



PULP & PAPER

# REAL-WORLD EVALUATIONS

ANDRITZ LEAF TESTER FOR DISC FILTERS

**ANDRITZ**

ENGINEERED SUCCESS



# Comparative testing of disc filter sectors, bag fabrics, and process parameters

Disc filter performance can deteriorate in the course of the time. This drop in productivity, filtrate quality, or level of dryness can be caused by a number of factors, such as worn parts or incorrect adjustments. A change in process condition or pulp grade can also affect operation of the disc filter and might be a reason for optimizing the production, to reduce fiber losses or increase throughput, for example.

## THE ANDRITZ LEAF TESTER™\*

This measurement and simulation device can help determine the improvement potential of your disc filter based on stock samples collected directly at your machine during every-day operation. It can be used in both thickening and save-all applications.

All test runs can be conducted in a single shift by an ANDRITZ expert without affecting disc filter operation. The Leaf Tester combines a comparison of various filter types (sector designs, bags) with simulated process parameters in order to establish the optimum set-up.

## SIMULATION OF VARIOUS PROCESS PARAMETERS

- Underpressure (vacuum)
- Rotational speed
- Filtrate split
- Drying time





The process set-up is simulated with the ANDRITZ Leaf Tester software. For each filter type, samples are taken directly at your disc filter, each test run generating a piece of fiber mat as well as a given quantity of filtrates (cloudy and clear for thickeners, cloudy, clear and super-clear for save-all applications). All samples will be analysed in your on-site fiber laboratory to determine the dry content of the fiber mat, the production volume, the quality of filtrates, and so on.

The detailed test report will also contain recommendations for improvements, such as a change of sector type or bag, or a combination of both. Furthermore, there may be advice on an adjustment to the process parameters.

