



# SEPARATION KEEP YOUR PRODUCTION LINES RUNNING SPARE AND WEAR PARTS

The secret to success lies in keeping your production lines running. That is why we at ANDRITZ have made considerable investments in our stockholdings of spare parts at our sites around the world. No matter where you are located, our mission is to ensure you get quick and reliable delivery of the parts you

need – whether from our own local inventories or from consignment stocks. With the exception of consumable wear parts, all of our spares have a twelve month warranty against manufacture or material defects. Take advantage of our 150 years of OEM experience gained from an installed base of

more than 55,000 machines. Let our global team of solid/liquid separation specialists help you improve safety, reduce costs, and save on power – for a vast number of well-known OEM brands.

## ANDRITZ

ENGINEERED SUCCESS





# SEPARATION SUPERIOR LIFETIME PERFORMANCE

## REPAIRS AND UPGRADES

Why scrap your existing solid/liquid separation equipment or system if it could be upgraded with the help of the latest R&D? And who better to perform OEM repairs, machine re-certifications, and enhancements than ANDRITZ, who engineered many of these systems from the start? Whether you're looking to

optimize performance or extend the lifetime of your equipment, our teams can repair, retrofit, and modify your machines on-site, or in one of ANDRITZ's 70 manufacturing and service locations worldwide. All so you can add years of productivity with the minimum possible downtime. Take advantage of our 150 years of

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# ANDRITZ

ENGINEERED SUCCESS





SEPARATION

# A WORLD OF SERVICE

PUT OUR 150 YEARS OF OEM EXPERIENCE  
TO WORK FOR YOU

**ANDRTZ**

ENGINEERED SUCCESS

# Put our 150 years of OEM experience to work for you

## VAST EXPERIENCE THROUGH LARGE INSTALLED BASE

With an installed global base of more than 55,000 solid/liquid separation machines and systems, you can imagine that we take service seriously. Wherever these customers are located, we work very closely with them to maximize uptime and boost efficiency.

## WELL-KNOWN OEM BRANDS

Some customers know us as the people with ANDRITZ on our overalls. Others have come to understand that we are the OEM behind former brand names like 3Sys Technologies, Bird, Delkor Capital Equipment (Pty) Ltd., Escher Wyss dryers, Frautech, Guinard Centrifugation, KHD Humboldt Wedag, Krauss-Maffei centrifuges, dryers, and filters, Lenser, Netzsch Filtration, Rittershaus & Blecher, Royal GMF Gouda, Sprout Bauer, and Vandenbroek - all companies that have been acquired by ANDRITZ. But frankly, we are capable of servicing and supplying spare parts for nearly all brands of solid/liquid separation equipment on the market.

## LOCAL SUPPORT BACKED BY GLOBAL EXPERTISE

Our service philosophy is simple: One phone call, one contact person, one dedicated team that speaks your language and knows your equipment and process. This is not an empty promise. It is backed by a network of 550 service specialists for separation equipment and systems as well as service centers all around the world.

## A TRUE FULL-SERVICE PROVIDER

Whether you need spare parts, rentals, local service, repairs, upgrades, or modernization of your equipment, ANDRITZ is your service specialist in all aspects of separation. From initial consulting through to service agreements, process optimization, and training programs, we are always looking for ways to minimize downtime and increase predictability in operations while raising your overall production efficiency. In short, we've got you covered.



