



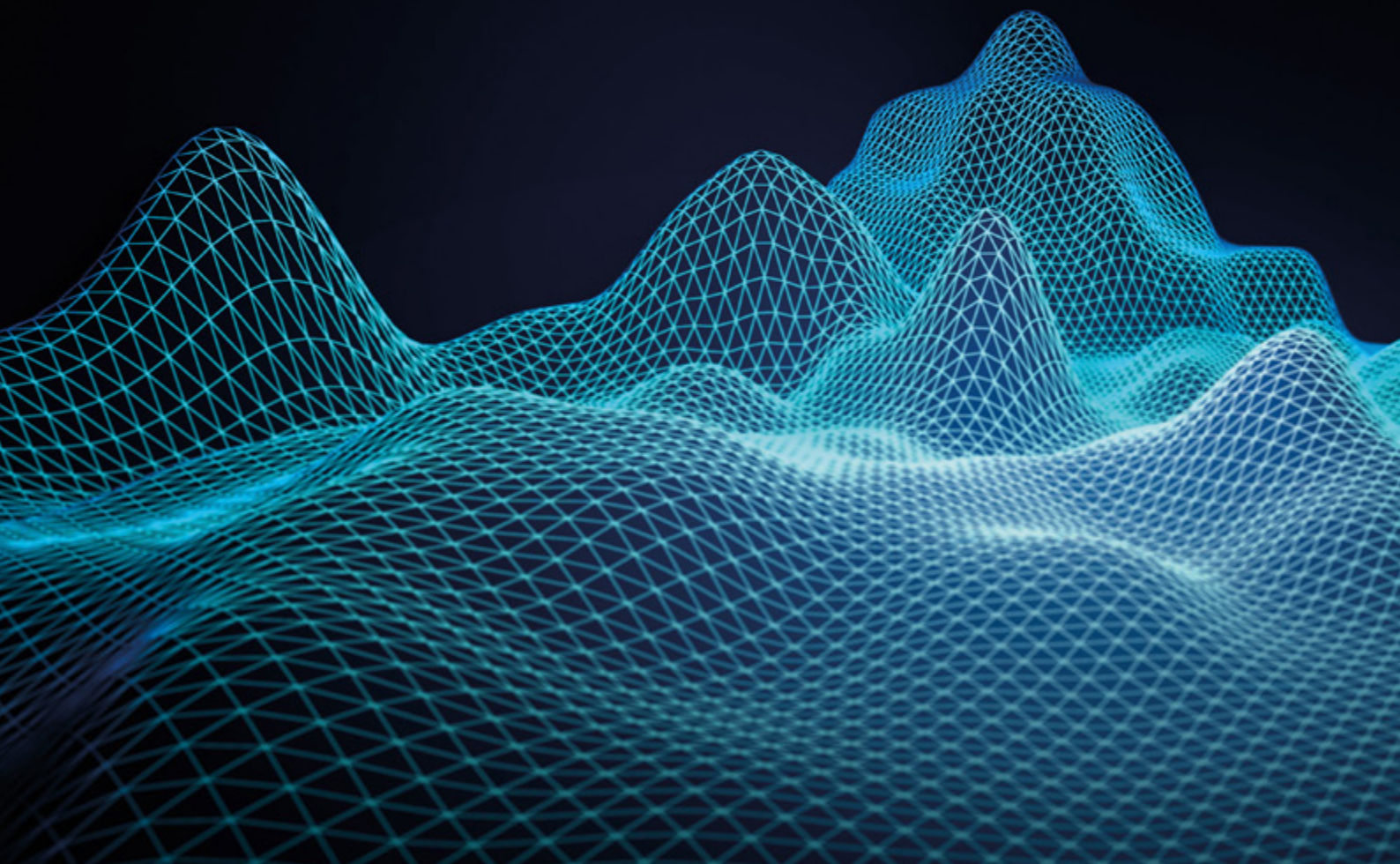
AUTOMATION
METRIS OPP
OPTIMIZATION OF
PROCESS PERFORMANCE

ANDRITZ

ENGINEERED SUCCESS

Metris is built on know-how and expertise

ANDRITZ combines technology, innovation, and know-how in digitalization under the brand name Metris – ANDRITZ Digital Solutions. The latest developments in the areas of technology covered by the Industrial Internet of Things are constantly being integrated into result-oriented solutions like Metris OPP (Optimization of Process Performance). The main focus lies on Smart Sensors, Big Data, and Augmented Reality. The Smart Service initiative complements the beneficial offering provided under the umbrella brand Metris.



Editorial

"Outstanding competitive position in the digitalization sector by linking new technologies to the network of ANDRITZ experts."