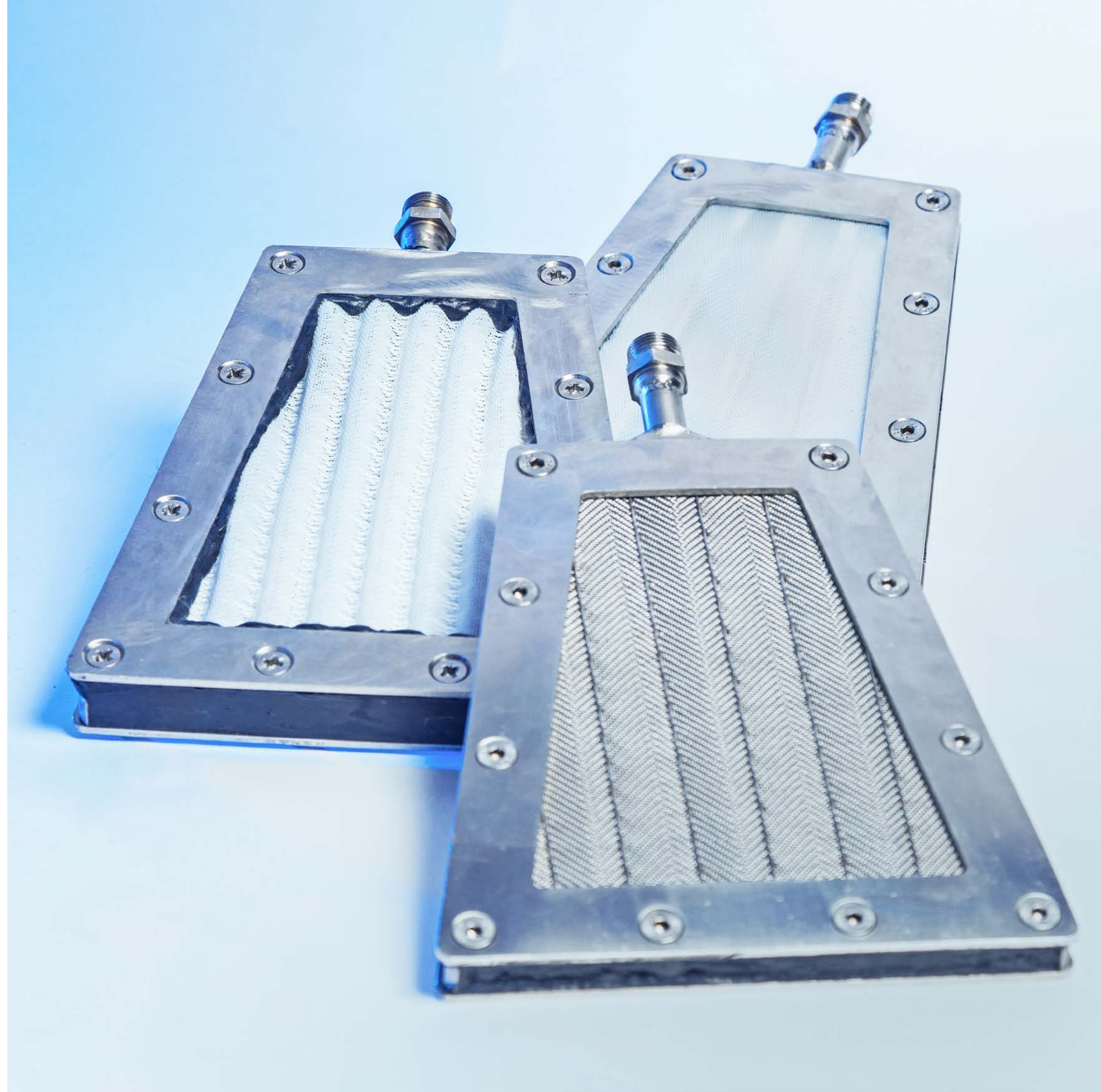
#### COMPARISON OF SECTORS

Furthermore, different sector or bag types can be tested and compared in order to determine the most effective combination for each application:

- SuperFlow sectors
- Grid sectors
- Bagless sectors
- Flat and high-capacity bags
- Selected competitor filter types

#### BENEFITS

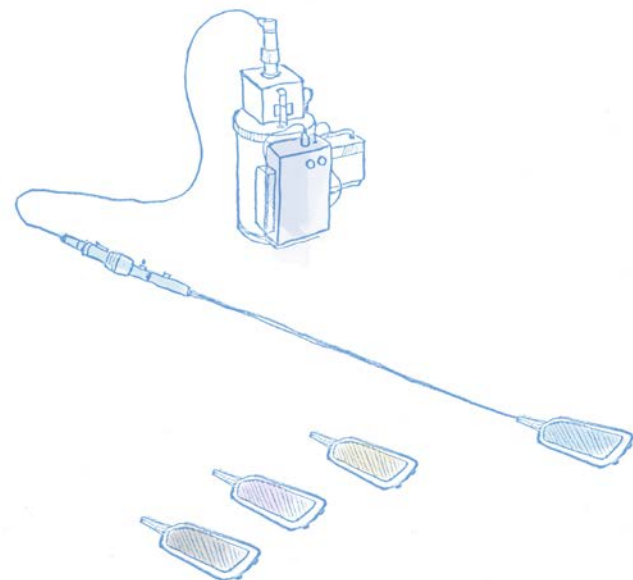
- Testing under real operating conditions at the customer's disc filter
- Comparison of filter types and evaluation of process parameters
- Low-effort test providing fast results
- Clear improvement recommendations from ANDRITZ





