

## Markert Group — four generations of excellence in textile process filtration

The Markert Group was established in 1929 and has been thriving over the years in the filtration industry specializing in manufacturing and selling filter cloths for industrial process filtration and hoses for industrial application.

Our mission is to make our customers' filtration process as efficient as possible. Consequently, Markert has successfully created a close network with leading OEMs and end customers.

In December of 2022, Markert made their way into the United States market with the acquisition of Cross Filtration. Cross Filtration became an industry leader in the US by maintaining a legacy of leadership, innovation, and high-quality craftsmanship. With the new name, Markert USA, Cross Filtration's legacy in

Moravia, New York will be carried on as part of Markert Group.

Today, as a market leader in the United States and Europe, Markert continues to base their strong brand reputation on three leading principles:

- 1. Integrity**
- 2. Optimization**
- 3. Innovation**

The experts at Markert stand by these principles to provide application specific advice and products that will optimize the effectiveness, lifespan, and overall efficiency of a liquid filtration process in any industry.



**Markert USA LP**

A Markert Group Company

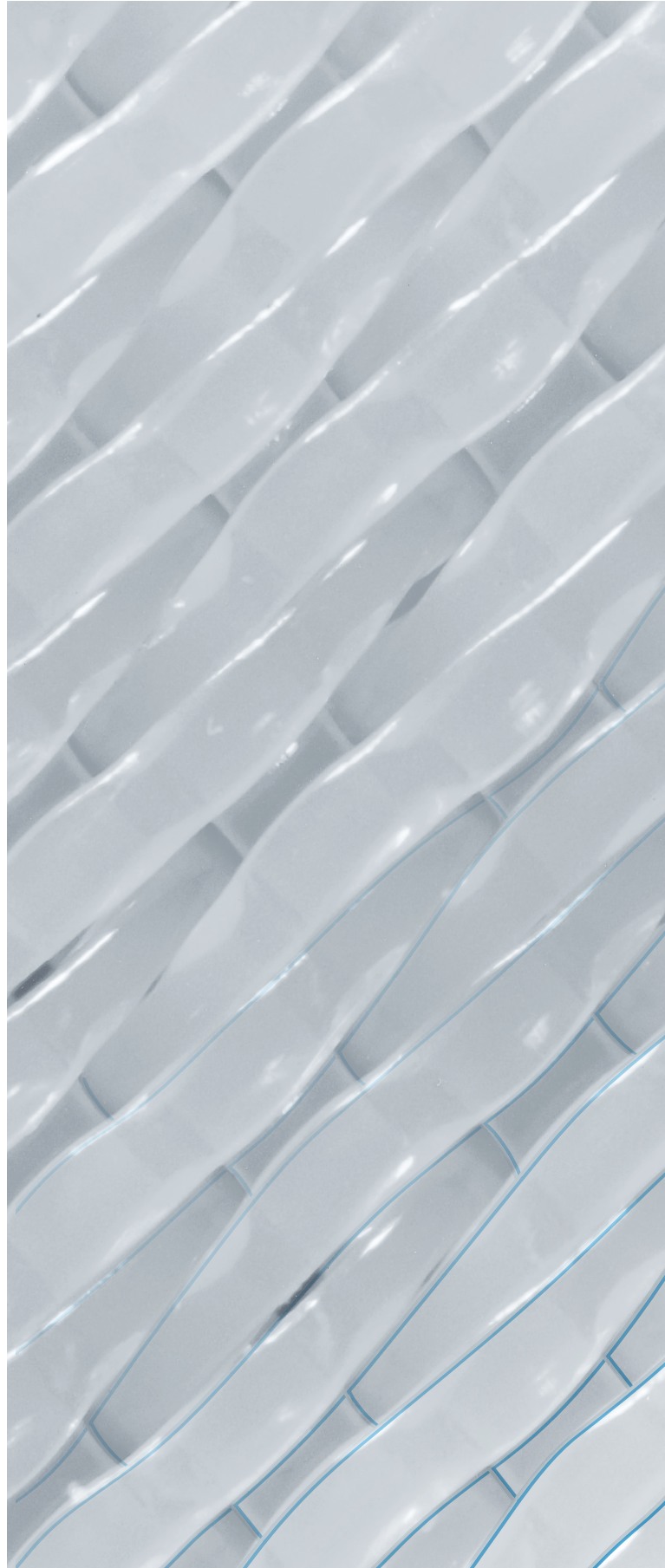
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Moravia, NY 13118 | United States

