

# Automatic Filter Press

## Smart filter press with advanced control systems for the mining industry



# DIGITAL SOLUTIONS TO POWER YOUR PRODUCTIVITY

WWW.FLSMIDTH.COM/SOLUTIONS/DIGITALIZATION

The operation of your business is becoming more and more complex. Every day, you must produce more with less - without compromising the environment.

At FLSmidth, we help you do just that. By increasing your resource efficiency and reducing energy consumption, our suite of digital tools enable you to power your productivity.

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**ENABL**R

# Complete connectivity and optimised control system for higher efficiency and reduced maintenance

Achieve maximum process water recovery with our latest and innovative filter design, specifically designed for the mining industry. With an integrated, user-friendly control system, these configurable, safe and smarter filter presses are suitable for even the harshest environments.

## Key benefits

■  
Reduced  
unplanned downtime

■  
Increased  
asset availability

■  
Remote  
data visibility

■  
Fully automatic  
cake discharge

# Smart filter press with advanced control systems

## Achieve operational and asset health insights 24/7 with digitally enabled AFP

Mineral processes face numerous challenges: Securing the safety of your personnel; reducing your environmental impact; increasing productivity while working with lower grade ores – all while creating quality products that can compete in a difficult landscape. Digital technologies provide you with greater control in all of these areas, enabling you to maximise your returns in a safer, more sustainable manner.

But what does “digitally enabled” mean for your automatic filter press? It means that you have the option to connect your AFP to our digital ecosystem, giving you the combined benefits of our technologies and our experience. We offer a range of services geared towards maintaining asset health and optimising performance – many of which can be carried out remotely, saving both time and money.

## Maximum reliability

Our AFP’s advanced control system provides you with a 24/7 view of performance metrics, enabling you to increase machine reliability and availability. And our condition-monitoring feedback and controls allow you to be proactive about scheduling maintenance, thus minimising the risk of unplanned downtime.

- The AFP comes with multiple sensors as standard to monitor and control machine movement, process valve operation and slurry filtration process.
- Optional instruments analyse the hydraulic oil, HPU component performance, filter cloth condition and process performance of the pressure filter.
- With a connected machine, you also have the option of remote support and troubleshooting with FLSmidth 24/7 Global Remote Service Center.

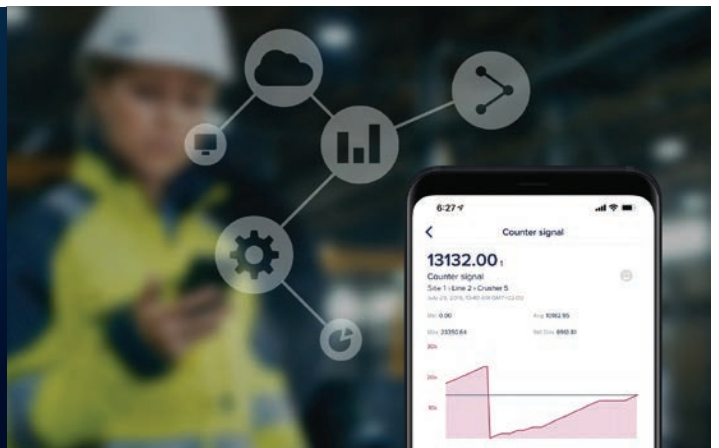
Using the onboard real-time data, trending and historian, our system has the ability to measure, manage and control numerous sustainability indicators. It also comes with predefined reporting techniques, such as dashboards, score cards, energy consumption and more, which can be used to unlock and indicate the value of overall sustainability key performance. And with our SiteConnect mobile app, you don’t even need to be onsite to check on your key asset parameters.