# Work steps

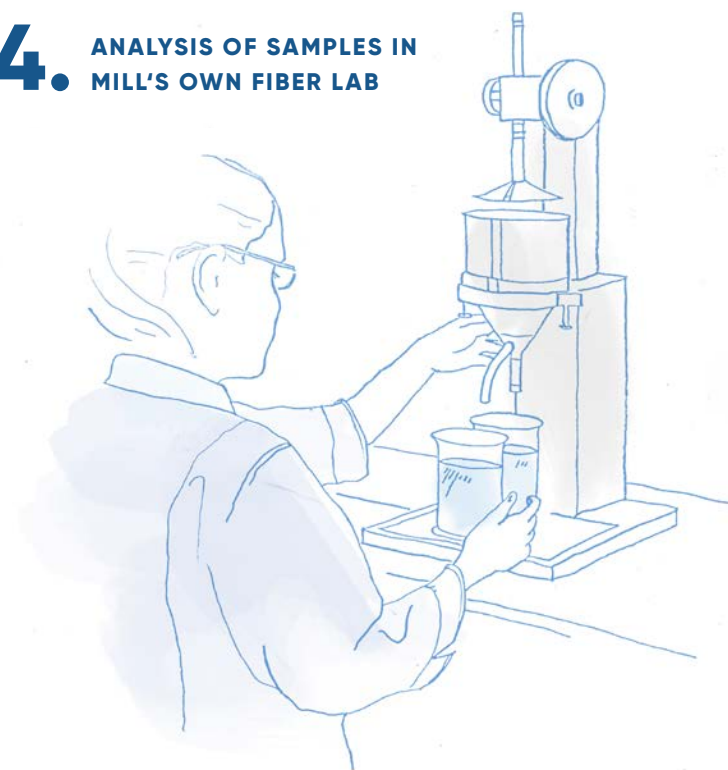
## 1. ANDRITZ LEAF TESTER: COMPARATIVE TESTING OF DISC FILTER SECTORS AND BAGS



## 2. SIMULATION OF DISC FILTER PROCESS FOR EACH TEST RUN IN LEAF TESTER SOFTWARE



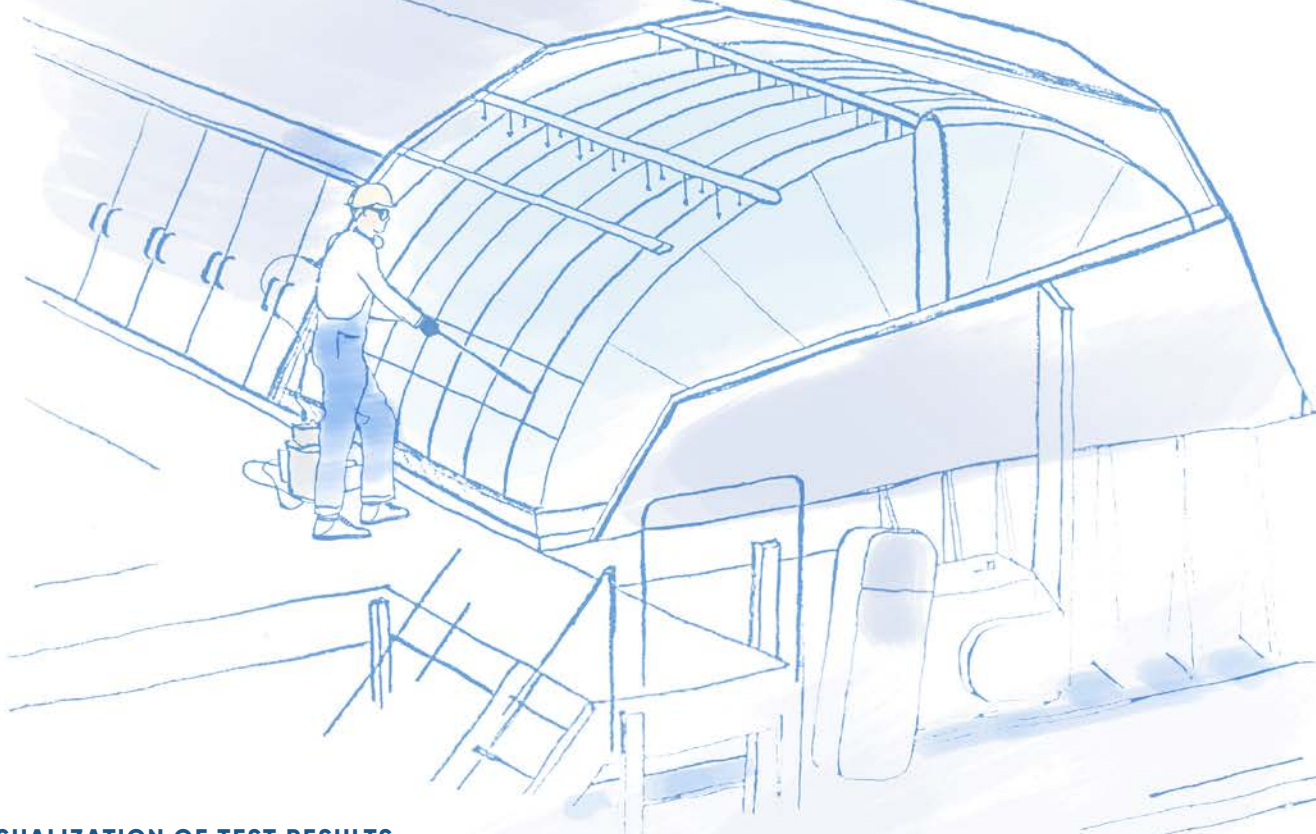
## 4. ANALYSIS OF SAMPLES IN MILL'S OWN FIBER LAB



## 5. TEST REPORT AND RECOMMENDED MEASURES



## 3. SAMPLING WITH VARIOUS FILTER TYPES DURING DISC FILTER OPERATION



### VISUALIZATION OF TEST RESULTS





#### **EUROPE**

ANDRITZ AG  
Graz, Austria  
p: +43 316 6902 2446

ANDRITZ OY  
Kotka, Finland  
p: +358 020 450 5555

#### **ASIA**

ANDRITZ K.K.  
Tokyo, Japan  
p: +81 3 3536 9700

PT. ANDRITZ  
Jakarta, Indonesia  
p: +62 21 390 5001

#### **CHINA**

ANDRITZ (CHINA) LTD.  
Foshan, Guangdong, China  
p: +86 757 8202 3502

#### **NORTH AMERICA**

ANDRITZ LTD.  
Lachine, QC, Canada  
p: +1 514 631 7700

#### **SOUTH AMERICA**

ANDRITZ BRASIL LTDA.  
Curitiba, Brazil  
p: +55 41 2103 7601

#### **ANDRITZ.COM**

dewatering-service@andritz.com



\* Trademark of the ANDRITZ GROUP. For information regarding ownership and countries of registration, please visit [andritz.com/trademarks](http://andritz.com/trademarks)  
All data, information, statements, photographs and graphic illustrations in this leaflet are without any obligation and raise no liabilities to or form part of any sales contracts of ANDRITZ AG or any affiliates for equipment and/or systems referred to herein. © ANDRITZ AG 2019. All rights reserved. No part of this copyrighted work may be reproduced, modified or distributed in any form or by any means, or stored in any database or retrieval system, without the prior written permission of ANDRITZ AG or its affiliates. Any such unauthorized use for any purpose is a violation of the relevant copyright laws. ANDRITZ AG, Stattegger Strasse 18, 8045 Graz, Austria. DF Leaf Tester 1.1/03.2019 EN