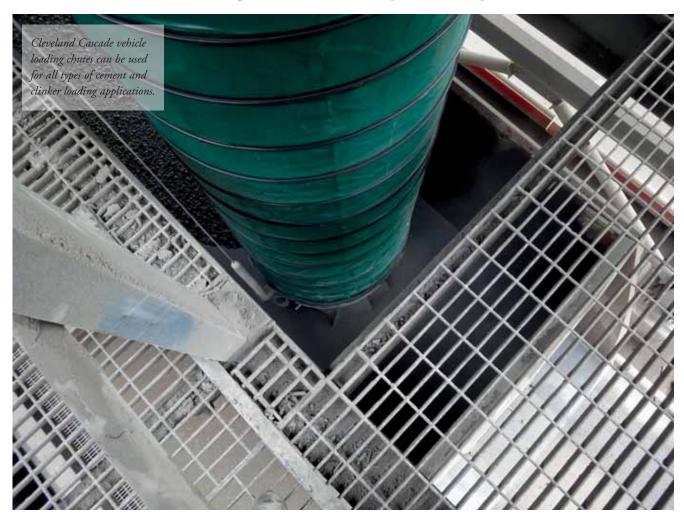
## **Cleveland Cascades: loading cement efficiently and safely**



Cleveland Cascades Ltd, renowned for its global supply of bulk material loading chutes for shiploaders and silo loaders, is seeing increased demand for its vehicle loading solutions, in particular in the cement industry.

The company has designed and supplied over 500 loading chutes since 1992, from shiploaders for alumina in Australia to silo loaders for coal in Israel. These systems use the company's unique Cascade loading system, whereby the loaded material cascades vertically through an arrangement of oppositely inclined cones the length of the chute. The material is loaded at a low velocity, yet high volume, and this means problematic materials can be transferred with minimized dust emissions and also minimized degradation and segregation of

The vehicle loading solutions use the same Cascade technology, but whereas quayside shiploaders can be over 30 metres in length, the vehicle chutes need to be much shorter and to accommodate more frequent loading patterns and more intricate logistics of tanker and open vehicle loading.

product.

The vehicle loading systems are more lightweight in comparison to shiploaders, but are designed with the similar operational functionality of the larger chutes. Material detection probes housed in the carrier of the systems allow for automatic raising on detection of material,

which facilitates continuous material loading. Limit switches in the hoist system can be set to allow travel limits which enable the optimum loading levels.

The Cascade technology is ideal for the loading of materials such as cement and clinker, which are notoriously problematic to handle in terms of dust emissions. Clinker is also a very abrasive product, and is often loaded at material temperatures in excess of 90°C. For such applications, the Cascade chutes are specified with ceramic linings, to offer optimal abrasion resistance and with specific electrical componentry, such as material detection probes, that can withstand bulk loading at these high temperatures.

