



SUCCESS STORY | MINING

Tailored reliability with Häggglunds drive solutions



McLanahan brings customers tailored reliability with Hägglunds

McLanahan Corporation is a global provider of process solutions for a variety of industries, including mining and mineral processing. Among the company's recent deliveries is a group of feeder breakers equipped with Hägglunds hydraulic drive systems from Bosch Rexroth. The project, which constitutes critical infrastructure for an Indonesian energy supplier, highlights why Hägglunds drives are so often a part of McLanahan solutions positioned to succeed in a changing global market.

Optimized instead of off the shelf

Since 2003, McLanahan's center of excellence for mining and mineral systems has been located in Newcastle, Australia. Having been a mining industry hub for roughly 100 years, Newcastle was an obvious choice for Mike McLanahan, who originally

started up operations in Australia in the 1960s. McLanahan remains a family business, but it's one with almost 200 years of history and a significant global footprint.

"As a global minerals organization, we have a wide-ranging customer base," says Chris Knowles, Director of Sales

& Marketing at McLanahan Australia. "In particular, we serve those who are looking for customized equipment rather than something off the shelf. The key consideration is an optimal outcome for their particular application, which might be crushing in a harsh, remote environment like Mongolia. Or it might be small-scale extraction of lithium cobalt for batteries, where it's really about footprint."

Understanding customer KPIs

The most recent project from McLanahan Australia is one for Bukit Asam, a large and publicly listed energy company on the Indonesian island of Sumatra. Working through an engineering consultancy, McLanahan won

the supply of two Feeder-Breakers and one Reclaim Feeder-Breaker, set to begin operation in mid-2021. These units will have Hägglunds hydraulic drive systems for the chain Feeder application and Rexroth hydraulic cylinder systems supplied for the chain tensioning function and the hopper door. The contract also includes two years of critical drive spares.

“The inclusion of spares is quite important, because it shows the value of high availability to the customer,” says Knowles. “Their KPIs center on the certainty of energy supply for the people of Sumatra, so we had to demonstrate that we understood that importance. We had to deliver confidence in meeting their goals, and that’s where Hägglunds comes in.”

Secure in Hägglunds reliability

Knowles emphasizes the cultural aspects of confidence as well as the commercial ones. He acknowledges that not everyone wants to pay for reliability, but he notes that customers lose face when they can’t deliver due to technical faults or downstream issues. McLanahan’s equipment and component selections are based on reliability, rather than price.

“In these Feeder-Breakers, for example, hydraulics offer adaptability to changing demands on the drive – the high load variation, the high shock loads that you get in crushing applications,” Knowles says. “We specify hydraulics for this application because hydraulics are ideally suited to it. From there it’s a fairly simple step to Hägglunds, because Hägglunds is recognized as the premiere hydraulic drive solution globally.”

By way of evidence, Knowles mentions the long history of Hägglunds solutions in mining and their credibility in delivering robust and reliable outcomes, even in harsh and remote environments. “When someone sees the Hägglunds name on the drawings



Chris Knowles, Director of Sales and Marketing – Mineral Systems

and technical data sheets,” he says, “there are no questions, just a sigh of relief.”

A match for both application and machine

Engineer Peter Bone, McLanahan’s project manager for the Bukit Asam delivery, is in full agreement with Knowles about the merit of Hägglunds solutions. From the beginning, he says, Hägglunds hydraulic drive systems were the intention for his project. Reliability was the key reason, but the drives also benefit McLanahan’s overall machine design.

“A lot of what we deliver is specifically high-torque equipment with low rotational speed, such as Drag Feeders,” Bone explains. “Hägglunds hydraulic drives are ideal for that requirement, because they’re usually smaller and more compact, with no real overhung loads. From an engineering perspective, it really allows us to keep our shaft sizes small and our equipment modular and compact – while being able to deliver the power our customers need.”

“Hägglunds drives are relatively com-

pact for the power they deliver,” Knowles agrees. “The equipment range, the range of configurations for the hydraulic power units and the range of configurations for the motors are strong contributors as opposed to going with another supplier. I do think they enhance our approach.”

Modularity means easier delivery

In the Bukit Asam project, as in much of McLanahan’s export work, the small size and high flexibility of Hägglunds solutions have additional benefits. McLanahan often delivers to remote locations, where poor roads can mean barging the equipment up a river and hauling it overland by truck. This is one of many situations that can make modularity a significant advantage. “We’re never 100% certain of the specific location or orientation of the equipment when we deliver to a remote location,” Knowles explains. “Having modularity in the power unit allows us to put it in different areas, even many meters away. Changes on site become exponentially more costly, and that never makes for a comfortable conversation. So anything that



makes it quick and easy to solve is a great thing.”

Control prepared for the future

While delivering equipment to remote customers will always pose challenges, McLanahan does see easier times ahead. This is thanks to connectivity, an area where Hägglunds solutions may simplify the work. “We’re using the Hägglunds control unit for the first time in this project,” says Bone of the control system for Bukit Asam. “There were no special control requirements here, but the controller’s capability and Bluetooth compatibility have produced a dialogue that will have an outcome in future projects. We’re moving into more condition monitoring and live cloud monitoring in order to support our customers.” “With the condition monitoring and control capabilities already in the hydraulics, all we need are the inputs and outputs for the alarms,” Knowles elaborates. “Condition monitoring is a core upgrade in terms of what we’re providing in our equipment, and the Covid-19 pandemic has brought it

closer to the consciousness of mining operators. The Hägglunds team are at the forefront, I’d say. They’re leading the pack in terms of providing web-based or cloud-based condition monitoring and automation, so it’s an easy choice.”

Being there makes all the difference

As for support on the ground, McLanahan is extremely happy with the access to Hägglunds expertise – not only through local representatives in Australia, but also in Indonesia and the other countries McLanahan delivers to.

“If I have questions or need parts turned around quickly, I’ve got the local support,” says Bone. “I’ve never had to wait more than 24 hours for anything, and 99% of the time we get an instant response to our questions. If something goes wrong on site elsewhere, I can still pick up the phone and get somebody there quickly to look at it.”

Knowles nods in agreement. “It’s very comforting for us to know that we have access to Hägglunds service reps around the globe,” he says. “By no

means are we the hydraulic experts in the field, so having that key support close to our customer is really part of our value proposition. It’s what we require and also what we admire from the Hägglunds team.” As Knowles describes it, the admiration runs very deep indeed. “We want to respond to our own clients quickly, regardless of where they are, in a form suitable to them,” he says. “The Hägglunds team set a good example, centering their business in northern Europe and yet managing to be local. They supply the sort of support we absolutely need in this 24/7 world.”