

# filtertechnik.Europe

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## Better Function in Metal Mesh

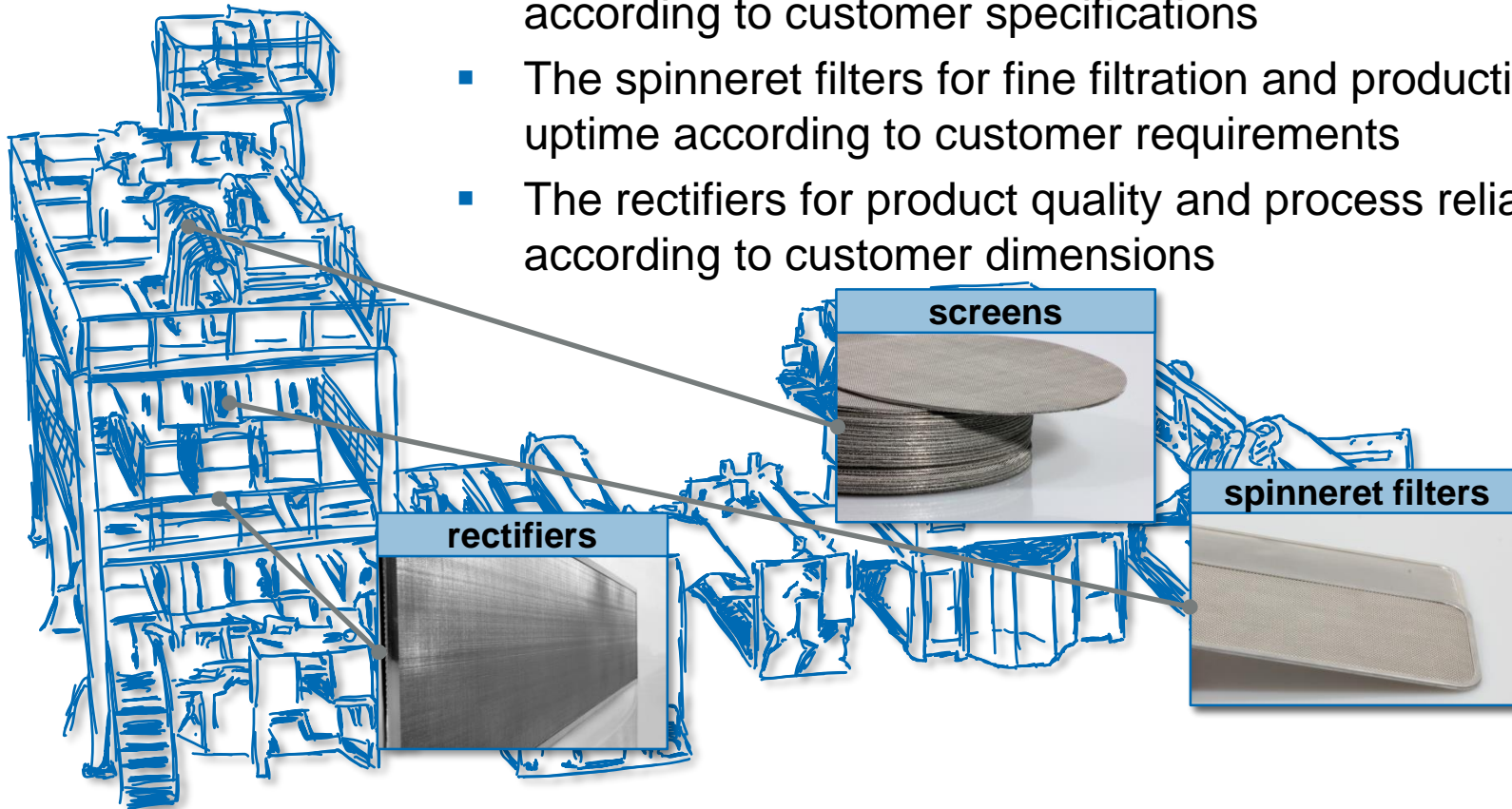
**Filtration 4.0** - *your solution for optimized nonwovens filtration*

