

Flexco Replaces Competitor Belt Cleaners with Corrosion-Resistant Tips at Fertiliser Plant to Improve Cleaning Efficiency

Industry

Chemicals

Application

Fertiliser

Product

H-Type® Primary Cleaner with Corrosion-Resistant Tungsten Carbide Tips

Objective

- Find an efficient and long-lasting belt cleaning solution

Conveyor Details

- Multiple belting types with speeds from 1m/s – 4m/s and widths from 450mm-1200mm



Problem:

A leading supplier of fertilisers in Tasmania was experiencing rapid blade wear on their existing belt cleaners, resulting in a continuous loss of time and money spent on clean-up and system maintenance. The manufacturing facility produces high-quality single superphosphate (SSP) that delivers critical nutrient inputs to the Australian farming industry. Annually, they produce 10 million tonnes of fertilisers, 10 million tonnes of grains, and sizeable volumes of petrochemicals. Thus, minimising any chances of downtime was critical to keep their productivity high and operations running smoothly.

Solution:

The site reached out to a Flexco Heavy-Duty Specialist, who addressed their concerns with the rapid wear of the tungsten carbide tips on their existing belt cleaners. After an onsite inspection of the affected system areas, the Flexco specialist concluded that there are corrosive chemicals in the fertiliser material process that is wearing out the tungsten carbide blades extremely fast. To counteract this reaction, corrosion-resistant tips on H-Type® Belt Cleaners were suggested to replace the existing competitor belt cleaners. Over the past few years, the Flexco Australia team has researched, engineered, and manufactured a complete range of corrosion-resistant tips for abrasive applications. The tips are made from corrosion-resistant tungsten carbide and Stainless Steel, ensuring they quickly profile to the belt whilst remaining chemically resistant.

Result:

After installing H-Type® belt cleaners with corrosion-resistant tips, the cleaning efficiency was increased drastically. The average blade life is now 12-18 months, compared to the previous belt cleaners, which were lasting 1-3 months. Flexco was able to provide a solution that lasted six-times longer than the previous cleaning system, ultimately improving their cleaning efficiency and minimising maintenance costs.