### LOCAL SUPPORT

Responsive local service centers and field service technicians



### REPAIRS & UPGRADES

Optimization of machine and process performance, repair work, retrofitting, and modernization



### SECOND-HAND & RENTALS

Certified second-hand and rental machines



### TRAINING

Operator training and tailored seminars for operating and maintenance personnel



### OEM SPARE PARTS

Filter cloths, spare and wear parts from OEMs or with OEM level quality, all readily available



### SERVICE AGREEMENTS

Preventive maintenance, contracts for spare parts, maintenance, inspections, repairs, upgrades, operation, and equipment monitoring



### PROCESS OPTIMIZATION

Automation tools and process expertise to boost your profit



### LAB AND ON-SITE TESTS

Lab and testing capabilities for process optimization and machine upgrades



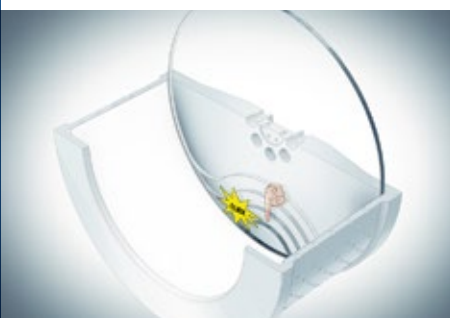


# That's what we call good service.



## **SAVE UP TO 30% POWER ON DECANTERS**

In many cases, our service product innovations can significantly reduce power consumption. At least that is the case with TurboJet, a next generation weir plate that reduces a centrifuge's absorbed power by up to 30%, depending on flow rate, pond depth, and bowl speed. This patented innovation can be fitted to ANDRITZ decanters (ANDRITZ, Bird, KHD, Guinard, etc.) and can also be retrofitted to nearly all brands of decanters.



## **REDUCING MAINTENANCE TIME AND COSTS BY AROUND 50%**

Changing filter cloths can be extremely time-consuming, costly, and error-prone. Which is exactly why we have developed SmartFIX for filter centrifuges, the market's latest and most innovative filter cloth fastening system. Designed to replace clamping ring assemblies in most types of filter centrifuges, it simply clicks in and out in seconds, cutting maintenance time and costs in half.



## **IMPROVING SAFETY AND HYGIENE IN EDIBLE OIL FRACTIONATION**

Hygiene and safety are essential in edible oil fractionation. No matter how good your filter press or "food grade" hydraulic oil, leakages can spoil stearin quality. And the oil required to power larger filter presses can often cost more than the palm oil you are producing. Our Palm Olein Power Pack solves this by allowing you to use 100% food grade palm olein in your hydraulics. The result? A safer, more economical use of resources, with a byproduct that can be re-processed after use.



## **REDUCING COSTS AND LEAD TIMES**

An international specialty chemicals company saw that the high-grade titanium case of its decanter centrifuge was suffering severe corrosion due to changing process conditions such as elevated temperatures and concentrations. Rather than replace it with an identical case, which would be both expensive and extremely time-consuming, we worked together to develop and test a 10mm thick fiberglass reinforced plastic (FRP) case that was chemically resistant, safe, and economically attractive. To ensure its safety, we fired ammunition at it – proving it could withstand more than six times the impact of the heavy particles it would contain.



## **FULLY AUTOMATED POLYMER SAVINGS**

To reduce polymer consumption and improve digester performance, one wastewater customer decided to install RheoScan, an automated, optical measurement system that optimizes polymer dosage. The results were impressive: 33.8% annual polymer savings in the belt thickening stage, 16% savings in the dewatering stage, and an 11.7% increase in biogas production.





# SEPARATION OPTIMAL EFFICIENCY IN PLANT OPERATIONS PROCESS OPTIMIZATION

Whatever your solid/liquid separation equipment or system, there's a tailored process or control solution that can reduce operational costs and improve performance, safety, and product quality. At ANDRITZ, we have the expertise to appraise your process, support or execute R&D projects, and to modernize your automation. With our worldwide network of process

experts and automation engineers, we can provide plant audits, local or remote services, upgrades, and optimizations. ANDRITZ can satisfy the complete range of your process needs during the lifetime of your assets. All scalable from single machines up to plant-wide installations, efficiently executed by a single supplier, and always individually tailored to your

business demands. Take advantage of our 150 years of OEM experience gained from an installed base of more than 55,000 machines. Let our global team of solid/liquid separation specialists help you improve safety, reduce costs, and save on power – for a vast number of well-known OEM brands.