# Nonwovens filtration

## Metal filters enable efficiency

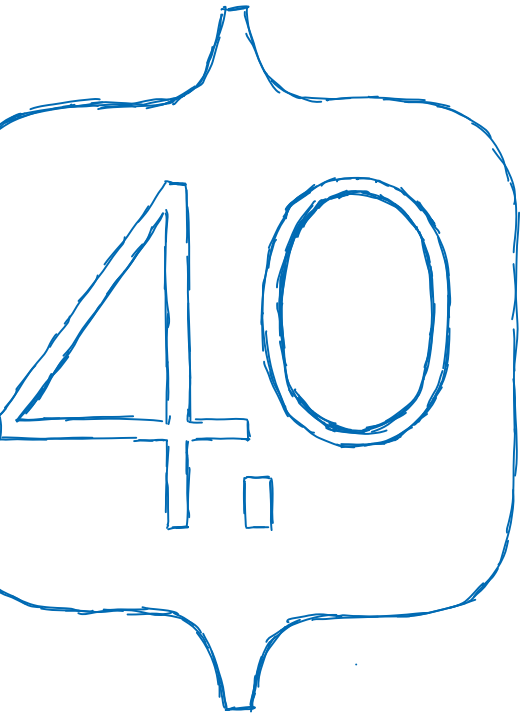


- The screens for continuous compound/plastic purity according to customer specifications
- The spinneret filters for fine filtration and production uptime according to customer requirements
- The rectifiers for product quality and process reliability according to customer dimensions



# Nonwovens filtration

## Our approach – Filtration 4.0



### Motivation – offer added value service!

- Let's offer the customer a plug'n'play service instead of a conventional product

### Technology – drive innovation!

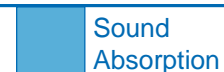
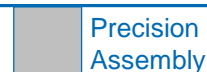
- Let's focus on what could be possible instead of on just what worked yesterday

### Partnership – unite expertise!

- Let's combine our expertise for our common benefit instead of conservative „this is mine – this is yours“

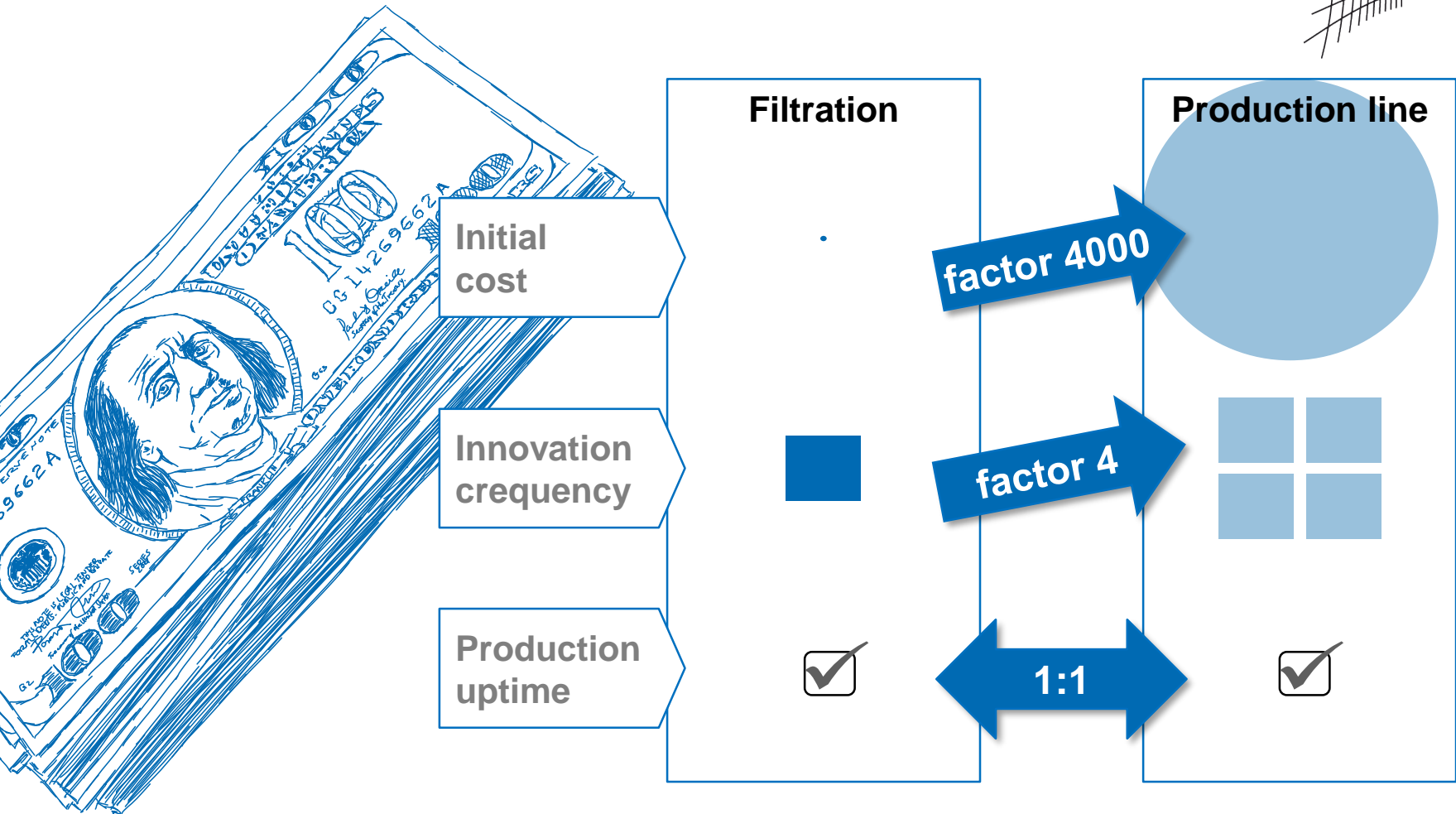
### Glocal – serve customers worldwide!