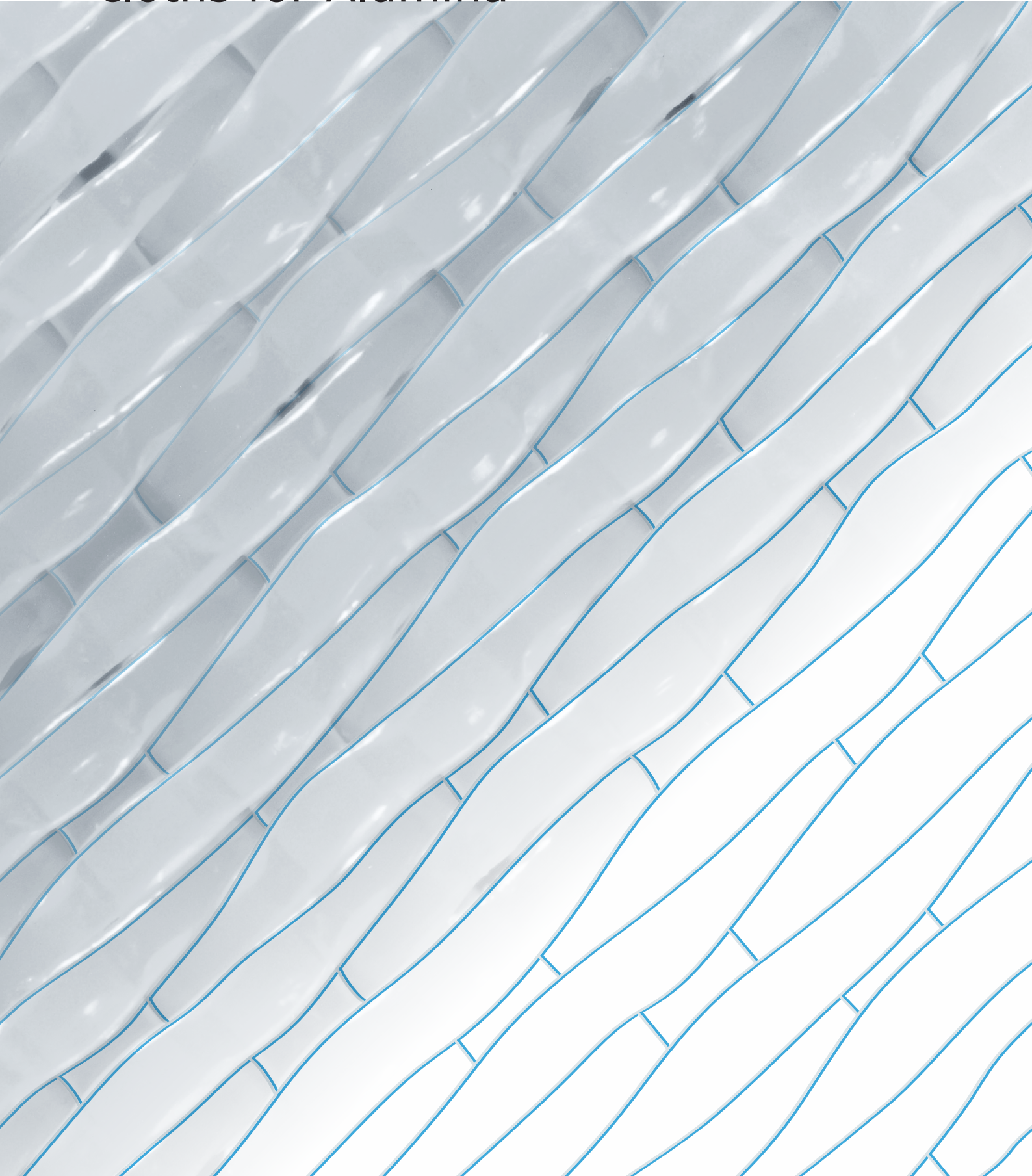
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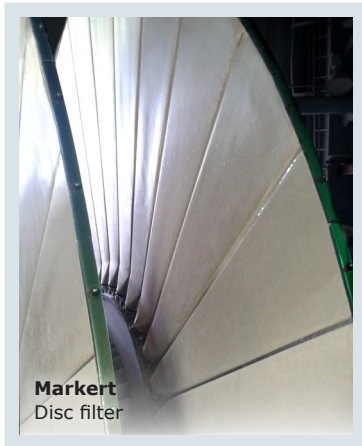
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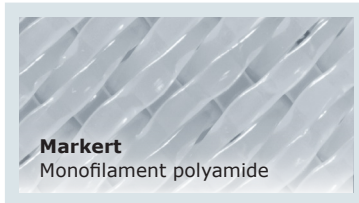


