

Kiwi bulk cargo engineers team up with DCL



Heavy duty application: DCL load spout loading cement

Bulk handling operators across a range of industries face greater pressure globally for their businesses to conform to ever stricter environmental standards around dust and product discharge during operations. Minimising the volume of product discharged into the environment can be a challenge as bulk handling facilities increasingly compete with other commercial users for operation space, and public perceptions of dust's environmental impact. Here in New Zealand operators also face increased penalties under the Resource Management Act (RMA) for illegal discharges. Even when air discharge is not a consented requirement, dust

layers can affect water quality, and in turn become a RMA issue. In addition, stricter health and safety requirements mean operators are also required to provide a safer, healthier environment for staff to work in, with minimal exposure to potentially unhealthy dust contamination.




Dust control at the bulk transfer points increases system productivity by reducing material losses. Estimates are that those losses can be as high as 5 percent of the total product handled. Recognising this need for technology to manage dust issues, established Tauranga engineering firm Page Macrae Engineering has teamed up with United States company

Dust Control and Loading Systems (DCL) to act as the Australasian agent for the global company. The Michigan based company researches, develops and manufactures a full range of dust control loading systems and key components. The DCL range of discharge spouts, conveyors, valves and filter modules is suitable across a wide range of bulk material types, as varied as fertiliser, cement, grain products, alumina, limestone and salt. Their application is not limited to shipping points, with increased use in quarries, grain handling facilities and bulk fertiliser storage depots.

A key emphasis of DCL's ethos is to design dust

control technology without sacrificing equipment and plant productivity. A typical DCL application is the company's heavy duty loading spouts, designed specifically for stockpiling dusty product in warehouse or storage situations. These include bulk storage of products like palm kernel extract, fertiliser and grains. The spouts are also suitable for ship loading and capable of operating at up to 6000 tonnes per hour. Flexible sleeves and rubber skirted lining provide a high level of dust suppression, and additional suppressors offer virtually dust free product handling.

DCL's retractable discharge

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spouts also provide exceptional dust free discharge for loading into enclosed rail cars and trucks. The company's latest development, a compact filter module provides a very low profile combination of unloading spout and dust filter, ideal for use when loading enclosed or open vehicle spaces. The "all in one" spout and filter module eliminates the need for expensive additional ducting and ensures a flexible, easily located discharge point.

Page Macrae Engineering Bulk Cargo manager Bruce Ennis says the DCL agency brings valuable synergies for both companies. "Page Macrae is increasingly focussed on developing whole chain bulk handling solutions. That can include from ship to storage, but also equipment for any handlers of bulk materials that are problematic for dust creation. Our equipment now includes our bulk grabs for ship unloading, while our Enviro-Max hoppers provide a solution for discharging cleanly into trucks and rail cars, with dust control technology ensuring compliance issues are being met. "DCL discharge spouts are a key component in our hoppers, and our use of them comes after careful assessment to determine they are the best available." He says one of the top priorities for companies seeking bulk discharge systems is dust suppression. Page Macrae's recent delivery of hoppers to POAGS Port of Darwin and subsequent repeat order for POAGS Port of Bunbury, are typical examples. "The client had to prove to authorities clearly how they were going to manage dust losses, and the DCL discharge spouts we fitted have proven to be highly effective in achieving that." ● *Go to www.demm.co.nz/enquiry quote:*

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