- Let's serve our customers with global standards and local flexibility for efficient global networks



# Nonwovens filtration

## No production without the filter



approximation based on fteu market analysis

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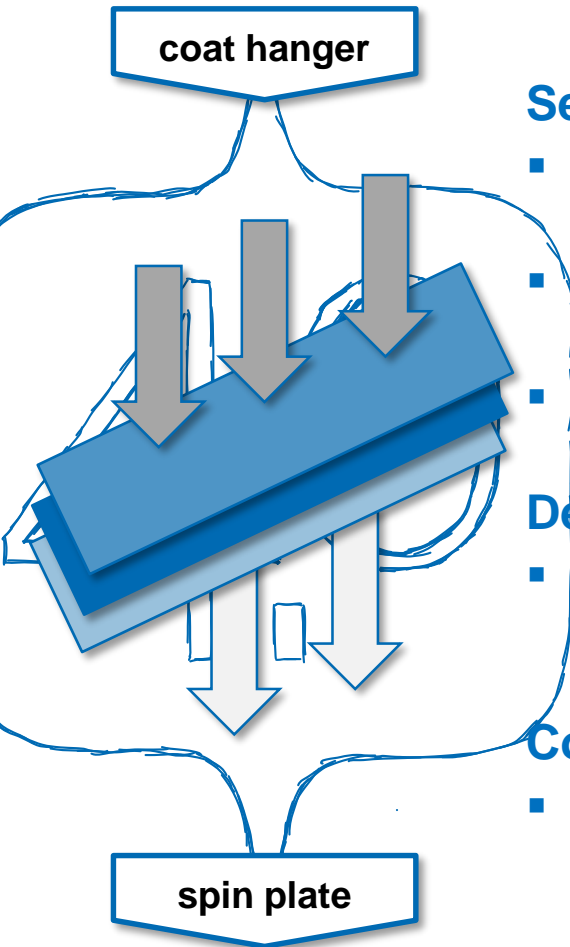
	Fluid Filtration		Fluid Dispersion		Precision Assembly		Sound Absorption		Heat Absorption
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Better Function in Metal Mesh

