



Cleveland Cascades Ltd

CASE STUDY

24 YEARS OF DUST CONTROLLED LOADING AT CLEVELAND POTASH



Customer	ICL, UK.	Location	Teesport, UK.
Date	July 2016	Material Handled	Potash & Polyhalite
Application	Ship Loader	Loading Rate	500 tph
Chute Type	Cascade 1100	Chute Length	15m

The Dry Bulk Terminal at Teesport, UK, is a dedicated distribution center for products mined from Cleveland Potash's Boulby mine. The materials arrive by train and are held in a silo storage shed before onward distribution by vessel. The terminal handles over 1 million tonnes per annum of Potash & Polyhalite, with shipments sailing to export markets around the world, as well as the home market.

For Cleveland Cascades Ltd this is where it all began. The original idea for a cascade cone loading chute, capable of controlling dust emissions during loading, was conceived here. The company was originally a division of Cleveland Potash Ltd, who diversified in to manufacturing loading chutes when they needed a high capacity loading chute which effectively controlled dust pollution. The innovative solution they conceived was the Cascade concept, which utilised a series of inclined cones to control the velocity and flow of their Potash.

Cleveland Potash, now known as ICL UK, is the oldest customer and over the years has bought numerous chutes for a variety of applications at the mine and the port. The parent company, Israel Chemicals Ltd (ICL) is also a long term user of Cleveland Cascades Loading Chutes at their Dead Sea Works operations in Israel.

The system can load up to 500 tonnes per hour through a chute which can extend to 15m in length in fully extended mode. Potash is highly corrosive, so to ensure a long service life, stainless steel fixings are used throughout and the GRP cones are protected with a 4mm UMHW PE liner.

In order to extend the operating life even further beyond 24 years, the chute is about to have an upgrade, with the installation of a new shroud and carrier section.

