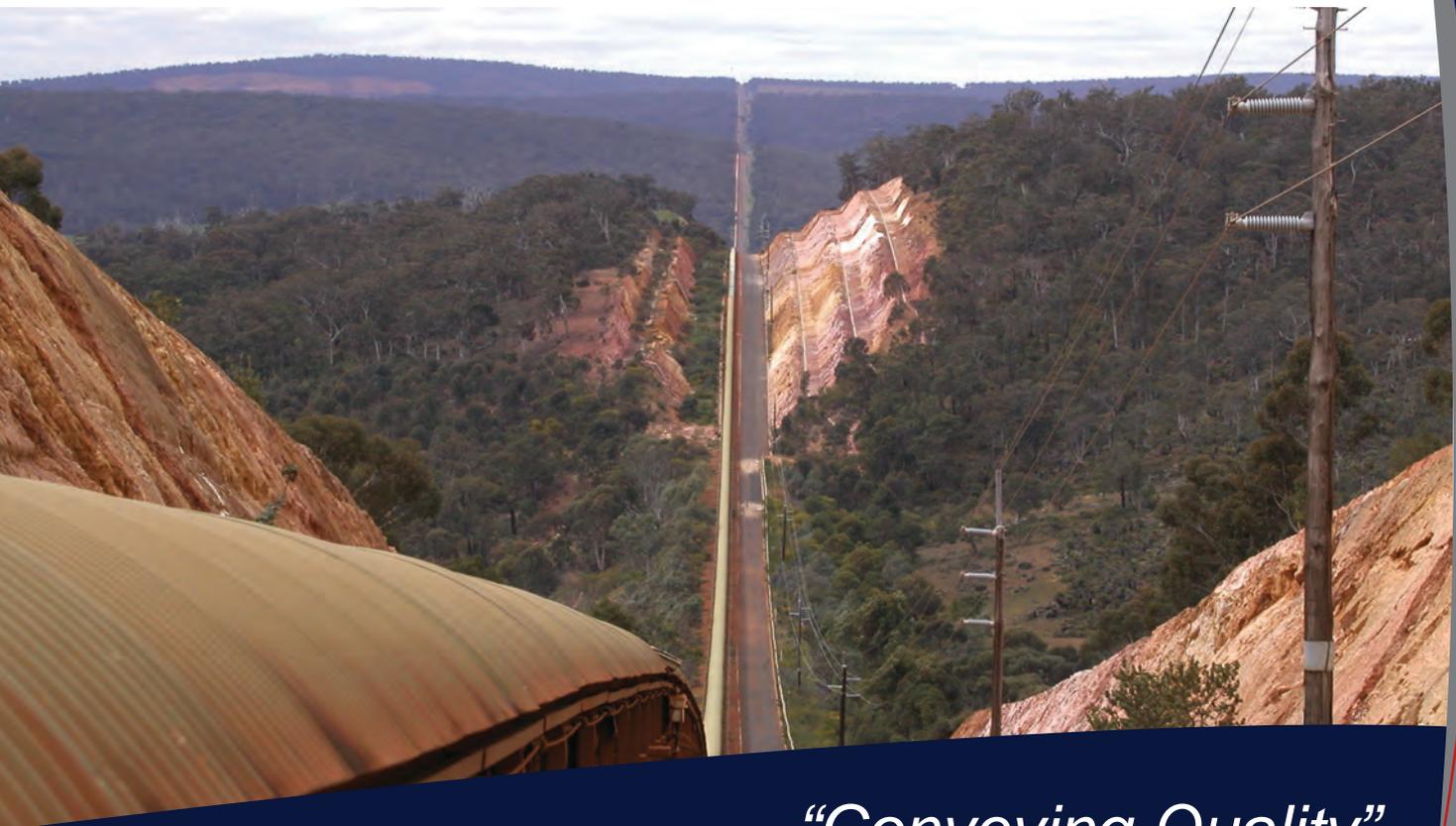


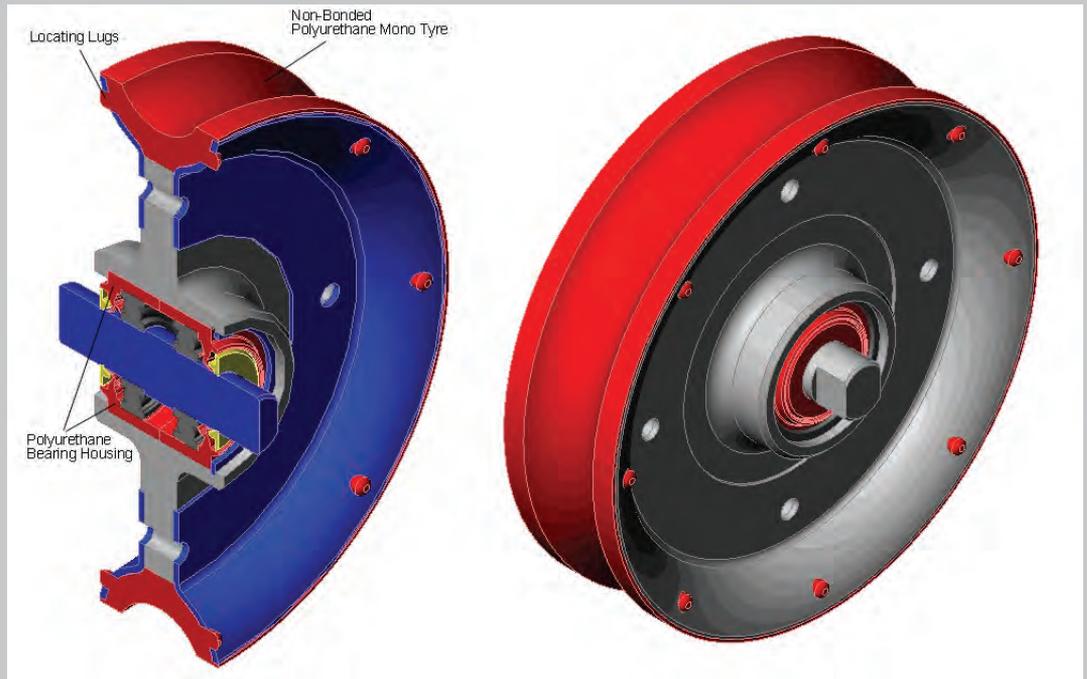


JLV Industries Pty Ltd



“Conveying Quality”

Cable Hauled Conveyor
Components



GLIDESEAL PULLEYS

In August 1999 JLV announced the successful development of a new pulley design utilising our patented Glideseal technology. The Glideseal Pulley shares the same extended service life and low noise emissions the technology provides to our idler rollers.

Polyurethane Monotyre

The new design features a moulded single piece tyre, which is mechanically assembled onto the hub with existing rim steels. The tyre is not bonded to the steel as previously. Extensive field testing has shown significant improvements in wear and durability properties. More than double the normal service life is typically observed.

Polyurethane Bearing Housing

The bearing housing is similar to that used in our Glideseal Idlers. This design has superior sealing efficiency, resulting in extended bearing life and noise reduction properties.

Noise Reduction Properties

The combination of the single piece tyre and the polyurethane bearing housing results in significant noise reduction.

On-site Installation

Initially, the rim steels will need to be cleaned, additional holes drilled (to accommodate locating lugs moulded on to the tyre) and hot dip galvanised to increase service life. After this work, future field change-outs will involve simply the replacement of the single piece tyre and bearing housing cartridges only.



NOISE & VIBRATION ISOLATORS

Main Sources of Noise

- Sound radiated from the reverberant acoustic volume contained within the corrugated shell cover.
- Sound radiated directly from the various mechanical impact processes that can occur. For example the meshing of the pulleys and cable that supports the belt (repetitive impacts) and the various joints / linkages between rocker arms, cross shafts, line stands etc.
- Sound radiated from the vibrating corrugated iron shell cover which has a very large surface area.
- For structural vibrations to radiate sound, the frequencies of the vibration correspond with the frequencies of the sound being radiated. For the overland Cable Hauled Conveyor, the dominant frequencies of sound radiation are from 100 Hz to 3000 Hz.

Advantages

- Reduces noise levels and eliminates costly replacement of mechanical equipment.
- The impact of the cables on the pulleys is dampened, resulting in extended life to pulley tyres, reducing the frequency of replacement.
- Not only is noise reduced to well below environmental acceptance levels but the life of the system is greatly extended, in particular that of the pulleys.
- Measurements conducted on a conveyor reveal that the installation of Polyurethane anti-noise and vibration componentry reduce vibration levels by about 50% in the 125 Hz octave level and about 20-30% overall.

Several sites across Australia are currently using JLV's Noise & Vibration Isolators.



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