Slide 4

# Nonwovens filtration

## Spinneret filter as efficiency key



### Segmentation of filtration

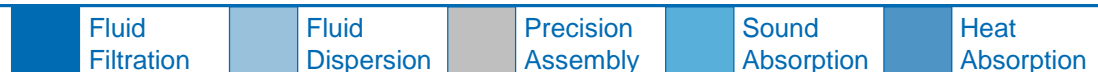
- **Flow in** – Focus on even distribution of the melt and separation of larger particles through pre-filtration
- **Filtration** – Focus on increasing dirt-hold-capacity and fine filtration to ensure constant product quality
- **Flow out** – Focus on the dispersion of melt over the entire spin plate surface and minimization of dead spots

### Definition of test types

- Seven test types for the focused trial and analysis of the actual improvement potential of flow in, cross flow, and flow out

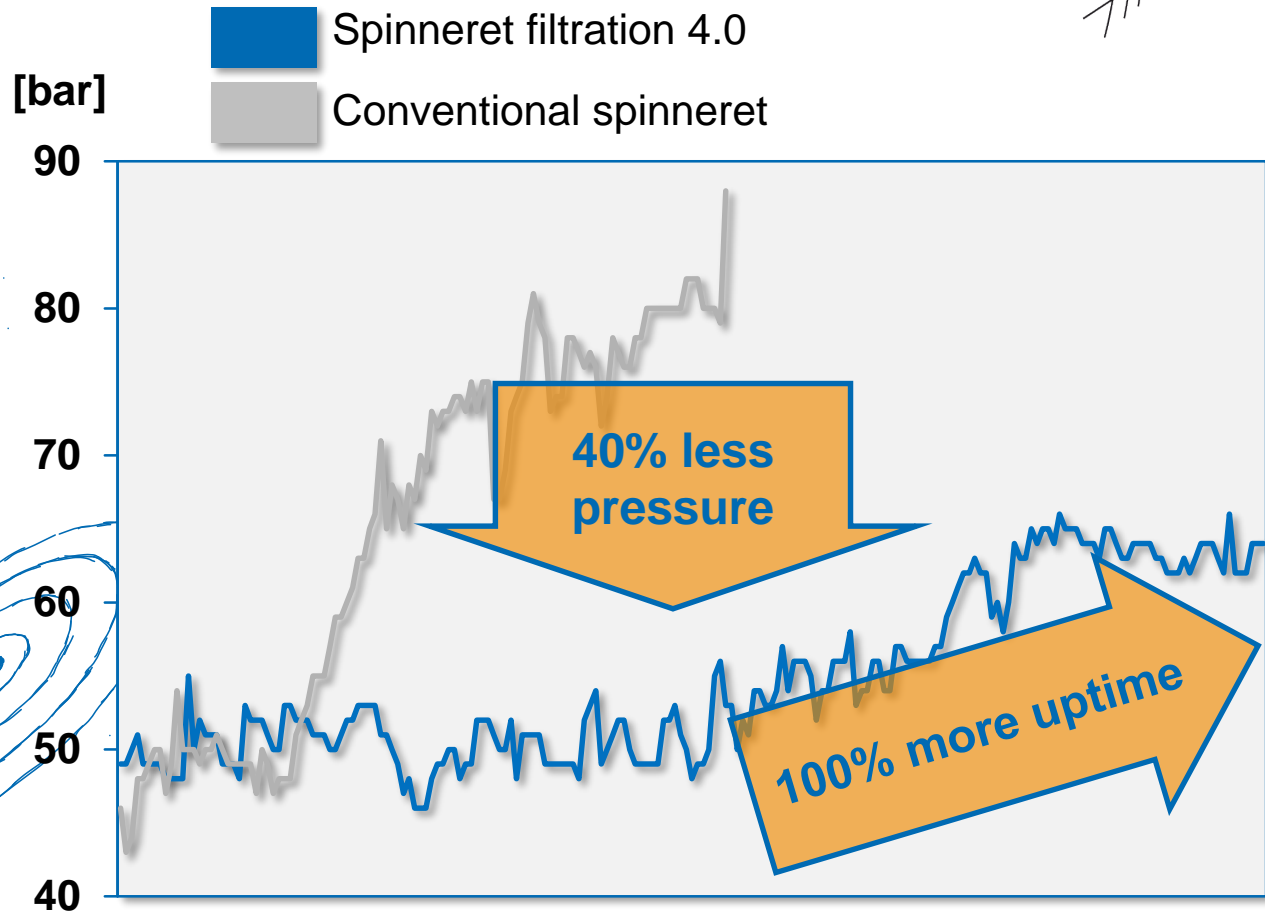
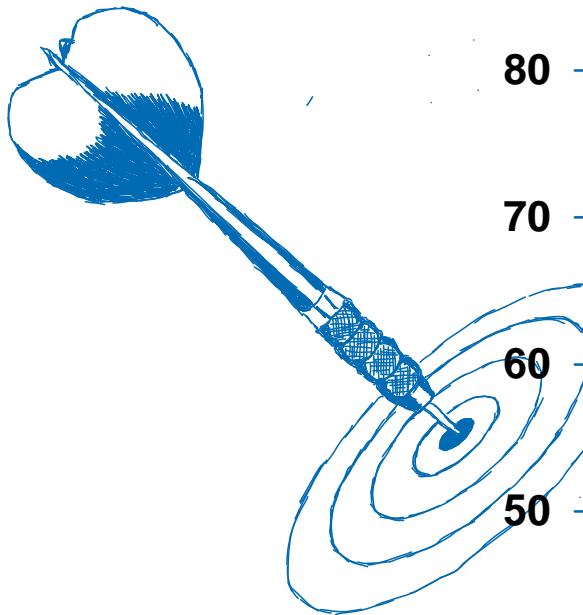
### Configuration of Spinneret Filtration 4.0

