

Service level agreements maximise screen uptime

Several key issues can affect the life cycle and productivity of a screen and have an impact on the bottom line at minerals processing operations. These include the shortage of skills within the industry, which often results in sub-standard maintenance being performed. In addition, maintenance is often undertaken on a reactive rather than a proactive basis, which can lead to further costly issues.

“Significantly, Joest Kwatani engineers for maximised tonnage over the screen during its lifetime. However, since screens are such critical elements in the process, it is important to undertake regimented maintenance to ensure ongoing efficient operation and improved yield,” says Theresa Walton, General Manager – Service at Joest Kwatani.

These issues are best addressed by the implementation of a service level agreement that is customised for individual mine requirements. The first step is to undertake a full audit covering the operating performance and the condition of the screen. “We also consider the upstream processes to ensure that the feed is within the original specifications for which the screen was engineered,” says Walton.

An essential part of the audit is a review of the on-site parts stockholding to ensure that all critical components are readily available both for planned maintenance and in the event of unexpected failure. A critical parts stockholding is set up on the customer’s system to facilitate seamless

planning and ordering, as well as the selection of the correct part.

During the audit an historical review is also done to ascertain the level of maintenance being applied, the skill level and the available resources at the mine. This information directly impacts on the frequency at which future maintenance should be conducted. Following the audit, Joest Kwatani develops both a short term action plan and a long term sustainable service programme.

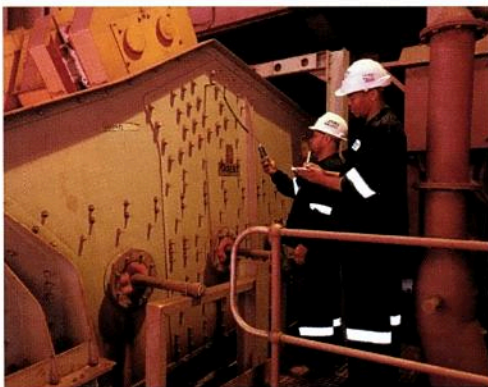
“The short term action plan is to bring the screens and feeders back to OEM specification. This will not only improve screening efficiency but could prevent potential catastrophic failure,” says Walton. The structured service programme approach allows customers to select a package that will match the current needs and resources of the plant.

In the fixed term action plan, Joest Kwatani seconds one of its skilled maintenance crews to site and a full structured maintenance programme is implemented on all vibrating screens and feeders. An experienced screening technician oversees the process and information regarding the screen’s operation is accumulated over its life span which assists in future planning.

The second option involves the customer performing ongoing maintenance on the vibrating machinery in line with a structured programme recommended by Joest Kwatani. “This approach involves a large training component to ensure that the customer maintenance personnel understand and can implement the requirements. This results in empowerment, upskilling and the instilling of a sense of accountability in the customer’s personnel. Our supervisory crew is on hand to provide continual feedback, evaluation and assistance where necessary,” Walton points out.

Under the terms of the service level agreement, Joest Kwatani undertakes continuous audits at predetermined intervals to measure improvements in performance as well as the condition of the screen. Remedial action is often recommended and could entail the proactive identification of vibrating machines which require extensive repair work or refurbishment as a result of their age.

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Metso develops jaw crusher maintenance platform

Metso has developed a new maintenance platform that increases safety when changing wear parts in jaw crushers. The new, ergonomic and safe maintenance platform is available on all Metso C Series jaw crushers.

Metso’s new maintenance platforms consist of hand rails which are also used for lifting the platform, sturdy work platforms and related control mechanisms, enabling them to be precisely placed at the desired height of the jaw opening.

The platform constructed of aluminium is easy enough for one person to move. The maintenance platforms are available to match with either single-piece or two-piece jaw dies. Metso has applied to patent the platform.

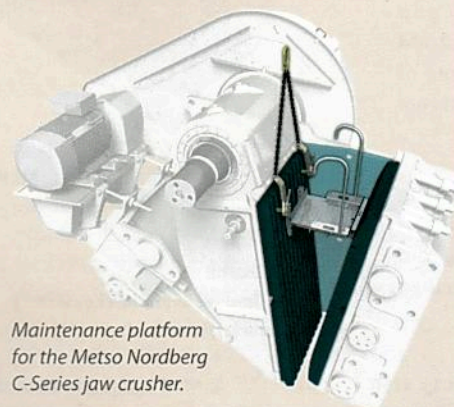
“With a small investment, Metso’s new maintenance platform offers a huge improvement in safety when making jaw changes. When the platform is installed correctly into the opening, it holds the jaw in place so that it cannot drop, even if the jaw’s upper mounting hardware is loosened or even removed. The platform is lightweight and it is easy to handle and adjust to fit the

desired level in the crusher cavity,” explains Ilkka Somero, Product Manager of Metso’s jaw crusher line.

“The textured aluminium platform is sturdy, slip resistant and covers the crusher cavity properly to prevent anyone from slipping or getting a leg wedged between the jaws. Due to its light weight, the platform is easy to lift into position and remove, speeding up the work of changing parts.”

The family of maintenance platforms is available for all Metso Nordberg C Series jaw crusher models C80 through C200.

Metso, website: www.metso.com



Maintenance platform for the Metso Nordberg C-Series jaw crusher.