## SiteConnect

### Want to know whats going on when you're not on site?

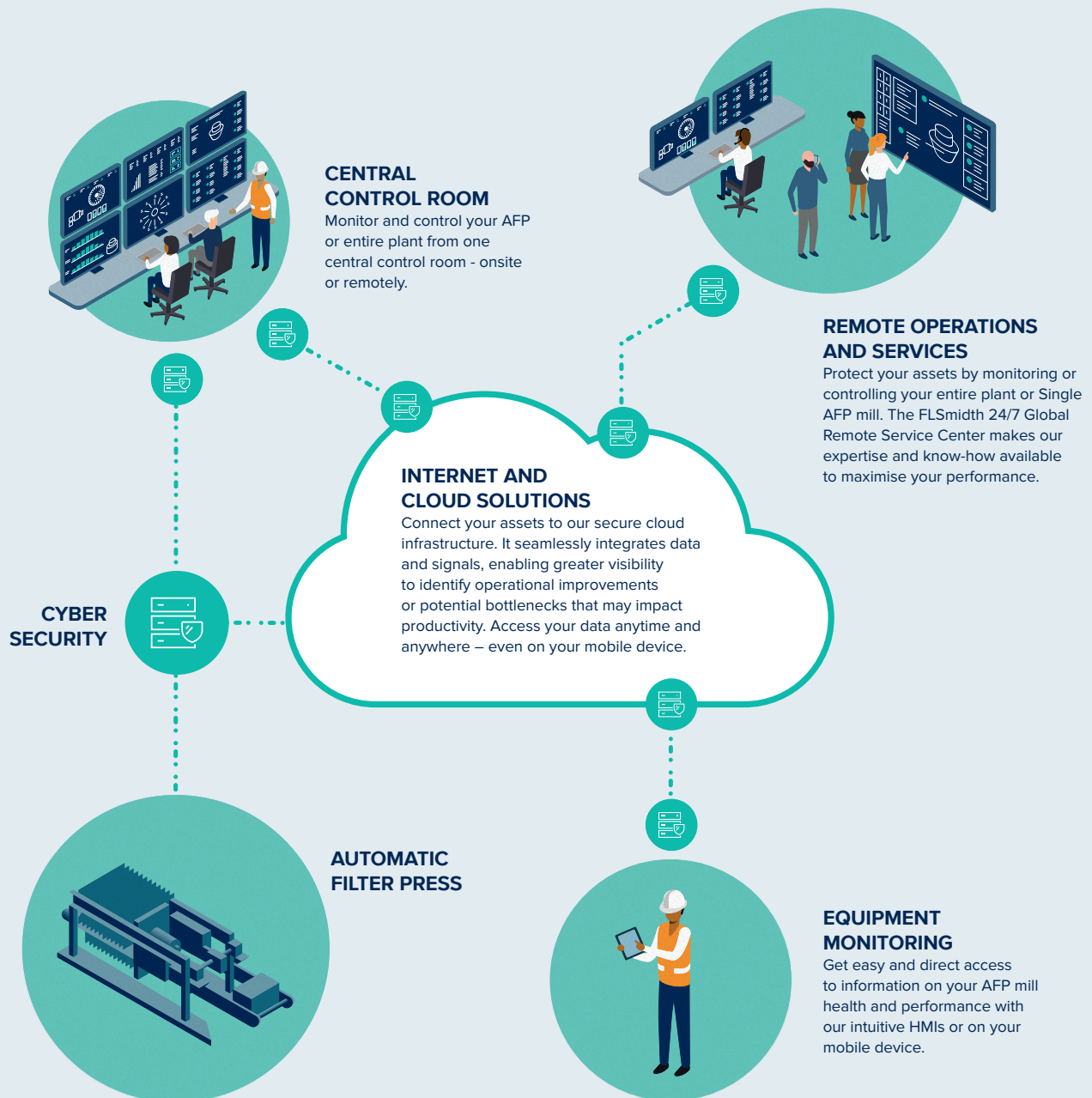
Stay connected with our mobile SiteConnect app for iOS and Android. View your asset performance and health data, no matter where you are, so that you can make the best decisions for your plant and equipment, promptly and with confidence

- Improved visibility of plant and equipment performance
- Optimised asset management
- Quicker response to unplanned events



# Digitalizing the dewatering circuit

To increase productivity in your mine, we provide a strong portfolio of digital solutions and services that connect, monitor, and optimise performance of your assets. This is the smart way to increase your output, reduce operational costs and reduce energy usage.





## CONNECTIVITY

### Monitor, control and optimise remotely

Connecting your AFP to the internet via our secure infrastructure is the prerequisite for harvesting the benefits of digitalization.

#### ECS/ProductControl

This is our fast and flexible digitally connected control system software that builds on FLSmidth's extensive expertise to deliver faster commissioning, minimised downtime through online troubleshooting, and the possibility to automate your equipment for better performance and productivity, while reducing operator errors. Functionality and performance are perfectly balanced to give the fastest, most advanced, yet simple-to-use solution. It is so much more than a traditional local control panel.

ECS/ProductControl is ready to be integrated with control systems of advanced process instruments for optimisation of cake consolidation and dewatering.

- Secure personnel and asset safety
- OEM solution
- Rapid troubleshooting
- Enables progress toward sustainable operations
- Easy integration to SCADA, Main Control Systems, and Cloud services

#### 24/7 Global Remote Service Center

Reduce unplanned downtime through insightful analytics and 24/7 monitoring by filtration experts.

#### Cyber Security

Keep your connected IT updated, safe and unbreachable. Cyber security is an integrated and fundamental capability of our digital portfolio.



## FILTER HEALTH

### Maximise the availability of your AFP

Online condition monitoring equipment protects your filter and mitigates risks to ensure optimal reliability.

#### Filter Sensors

Multiple sensors to monitor and control machine movement, process valve operation the slurry filtration process and more.

#### Life Tracker

Enables you to analyse filter cloth life and hydraulic oil conditions, plotting trends and helping you make the best decisions for greater productivity.

#### Augmented Field Engineer

Allows our engineers to remotely assist with your operational issues. A hands-free remote collaboration tool enables you to share vision of your equipment with our field service technicians. Results in faster resolution of incidents, reduces cost of service delivery and increased availability.

#### Online Condition Monitoring Services

We use secure and advanced cloud analytics, coupled with our local and global experts, to provide you with actionable insights to avoid losses associated with unexpected downtime and breakdowns.

#### ECS/Uptime Go

Get insights to identify causes of equipment failure and eliminate downtime causes.



## PERFORMANCE OPTIMISATION

### Boost your productivity

The AFP control system is ready for integration with both advanced process control systems and advanced process instrumentation to optimise cake consolidation and dewatering.

#### Filtration Sequence

Maintain product consistency and quality even as process conditions vary. Your operators never again have to guess when or how much to adjust the filtration processing times. Automatically calculate the optimal set of processing times to maximise throughput or efficiency.

#### Process Variable Direct Measurement

Use direct measurement of AFP inputs and outputs to optimise machine performance for consistent on spec production.

#### ECS/Plant Data Management

Transform process and quality data into real-time operations and get the most out of your plant and equipment.

## Key benefits of a connected filter press

- On-demand information in the control room or on your mobile
- Expedite remote support
- Enable faster decisions and actions
- Real-time insights available to top management
- Increase uptime and availability by decreasing unplanned breakdowns
- Maximise productivity and reliability
- Reduce environmental impact
- Cut operating costs
- Control and optimise operations



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# Mission Zero



TOWARDS ZERO EMISSIONS IN MINING



Zero water  
waste



Zero  
emissions



Zero energy  
waste



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