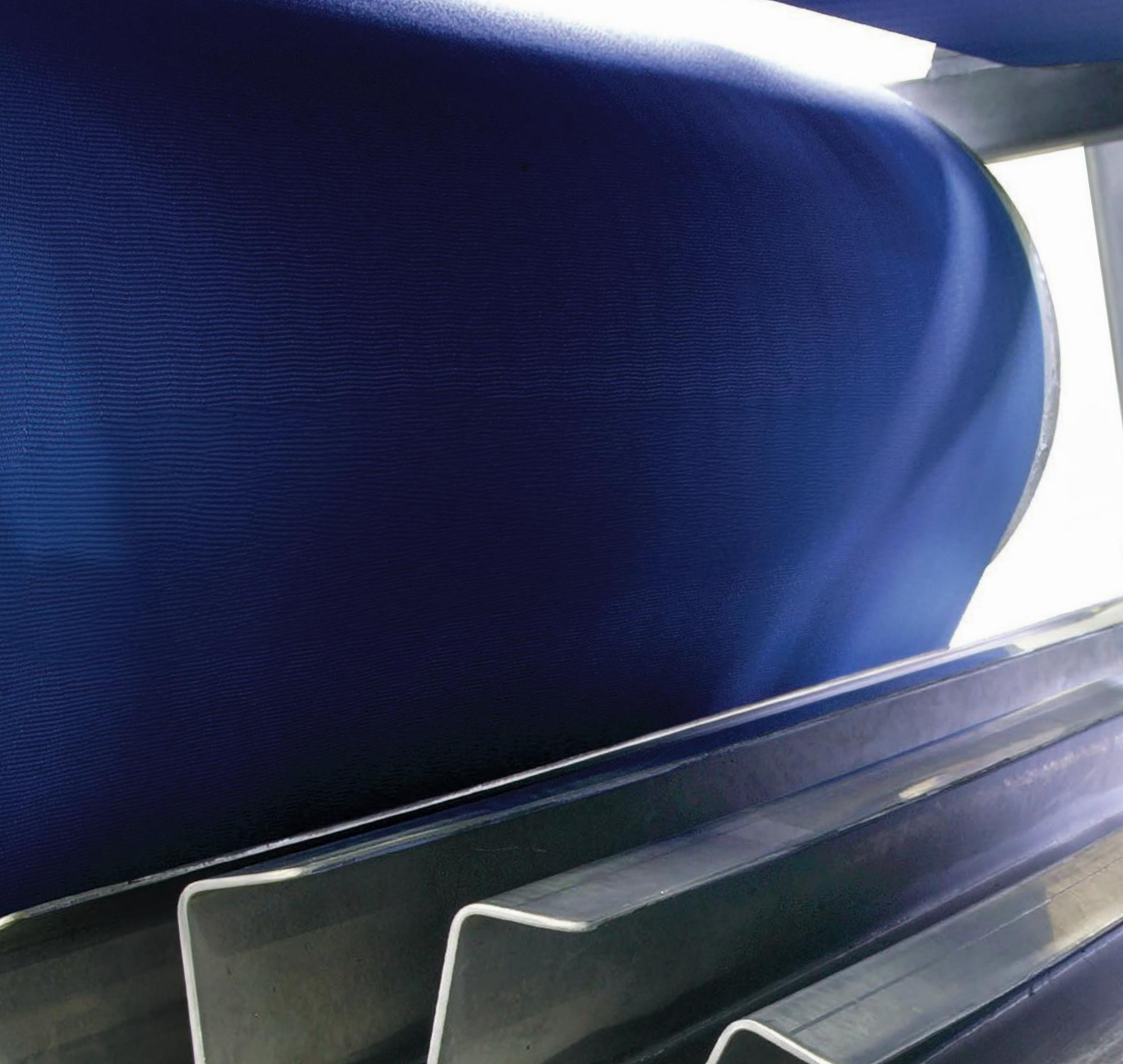
Projects in over  
**100**  
countries

Over  
**50**  
service centers

- - Headquarters
- - Subsidiary
- - Representative







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