# High quality filter cloths for Alumina

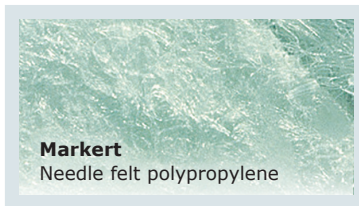




**Markert**  
Disc filter



**Markert**  
Monofilament polyamide



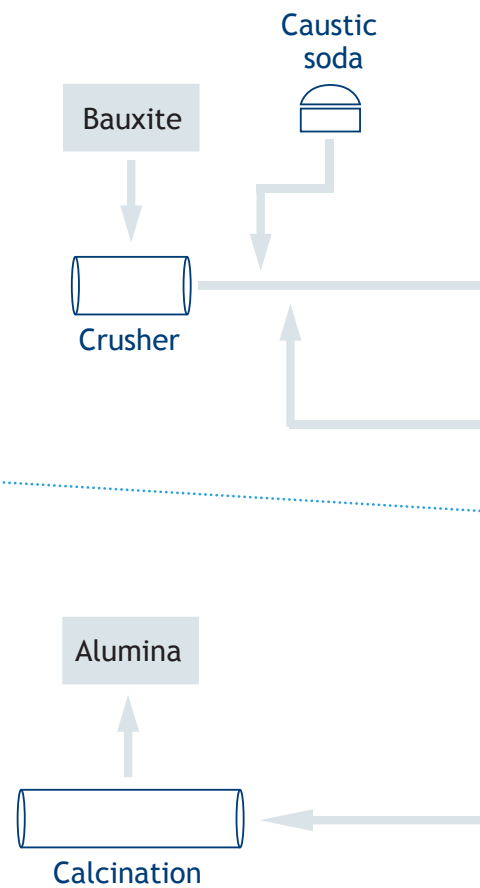
**Markert**  
Needle felt polypropylene

### Markert FILTER CLOTH FOR SEED FILTRATION

Seed filtration is not very demanding for a filter cloth in terms of separation, but because of the enormous throughputs required it is quite challenging.

Important features of **Markert** cloth can be listed as follows:

- improved dewatering and cleaning properties  
**constantly high throughputs**
- smooth surface of cloth  
**100% cake discharge even at high rpm**
- excellent wear properties  
cloth must withstand high mechanical impact of snap blow  
**prolonged life time**



### Markert FILTER CLOTH FOR PRODUCT FILTRATION

The most common method of filtration and washing of hydrate product is in a single step process on pan filter. It can be also carried out in a two-step or three-step process where drum filters and disk filters are applied. **Markert** double layer weave cloth on pan filters offer:

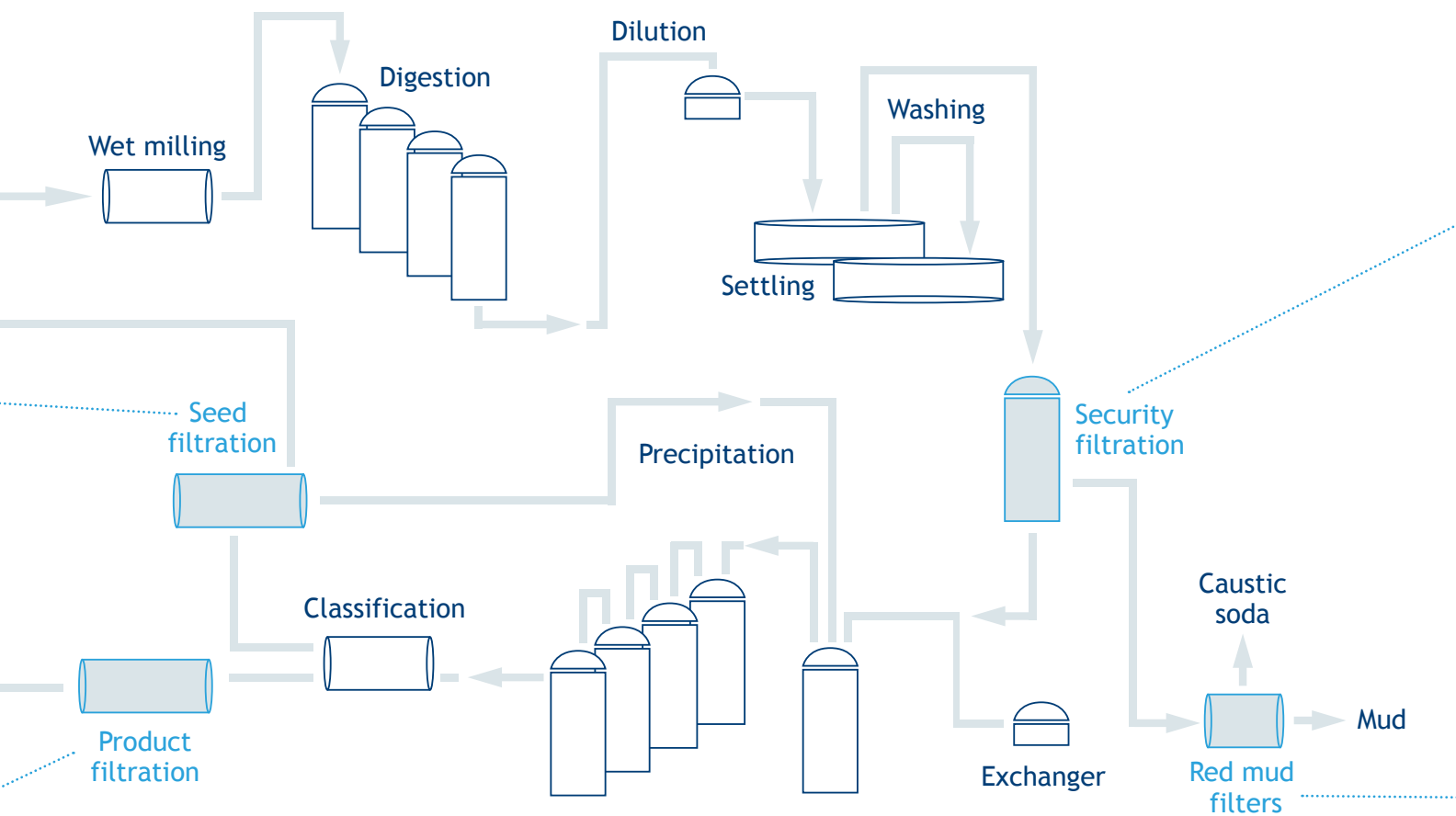
- Excellent dewatering properties  
**high throughputs, best washing results**

