



R.J. Herbert's box tipper



ToughMet® 3 AT110 bushings



TOUGHMET® APPLICATION: AGRICULTURE

Profile: R. J. Herbert Engineering

R.J. Herbert Engineering is a British manufacturer and supplier of grading and handling systems for the agricultural, food, recycling and logistic industries with offices in Cambridgeshire and Eindhoven.

CHALLENGE:

With recent changes in the produce marketplace, what used to be considered 'small potatoes' has now become a premium consumer product, demanding the best prices. R.J. Herbert Engineering is right in the thick of things, providing the machinery to sort out all of this produce.

By nature, freshly harvested potatoes are either dirty and dusty when dry, or grimy and muddy when wet. These harsh, gritty conditions coupled with heavy loads and repetitive operation can wear down the mechanisms of even the best machinery. This is precisely what caused Herbert's to look for a revised wheel design on their box tipping equipment.

Herbert's box tippers are built to hold more than 3,000 lbs of produce per load and tip 55,000 lbs per hour. They are also expected to withstand operation 24 hours a day, seven days a week.

SOLUTION:

Using a mild steel and oil-impregnated, sintered bronze bushing system in the box tipper's wheel led to excessive wear and limited part life meaning downtime and replacement parts.

To overcome this challenge, Herbert's has successfully adopted a hardened steel pin and roller, working with Materion Brush Performance Alloys' ToughMet® 3 AT110 bushing. Results so far have been extremely good, giving greatly enhanced life over the old system. The additional cost of the ToughMet® system has been easily compensated for in performance. In fact, Herbert's recently found that they can use ToughMet® CX 105 tube with the same results and realize even greater cost efficiencies.

As time progresses, Herbert's intends to use ToughMet® in new factory fitted equipment, as well as in refurbishments.