



Flexco Defeats Dust in Local Quarry Operation



Partners in Productivity

Transporting dry concrete involves high levels of dust. Because of this, it can be one of the most difficult aggregates to move – especially when conveyed as fine particles. Eliminating dust is a priority for most sites as it can cause and contribute heavily to a variety of respiratory and cardiovascular health issues, as well as being a skin and eye irritant. As a result, it is an important goal for most sites to contain as much dust as possible. This is especially important due to the strict environmental policy companies must adhere to around Australia.

To eliminate dust usually requires some sort of enclosed skirting system at the transfer point. When dust hits the belt from a transfer chute, it tends to have a “rebound” effect, causing large levels of dust to rebound off of the belt and into the atmosphere, contributing heavily to the aforementioned health risks. A system that encloses this dust at the load zone is the only effective way to eliminate such hazards.

At the time of plant construction, this particular site installed a complex skirting system, which made maintenance and replacement of belt conveyor products extremely difficult. The design of the current system required unnecessary components to be removed in order to access and replace parts – meaning a mammoth loss in productivity for this site. In addition to the design complexity, the spare parts for the system were difficult to source, as the manufacturer was based in Europe, resulting in long lead times.



Skirt damage and spillage issues with previous system

Apart from maintenance issues, the previous system was also insufficient in protecting the belt conveyor system against serious safety and productivity issues such as spillage. The spillage on the current system was immense, making it difficult to conduct maintenance tasks safely. The severe levels of spillage also resulted in a loss of profit due to wasted and unsellable aggregate material. In addition to these issues, the spillage caused a material build up on one side of the conveyor belt, causing the belt to mistrack – damaging the soft skirt and also the conveyor structure.

Local distributor Fenner Dunlop installed a Flexco enclosed skirt system with great ease due to the simple, yet effective design of the product. Dean Callaway, Sales Manager for Fenner Dunlop Wollongong, oversaw the project and states that it took only two, 12-hour shifts to complete the installation of the 13-metre enclosed skirting system.



New Flexco Enclosed Skirt System

In addition to ease of installation, the simplicity of the design meant production time no longer had to be compromised to complete maintenance tasks such as soft skirt changes out and adjustments. The system also incorporates easily adjustable hardskirts for longer-wearing side panels.

Adding to the ease of the product itself, is the extra assistance Flexco provides.

“Flexco engineers came to site to measure and provide support, as not all systems were standard and required engineered modifications,” Callaway said.

Fenner Dunlop installed the first two systems in November 2018 and since then an additional three systems have been installed. This is a true testament to the ease, rigour, and efficiency of Flexco’s enclosed skirting system which is able to prevent spillage and contain dust, making it safer for maintenance crews to conduct work both on and around the belt conveyor systems.

“Flexco’s enclosed skirting system has significantly reduced spillage making it safer and easier for maintenance crews,” Callaway added.

For more details on enclosed skirting systems please contact salesau@flexco.com.