- strong resistance against mechanical wear  
**prolonged life time**
- smooth surface  
**easy cake discharge, no adhering residues**

The leading technology for large capacity disc and pan filter: **Double layer weave cloth**

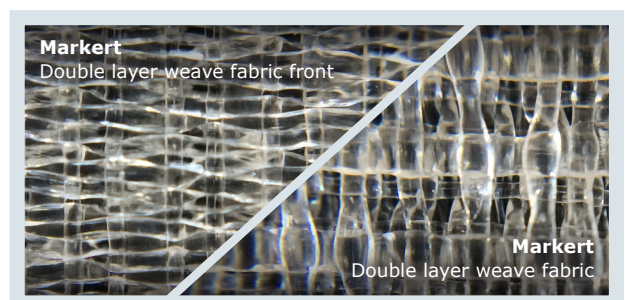
This special weave pattern might be also the solution for improving your filtration!

## Bayer process flowchart



It gives the benefits of combined filter and supporting cloth in a single cloth. The filtration side of the fabric consists of a monofilament that provides high throughput and excellent cake discharge while the back side consists of an integrated rigid supporting cloth which protects from damage.

This means there is no need for a separate backing cloth installation beneath the filter cover. This saves time during installation and set-up and offers an added benefit of increased life due to the advanced cleaning properties of the cloth.





**Markert** FILTER CLOTH  
FOR SECURITY FILTRATION

The purification of liquor is usually performed on

- Kelly filters
- vertical filters
- backwashing filters

Main features:

- high throughput but at the same time excellent retention of even very fine particles with size  $< 1 \mu\text{m}$   
**high filtrate clarity**
- form stability (no shrinkage) of cloth at temperatures in the range of  $95 - 110^\circ\text{C}$  ( $203 - 230^\circ\text{F}$ )  
**minimizes the risk of damage caused by friction**
- very good resistance of cloth against wear and tear  
**prolonged life time of cloth**
- excellent cleaning properties  
**consistent high throughputs**
- precise manufacture and use of auxiliary materials according to the needs of the machine and process



**Markert** FILTER CLOTH  
FOR RED MUD FILTRATION

The dewatering of thickened and washed red mud slurry can be performed in different ways. Traditional vacuum drum filters are widely used since they can handle large volumes of sludge. In the past decade, many OEMs have reacted to

alumina refineries' requirement for increasing production rates by implementing filtration systems offering considerable higher capacities such as the horizontal filter press.

The main claims of this process step are high throughput, excellent cake washing and lowest possible moisture content in the cake. **Markert** has suitable products to offer:

- particle size distribution  $X_{50} < 10 \mu\text{m}$  requires a very good filtration efficiency of cloth  
**high filtrate clarity and low moisture content**
- at the same time cloth should allow maximum throughput
- excellent wear properties  
**prolonged life time**
- extraordinary stability of cloth in regards to elongation and shrinkage
- good cleaning properties