## ANDRITZ

ENGINEERED SUCCESS





**SEPARATION**

**SECURE THE AVAILABILITY OF  
YOUR PROCESSES THROUGH A  
LONG-TERM PARTNERSHIP  
WITH ANDRITZ**

**SERVICE LEVEL AGREEMENTS**

**ANDRITZ**

**ENGINEERED SUCCESS**

**"Machine availability has increased and we can achieve more production time at the highest quality level. On top of this, asset management is now sustainable."**

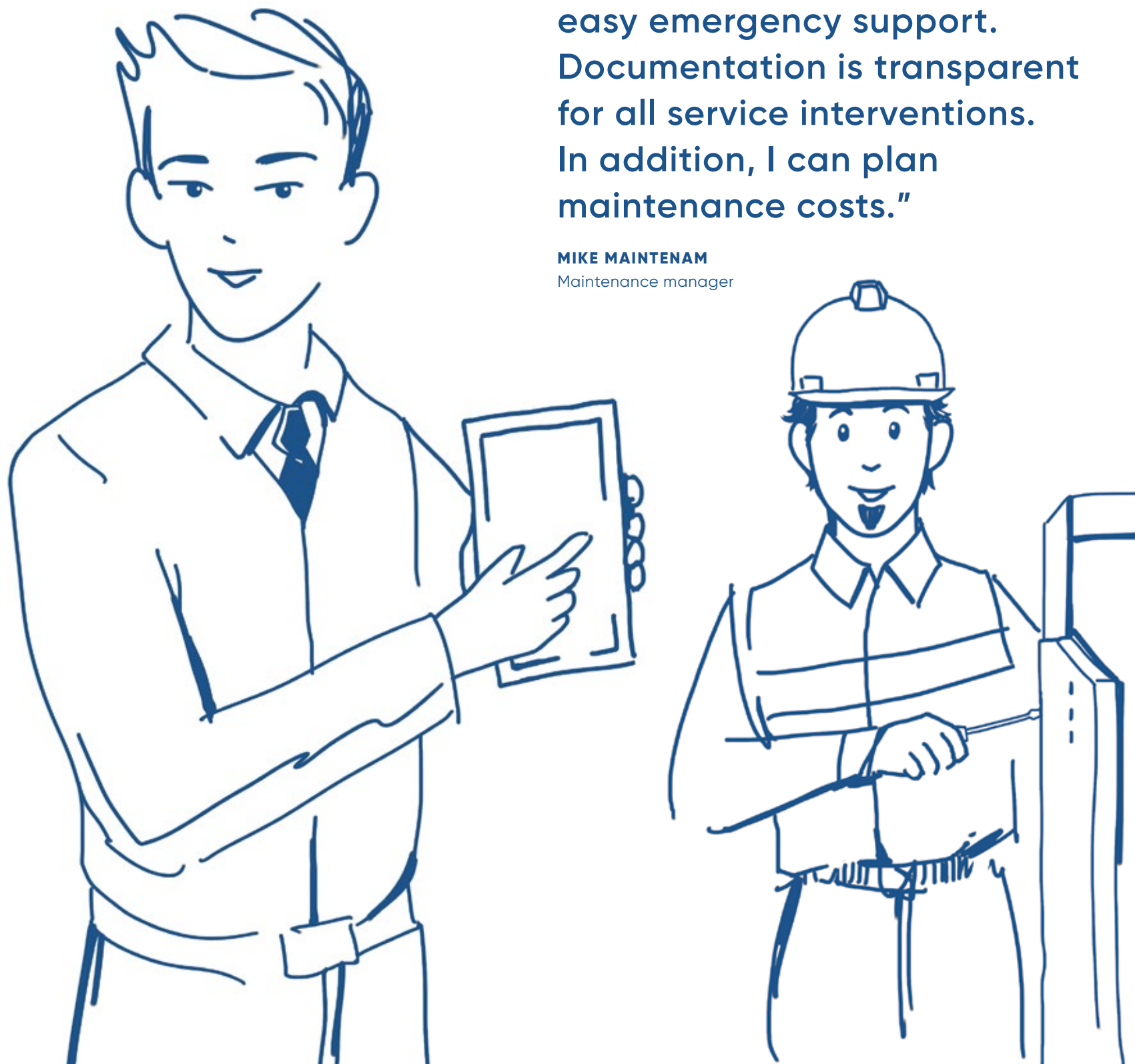
**PETER PRODUCTIONEM**

Production manager

**"ANDRITZ provides fast and easy emergency support. Documentation is transparent for all service interventions. In addition, I can plan maintenance costs."**

**MIKE MAINTENAM**

Maintenance manager





# Long-term partnership for your secured process availability

Keeping your business profitable can be more than a full-time job. Take advantage of our 150 years of OEM experience gained from an installed base of more than 55,000 machines. Let our global team of solid/liquid separation specialists help you increase machine availability and production quality – a machine's lifecycle long.

