

Top Three Quarry Maintenance Woes and How You Can Avoid Them



Minerals

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Maintenance downtime and labour costs are the main pain points for many quarries. Increases in operational expenses and the pressure to produce more product faster have driven quarry operators to seek out new methods of reducing downtime. The experts from Weir Minerals know that the most effective improvements come well before maintenance is required - at the time of the purchase decisions.

1. Access to your supplier

One of the most costly mistakes made when purchasing machinery is ignoring where the supplier is located. It can be very tempting to just look at the capital cost and bypass things like equipment origin and the supplier's presence in the area. While low capital cost looks good on paper, always ask: how easy will it be to get in contact with the supplier after commissioning?

Much of the on-site maintenance can be done in-house within a quarry, but there is still a large proportion that requires external assistance. Wear parts, service support, product overhauls, process improvements and expert advice can easily be accessible nearby – or effectively out of reach, depending on the choice of the original supplier.

A plant can be running well below optimum production or not running at all whilst waiting for a replacement wear part to ship from a distant warehouse. Same issues arise with second-hand equipment, where there is no service support, no spare parts and no warranty.

Finding a supplier with local service centres and spare parts stock is the best way to ensure that you are never far away from service support and expert advice. Weir Minerals' support network includes 16 service centres in Australia, so we can quickly get to our quarry customers for a full understanding of what they need and deliver it promptly.

2. Superseded equipment

Original equipment manufacturers (OEMs) such as Weir Minerals are driven to innovate by their customers' needs for improved safety and efficiency. While the latest improvements in the new generation of equipment may not always be immediately reflected in increases in output they contribute to the significant reduction of downtime and maintenance hours.

You may not consider replacing a piece of equipment if it is performing well and meeting its specified uptime. However, always evaluate the downtime associated with your equipment's regular maintenance. New products often take far less time and effort to maintain - resulting in hours of cost savings.

As an example of smart innovations that make maintenance easier and safer, the Trio® TV vertical impact crushers can be installed with hydraulic lid lifters for maintenance access, and Trio® jaw crushers feature hydraulic wedge adjustments as standard. Additions such as these can significantly contribute to decrease downtime labour costs and improve site safety.



2. Superseded equipment continued

The Gemex® belt tensioning system is another simple solution that can be fitted to most equipment and makes it possible to change belts on critical machinery in just minutes.

Innovation is not limited to machinery and equipment; supplier material technology and innovation in wear parts can make a big difference to the bottom line of quarry operators. Linatex® premium rubber products, manufactured using a proprietary patented process, have long been famous in the quarry industry for their outstanding wear performance in the toughest wet and dry abrasive environments. Weir Minerals' modular chute lining system uses a combination of wear-resistant materials including Linard® rubber. This system has been designed to allow users to change single panels in areas that have high-wear - avoiding the need to re-line the whole chute and saving cost and time.

3. Non-optimised plant

Quarries are more than just crushers and feeders; other equipment such as wear lining and fluid transfer are vital to the success of your plant. It is important that these elements work together consistently for efficient production. A supplier with a large product portfolio is able to tailor end-to-end solutions for individual customers optimise processes, as well as offer a variety of arrangements to meet individual needs.

Weir Minerals is the manufacturer of world-class brands like Warman® pumps, Cavex® hydrocyclones and Linatex® rubber products. Their expert teams have in-depth knowledge about how these products fit together and how to optimise them as a complete solution, to ensure each part of the plant is working to its highest potential.

Choosing a supplier with a large product portfolio also gives opportunities for upgrades or alterations throughout the life of a quarry as the needs of the site change. A supplier that understands how equipment fits together will be able to offer improvements as your quarry evolves.

Proper maintenance and support is vital to the long-term success of your plant. By incorporating the points above into your decision-making process when buying equipment, you can make your plant safer and streamline your operations. Consistent, high production is reliant on machinery that is working to its full potential, and well looked-after equipment will result in less downtime, fewer replacements, higher production volume and a higher-quality end product.

To find out more about Weir Minerals, visit <https://www.global.weir/industries/aggregates>

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