WOLFGANG LEITNER
President and CEO / ANDRITZ AG

Digitalization and linking of machinery and plants is an important focus in the strategies pursued for the future by modern production facilities. This has been acknowledged by creating an independent, virtual division – ANDRITZ Process Optimization (APO) – that concentrates over ten years of experience gathered in a considerable number of key projects. Metris OPP was developed by ANDRITZ and has been used – mainly by pulp mills – very successfully for over a decade.

In addition to digital optimization of plants in the pulp industry, the development of innovative control functions is now focusing on all of the other industries that ANDRITZ serves. OPP continues to develop

further, for example with new technologies implemented on the basis of deep learning (machine learning method based on the functioning of the human brain). By combining the latest sensor technologies with data analytic methods and involving the entire network of experts at ANDRITZ, OPP Services already succeeds in saving our customers over 50 million euros per year, numbers increasing.

An extensive product roadmap with over 40 additional apps and 500 customer-specific features on top of over 35 apps that are already implemented form the basis on which to meet the challenges of the fourth industrial revolution for our customers.

A handwritten signature in black ink, which appears to read "W. Leitner".

OPP goals



Increase the
process stability



Increase the
mill availability



Increase the
total production



Fast response
from area to area



Reduce the
energy cost



Reduce the
chemical cost



Keep existing
savings in
long term



Support operation:
diagnostics, start-
up, mill-balance

**BOOST
YOUR TEAM WITH
THE EXPERIENCE
OF MORE THAN
200 EXPERTS**

**INCREASE YOUR
PERFORMANCE BY
USING THE LATEST
TECHNOLOGIES**

**TRANSFORM
PROCESS KNOW-
HOW AND ARTIFICIAL
INTELLIGENCE INTO
BUSINESS RESULTS**

How Metris OPP helps achieve your business targets

ANDRITZ offers many advantages with Metris OPP service contracts by combining the latest technological insights in digitalization with in-house process experience gathered over several decades.

This is achieved by combining the Metris UX Platform with the expert

know-how provided. This powerful platform can be adjusted and customized individually according to customers' specific needs. A local expert analyst on site as well as remote assistance services complete the overall service concept and make it possible to implement customer-spe-

cific requirements promptly. The local experts are part of a global network and can thus fall back on the entire wealth of ANDRITZ experience. New algorithms for process improvements can thus be implemented in existing Metris systems at any time.



3%

PRODUCTION INCREASE

on average improvement results by Metris OPP.

98%

OF PROCESS STABILITY

referential for reached mill availability.

6%

REDUCTION IN CHEMICAL AND ENERGY CONSUMPTION

on average improvement results by Metris OPP.

10 years of experience with Metris OPP

The intelligent Metris platform analyzes available plant data, compares it with data already gathered, analyzes the data, and then provides valuable output for business intelligence, big data analytics, quality management, augmented reality applications,

and process information. These results play a vital role in increasing the efficiency and performance of systems already installed and thus secure competitive advantages on the international market. But OPP is not just a platform – it offers ANDRITZ service contracts for both

on-site and remote assistance services by specialists. These support services are performed by a network of various experts, for example by process engineers, chemical experts, or mechatronics engineers, depending on the customer's requirements.

OVER
50
CONTRACTS
IN 14 COUNTRIES

OVER
50
MILLION EUROS
SAVINGS PER YEAR

32
MILLION TONS
OF PRODUCTION

OVER
200
EXPERTS

0
CAPITAL
INVESTMENT

Note: Results until end of 2018



What our customers say



WOLFGANG MIZERA

Manager Pulp Production,
Sappi Austria

"With Metris OPP, we are securing advantages in process control at plant level."

We have been using Metris OPP very successfully in pulp production since 2014. The innovative approach of this IT solution supports the complex process control loops and process stages and helps to stabilize the processes at the individual plant levels. Thus, we had a large amount of data available on the stability of the control loops and range of levels relevant to quality, and we were able to reduce the costs for chemicals and energy. Our next goal is to increase automatic operations throughout the plant.



GÜNTER LEITGEB

Manager of Smurfit Kappa pulp and
paper mill, Nettingsdorf, Austria

"The benefits of Metris OPP to improve plant performance are remarkable."

We have been using OPP from ANDRITZ since 2013 and are very happy with the results achieved by digitalization and the connectivity of products and components. Initial successes, like energy savings, a stable production process, and higher output, were achieved after a very short time.

THE METRIS COMPETENCE

ANDRITZ offers a broad and constantly growing range of innovative products and services in the industrial digitalization sector under the brand name Metris, helping customers to

- enhance plant efficiency and profitability
- optimize the use of resources
- achieve constant and highest product quality
- reduce production downtime
- maximize user-friendliness

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