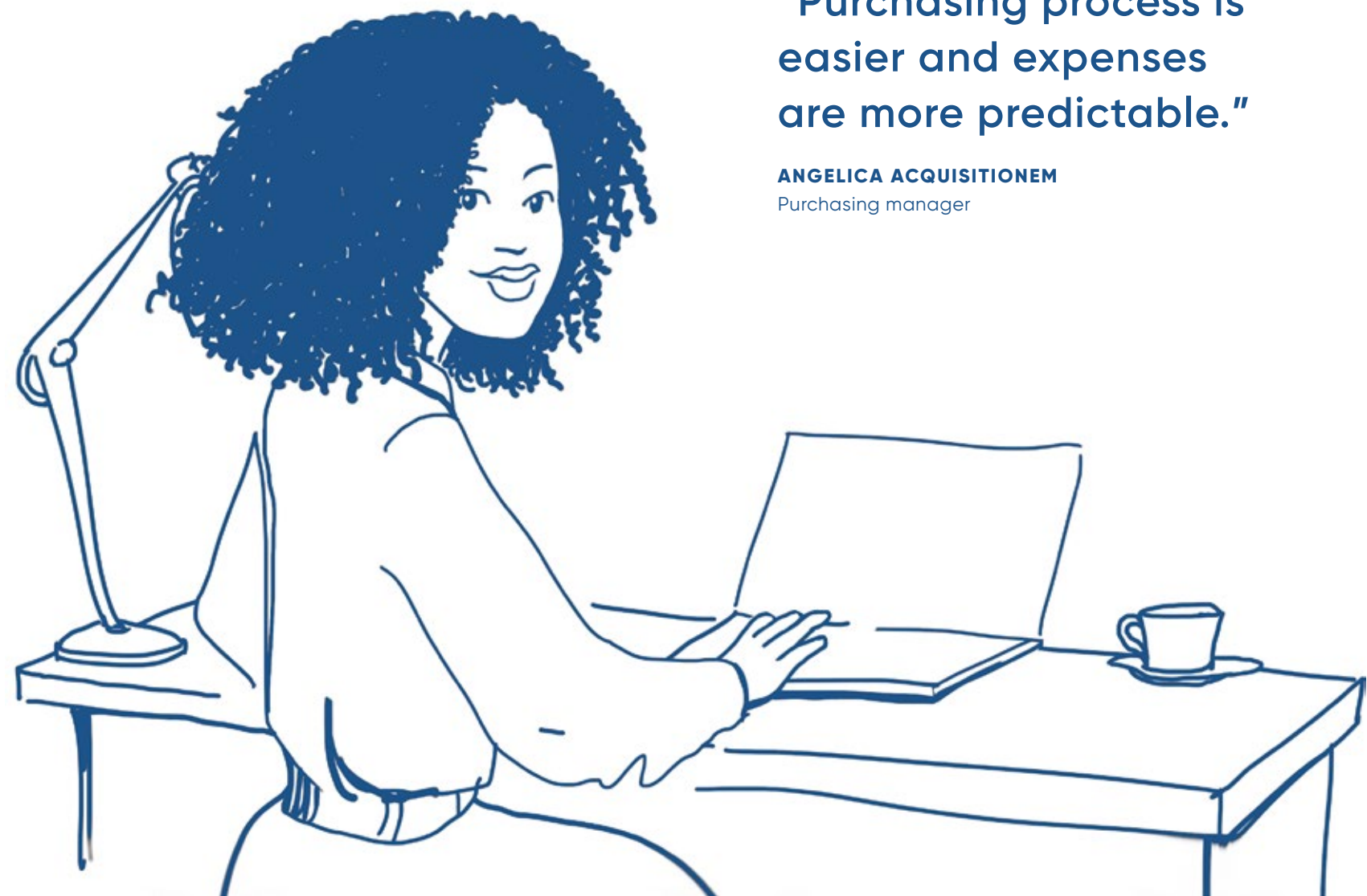
## YOUR BENEFITS

- Increased machine availability and more production time
- Highest quality level
- Fast and easy emergency support
- Sustainable asset management
- Calculable maintenance costs
- Easy purchasing process
- Transparent documentation for all service interventions

"Purchasing process is easier and expenses are more predictable."

