



### EXPERTISE, AT YOUR SERVICE

Today's mine operators are walking a tightrope

– forced to balance the demand for increased
productivity with the reality of lower grade ores and
the pressure of achieving sustainability goals.

One thing that can make that path easier to navigate is the experience of your team – but talent is also in short supply. Our mining services are designed to help you bridge that gap.

Onsite and remote support packages, powered by advanced digital technologies, ensure our experts are always at your service, bringing a wealth of solutions and process knowhow to everything we do.





**PRODUCTIVITY** 

The nature of mining has changed. The mineral resources are there but getting harder to access. The social license to operate is more fragile than ever before. And it is increasingly hard to find workers able to offer the skills you need.

At the same time, there are all kinds of new innovations that have opened up a world of opportunities for mine operators. Vision technologies that help you make more of your ore. Processing solutions that enable you to dramatically reduce water waste. And digital tools that enable easy connections between your mine and our experts.

Our ambition is to enable all mine operators to achieve zero water waste, zero emissions, and zero energy waste by 2030.

The path forward isn't defined only by new solutions, but also by optimisation. This is where our mining services will come into their own – combining our extensive knowledge of solutions with our long and varied experience with mining processes to empower you to operate a more productive, more sustainable and more cost-effective mine.

> **FL**Smidth Mission Zero

## From installation and commissioning...

Our partnership begins before day one. From the earliest stages of planning and development our experienced technical advisory team is available to help you optimise your site design for maximum productivity with absolute efficiency.

Getting the best performance from your equipment begins with getting everything set up correctly. Our pre-commissioning checks

ensure that all work is carried out safely, thoroughly and with a view to getting you up and running as quickly and easily as possible. For all your commissioning needs and beyond, our comprehensive service packages ensure that not only is your equipment ready to go, but your people are too — with maintenance and operating training considered a core element of our scope of supply. After all, the best equipment deserves the best practice.



Engineering works



Precommissioning checks



Functional commissioning



Performance commissioning



Plant acceptance and performance guarantees



Maintenance and operations training

### ...to troubleshooting

Minerals processing is rough and complex, creating numerous opportunities for things to go wrong. Whether you are dealing with a troublesome production bottleneck or a catastrophic failure, our expert teams are here to help return to productivity as swiftly as possible – both on your site or remotely.

### 24/7/365 support

Remote support services enable you to access expert help as and when you need it, without waiting for someone to arrive at your site. Available on an ad hoc or continuous basis, our remote support packages utilise everything from simple phone calls to advanced digital tools that connect directly to your equipment to provide a fast and comprehensive response.

### Complete shutdown services

When it is time for planned maintenance execution, our skilled engineers will come to your site and support you through the process. But we don't just turn up on the first day of shutdown – we're there for all the months before that, helping you prepare and schedule to ensure that the entire project runs smoothly and, critically, finishes on time and on budget.

## Upskilling your workforce

The skills shortage is a problem for mine sites around the world. And while we aim to plug that hole with our expert services, we also want to transfer our knowledge to your team. Which is why our training is structured to provide the right training, at the right time, to the right people. We take a blended learning approach that combines classroom (or online) learning with hands on teaching to maximise engagement. All our training courses are customised to your needs and in addition to training on specific FLSmidth equipment we also offer supporting skills in areas like lubrication management and condition monitoring.



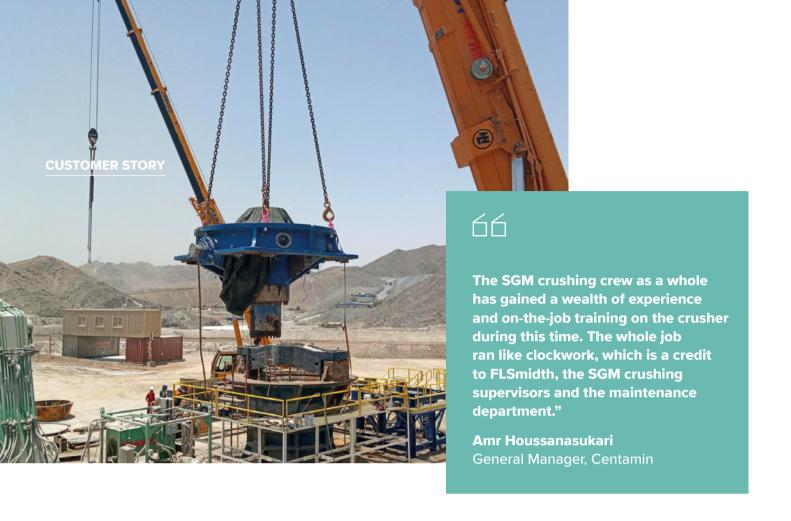




# Optimising efficiency at your mine site

Even when everything is running as expected, you might be seeking additional gains in productivity, or savings in water or energy consumption. Our range of onsite and remote services can help you increase process efficiency by optimising equipment performance. Our Service Line Agreements include both traditional and digital tools, such as onsite audits and our mobile insights app SiteConnect  $^{\text{TM}}$ , to increase equipment availability, reliability and performance.

These are 'living' agreements, based on close collaboration between FLSmidth and the customer. They can be focused on a specific asset, or around an entire process, depending on your needs. The advantage of this type of agreement is the ability to become far more proactive, developing a holistic preventive maintenance strategy — as opposed to a more reactive, piecemeal approach. In this way, you can aim to eliminate unplanned downtime and dramatically reduce costs — not to mention stress levels.



# BESPOKE SERVICES AND TRAINING HELP A GOLD MINE SOLVE CRUSHER CHALLENGES WITH MINIMAL DISRUPTION

Centamin's Sukari Gold Mine was having issues with its primary gyratory crusher. Two of the crusher's four foundation bolts were broken, they were experiencing premature failures to the countershaft, and a crack had developed in the main hub of the bottom shell. All of this was affecting performance, and creating concern around the future reliability of the shell.

As the OEM and a long-time partner of the mine, we were called in to help figure out the best path forward. Working together – onsite and remotely – we developed solutions to resolve these challenges and prevent them recurring. Our services during this period were comprehensive and tailored to this specific project. As well as advising on new parts, we also provided a detailed schedule of works, including complete planning, labour requirements, tooling, parts and equipment lists, to help ensure minimal disruption and downtime.

The great strength of this project was the partnership between Sukari's site maintenance team and our crusher specialists. Preparations included a walk-through of all the steps and critical areas of the job as well as on-the-job training to ensure a smooth shutdown. In the event, the project was completed a full 38-hours ahead of the agreed 11-day schedule, and with zero safety incidents.



## GLOBAL EXPERTISE WITH A LOCAL PRESENCE



FLSmidth is a global company with a local presence – with offices in 60 countries, and thousands of engineers ready to visit your site. In addition, we also have Supercenters and other service centres that includes offices, warehouses, workshops, laboratory and training facilities.

The Supercenters are strategically located in the heart of key mining regions to provide quick and easy access to parts and services – giving you the support you need, when and where you need it.

### **Expertise**

We'll provide dedicated experienced specialists to carry out your projects – always with a proven track record and with your approval.

### Cooperation

We will appoint a Service Account Manager to be your first point of contact for any requests or queries to ensure a swift response and a consistent flow of communication.

#### Responsibility

We are committed to our customers. When you partner with us, we consider ourselves to be part of your team – as invested in the success of your project as you are.



TOWARDS ZERO EMISSIONS IN MINING



Zero water waste



Zero **emissions** 



Zero energy waste

Contact us



flsmidth.eco/contact

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