

Flexco Return Belt V-Plough Blades Outlast the Competition

Industry

Iron Ore

Application

Carrying ore fines

Product

V-Plough Blades

Objective

- Extend componentry lifespan
- Remove return side carryback
- Increase productivity

Conveyor Details

- 1500mm wide belt, running at 5.5m/sec



Freshly installed blades on existing V-plough frame



Blades after 12 months, displaying only 40% wear

Problem:

Flexco worked in conjunction with a major iron ore mine site in the Pilbara of Australia to test Flexco's new polyurethane Return Belt V-Plough blades. The mining conglomerate wanted to run the trial to ensure that the current market leader's brand of plough blades were still the best choice in terms of quality and longevity. By doing so, the site could ensure that they are reaching their maximum level of productivity and cleaning efficiency through the controlled trial. The trial began with a belt that was 1500mm wide and ran at 5.5 meters per second, carrying iron ore fines.

Solution:

The aim of the trial was to see how Flexco's plough blades performed against the current leading product in terms of the following values:

- Longevity
- Quality
- Cleaning ability

Flexco created a plough blade using a proprietary blend of polyurethane, which is designed and poured in house at the Flexco facility in Grand Rapids, Michigan, USA. Known for its strength and longevity, the unique formula is perfect for the harsh iron ore mining application.

Result:

The on-going comparative trial lasted 12 months and at the conclusion of that period, the leading brand's blades were so worn that they needed to be replaced. Comparatively, Flexco's blades were only showing 40% wear, indicating an additional 10-12 months of life could still be derived from the blades after a year in service. The trial proved that Flexco's exclusive polyurethane formula was able to outperform the current plough spec on-site in every aspect: longevity, quality, and cleaning ability.