- Combination of efficiency-enhancing flow in, filtration, and flow out characteristics for the new cutting-edge filtration solution Spinneret Filtration 4.0



# Nonwovens filtration

## Filtration 4.0 – the results



tested under series production conditions with same production line, plastic and throughput; results depend on plastic as well machine and production parameters

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- Fluid Filtration
- Fluid Dispersion
- Precision Assembly
- Sound Absorption
- Heat Absorption

# Nonwovens filtration

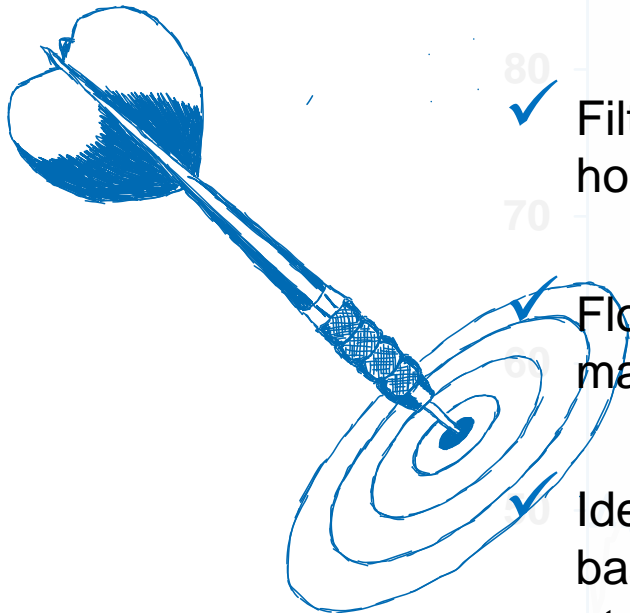
## Filtration 4.0 – the results



Spinneret 4.0

### Improvements of Filtration

- ✓ Flow in – Optimized layer specification leads to a more even melt distribution and decelerates pressure increase
- ✓ Filtration – 3D-structure of fine filtration increases dirt hold capacity and decelerates pressure increase
- Flow out – Improved mesh specification and filter manufacturing improves melt flow towards the spin plate
- Identification of variables to optimize filter specification based on the plastic/compound in use (additives, gels etc.)