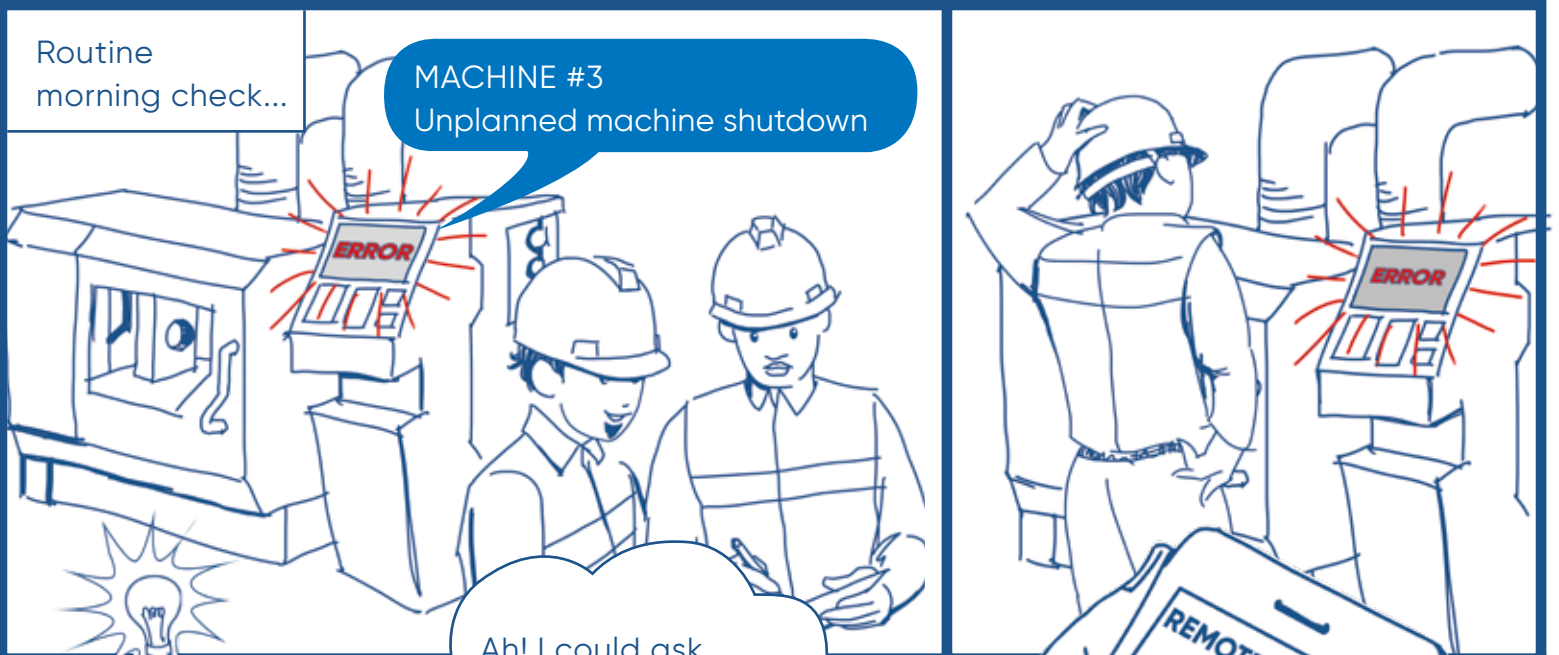
**ANGELICA ACQUISITIONEM**

Purchasing manager



Routine morning check...

MACHINE #3  
Unplanned machine shutdown



Ah! I could ask  
ANDRITZ for help!







# Service level agreements

## Basic package



### HOTLINE / SUPPORT REQUEST

Easy access to ANDRITZ experts via phone or the Metris addIQ Connect app. Easy communication with automatic translation service.



### REMOTE SUPPORT & REGULAR RESPONSE TIME

Technical support via phone or online via Metris addIQ Connect. Analysis and troubleshooting in case of machine malfunction (guaranteed response within 24 hours, Monday to Friday).



### CONTROL SYSTEM PERFORMANCE CHECK

Once a quarter, remote checks on the most critical system components (hard disc, working memory, etc.) are performed via Metris addIQ Connect.



### REPORT INCL. PREDEFINED KPIs

Automatic generation of machine-specific production and maintenance reports including predefined KPIs (Key Performance Indicators) as well as periodical email distribution (per shift, day, week, month).



### ONLINE METRIS SPARE PARTS CATALOG

Free web access to the Metris Spare Parts Catalog to ensure easy spare and wear part orders.

## Pricing option according to effort



### FIELD SERVICE INTERVENTION

Additional services on site on demand.





# Service level agreements

## Options with fixed pricing



### REMOTE SUPPORT & SHORT RESPONSE TIME

Technical support via phone or online via Metris addIQ Connect. Analysis and troubleshooting in case of machine malfunction (guaranteed response within 4 hours, Monday to Sunday).



### MACHINE & PROCESS MONITORING

Live machine and process data via Metris addIQ Monitoring (update interval of 1 min). Unlimited number of users and self-explaining, intuitive graphics.



