

# Schönfelder Papierfabrik: VForm for better performance and paper quality



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150 Years



# Superior paper quality and greater flexibility

ComCore –  
Papermaking

**4.0** ready

By retrofitting the PM 1 with VForm hydrofoils, Schönfelder Papierfabrik is responding to current market demands. The 3-in-1 solution ensures optimum dewatering in the forming section, even if changing between paper grades and basis weights frequently. So this traditional company gains more flexibility to adapt production to continuously changing demands.

 **-5** mm

height adjustment

Schönfelder Papierfabrik's PM1 in Annaberg-Buchholz (Germany) is one of the first paper machines retrofitted with VForm hydrofoils. Andy Diedrich, Production Manager at Schönfelder Papierfabrik, explains the key reasons for this retrofit: **“The constant improvement of our paper quality and the expansion of our grade range present new challenges every day”**. With VForm, Mr. Diedrich and his team now have three parameters at hand with which they can meet these criteria: Firstly, VForm allows the individual lowering of each foil by up to five millimeters. Secondly, each foil can be adjusted at an angle of up to seven degrees. This helps to identify the optimum setting for each paper grade and basis weight.

**7°** 

angle adjustment

**Optimum settings are stored and easily retrievable**

The third parameter enables the integration of the system into the automation platform ComCore. Data for each paper grade and each basis weight can be stored and recalled during a grade change. **“The ready-to-connect VForm hydrofoil boxes supplied by Voith are individually adjustable and could be easily integrated into the control system of our PM 1 with ComCore”**, praises Mr. Diedrich. The



- 1 Each VForm hydrofoil can be adjusted exactly with respect to its height and angle, as confirmed with measurements carried out by Robert Attwenger (left), Voith development engineer, and Andy Diedrich, Schönfelder Papierfabrik.
- 2 One of the two VForm hydrofoil boxes in use.

optimum setting for each paper grade and basis weight takes place fully automatically, which significantly increases process reliability. **“Through the use of VForm hydrofoils we are able to react flexibly to the increased market demands in the future”**, summarizes Mr. Diedrich.

#### Improvement of all important parameters

With respect to the PM1, Schönfelder has replaced three of the existing conventional boxes by two VForm hydrofoil boxes. By using VForm, dewatering performance in this area has increased by up to 50%. And not only this, as Mr. Diedrich adds: **“With the new VForm hydrofoils from Voith, we achieve higher drainage capacity and improved formation. At the same time, we were able to increase the static strength properties and achieve improved fiber orientation.”**

Because precise setting of the dewatering system results in higher activity and better homogenization of the fiber suspension. This results in increased paper strength.

The improvement of the dewatering performance opens up the possibilities for higher basis weights, and also to an increase in production at higher basis weights.

#### Results at Schönfelder

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- + Improvement in paper quality and performance
  - Increase in dewatering performance by up to 50%
  - Higher strength by up to + 8%
  - Improved fiber orientation by > 40%
  - Improved formation by > 10%
- + More production flexibility allows frequent change of paper grade and basis weight
- + Intuitive and simple handling by means of IT integration via ComCore platform

## About Schönfelder Papierfabrik

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Schönfelder Papierfabrik was founded in 1911. Over the last twenty years, the traditional company has modernized its plants repeatedly, and offers a wide selection of paper products completely manufactured from waste paper. Meeting customer requirements individually and in the shortest possible time – this is a core element of Schönfelder Papierfabrik's corporate philosophy.

Voith Paper GmbH & Co. KG  
St. Poeltener Strasse 4  
89522 Heidenheim, Germany  
Tel. +49 7321 37-0



[paper@voith.com](mailto:paper@voith.com)  
[www.voith.com/paper](http://www.voith.com/paper)

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