tested under series production conditions with same production line, plastic and throughput; results depend on plastic as well machine and production parameters

Fluid  
Filtration

Fluid  
Dispersion

Precision  
Assembly

Sound  
Absorption

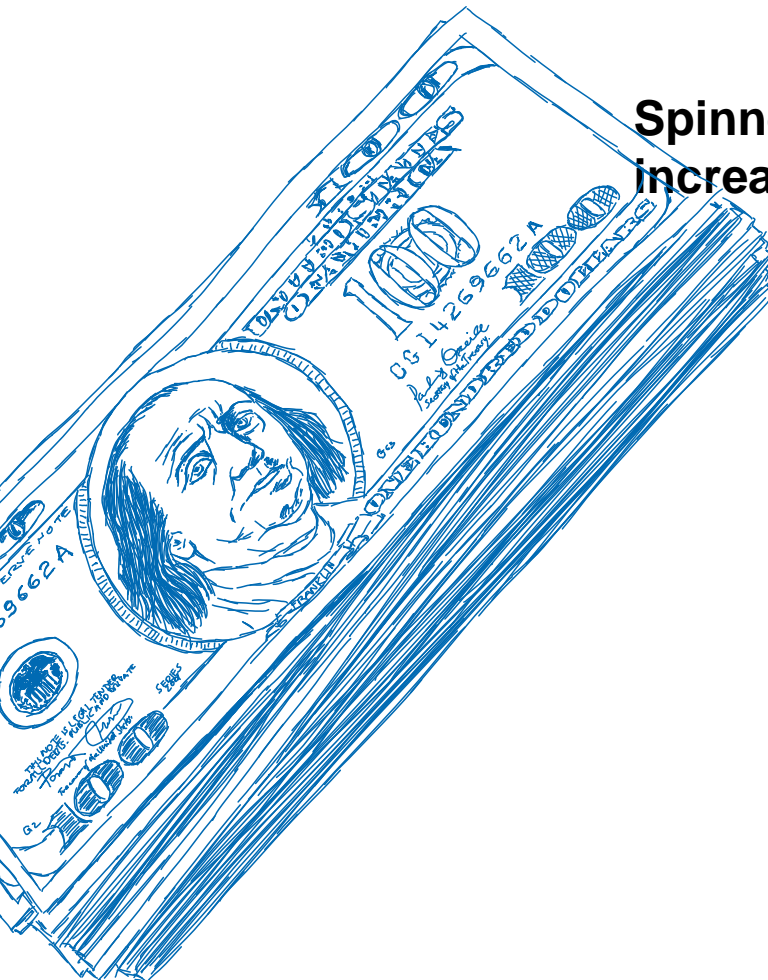
Heat  
Absorption

# Nonwovens filtration

## Filtration 4.0 – your benefits



Spinneret 4.0 is the cutting-edge filtration solution to increase efficiency in nonwovens production lines



Longer production uptime



Longer lifetime



Lower maintenance costs



Increased production output



Higher energy efficiency



Fluid  
Filtration

Fluid  
Dispersion

Precision  
Assembly

Sound  
Absorption

Heat  
Absorption



# Contact

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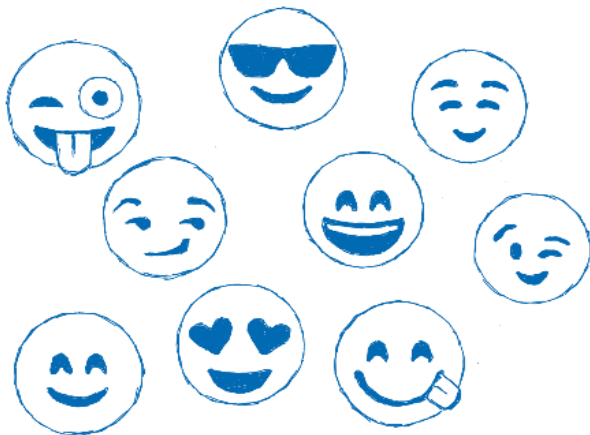
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Heat  
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