### PERFORMANCE AUDIT & MACHINE READJUSTING

On-site check on current plant performance. Readjusting of plant and associated control loops delivered in the original ANDRITZ scope of supply.



### REPORT - CUSTOMER SPECIFIC KPIs

Automatic generation of machine-specific production and maintenance reports as well as periodic email distribution. Definition of up to 5 customer-specific KPIs possible.



### NOTIFICATION SERVICE – CRITICAL ALARM

Mobile app push messages and email service for predefined critical machine and process alarms and events.



### PERIODICAL TESTING OF SAFETY-RELATED SYSTEM

Periodical testing of safety-related systems (SRS) as required by standard EN 13849 and on definition of overall safety lifecycle in the current standard.



### PERIODICAL INSPECTION

Annual machine-specific inspection and basic service including defined spare and wear parts.





## WHAT'S YOUR SEPARATION CHALLENGE?

ANDRITZ Separation is the world's leading separation specialist with the broadest technology portfolio and more than 2,000 specialists in 40 countries. For more than 150 years, we have been a driving force in the evolution of separation solutions and services for industries ranging from environment to food, chemicals, and mining & minerals. As the OEM for many of the world's leading brands, we have the solutions and services to transform your business to meet tomorrow's changing demands – wherever you are and whatever your separation challenge. **Ask your separation specialist!**

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**ANDRITZ.COM/SEPARATION**



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