

# SuccessStory at Coating of Technical Textiles



**Go sustainable with  
PLEVA microwave sensors**

# The Situation



Coating is the essential part of functionalizing textiles, e.g. for sun protection, blackout curtains...  
Thereby, chemical pastes or foams are added to the textile.

Often, two challenges occur in production, which have a **high impact on sustainability** and **cost-efficiency**:

## 1. Too much coating is added.

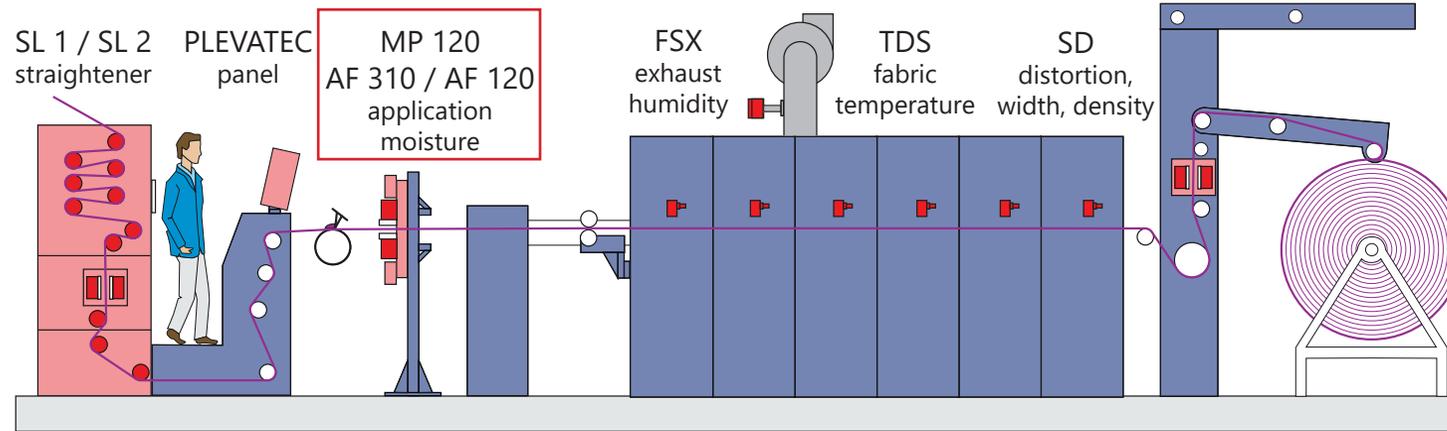
This implicates **unnecessary consumption of pastes and foams**, as well as increased **energy consumption for drying**. Or in some cases it means the good is second choice or even rejected (as it is e.g. too thick).

## 2. Too little coating is added.

This leads to **second choice or rejects**, which in turn also means unnecessary consumption of resources.

# The Solution

To save valuable resources and prevent rejected goods, the contactless measurement and control of the add-on is required.



The microwave measurement systems [AF 120](#), [AF 310](#) or [MP 120](#) are placed directly after the coating knife. This enables a permanent monitoring and control of the coating application. Even the smallest changes of the coating application become visible, and the add-on chemicals can be reduced to minimum.

➡ **The result is: more constancy, reproducibility and evenness.**

# The Success

## Exemplary calculation of resource and cost savings

with data from one of our customers with a coating production in the Netherlands

<b>Production data</b>	1.500.000 m <sup>2</sup> foam coatings per year	and	1.500.000 m <sup>2</sup> paste coatings per year
<b>Costs of chemicals</b>	foam = 1.6 €/kg	and	paste = 3.5 €/kg

Exemplary, experienced saving of chemicals due to usage of microwave sensor: [5 g/m<sup>2</sup>](#)

**Savings of costs**

Foam:  $1.500.000\text{m}^2 \cdot 5\text{ g/m}^2 \cdot 1.6\text{ €/kg} = 12.000\text{ €}$   
Paste:  $1.500.000\text{m}^2 \cdot 5\text{ g/m}^2 \cdot 3.5\text{ €/kg} = 26.250\text{ €}$

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**38.250 €**



### Our impact as your **HEROES FOR SUSTAINABILITY**

- Only required chemicals are used, which saves resources (up to some tons per year).
- Energy consumption for drying can be reduced to a minimum.
- Less rejected/second choice goods are produced.
- No need for cut-outs of fabrics for checking the coating.