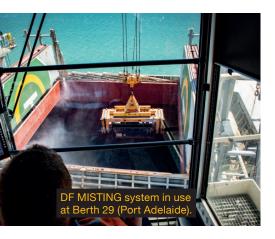
Dust suppression

Leading the way for safe and efficient ports

SINCE ITS INCEPTION IN 2001, FLINDERS PORTS HOLDINGS HAS ALWAYS HAD A COLLABORATIVE RELATIONSHIP WITH SOUTH AUSTRALIA'S BULK EXPORTERS, NOT LEAST THE STATE'S MAJOR MINERS.



he company facilitates bulk exports and imports from each of its seven ports including Port Adelaide at the purpose-built minerals' precinct at Berth 29, from Port Pirie - location of the globally significant Nyrstar smelter, and Thevenard – for the largest exporter of mineral sands in the southern hemisphere.

Over the last 20 years, the company has sought to work with customers to ensure the bulk export process can be as safe, sustainable, and efficient as possible.

This led to several innovations born out of Flinders Port Holdings operations and adopted nationally.

The best example of the company's innovative solutions is linked to the perennial problem facing mineral concentrate exporters: dust.

The challenge of suppressing dust emissions during the transport of concentrates were especially acute at Port Adelaide where the Flinders
Ports mineral precinct handles close
to a million tonnes of minerals sands,
copper concentrates and iron ore
annually. From the outset, the company
has consistently looked for ways
of minimising dust emissions and
exceeding environmental standards.

To this end, the company was one of the first port operators in Australia to install the industry leading DF MISTING® Misting System at its Port Adelaide facility and it has been working collaboratively with customers to refine and improve the system ever since.

One of those customers is OZ Minerals, owner and operator of the Prominent Hill copper-gold mine, located 650 kilometres north-west of Adelaide in South Australia.

Copper-gold concentrates produced at Prominent Hill are transported by road to a rail siding and then by rail to Port Adelaide. The concentrate is then shipped to customers in Asia and Europe. Flinders Logistics, a part of Flinders Port Holdings Group, and OZ Minerals started working together in 2012 and over the years they have partnered on projects to continuously refine and improve the technology – making it more efficient and environmentally sound.

The misting system now features several different types of nozzles with bespoke filters, and a water-wise innovation that has reduced the amount of water used to generate the fine mist spray. Flinders Port Holdings is also

investing in innovation within Flinders Logistics to drive efficiencies in the bulk container loading process but also, critically, to improve worker safety.

The company has developed a proprietary Container Spreader Guidance Apparatus to eliminate the manual handling risks to personnel.

The guidance system has made vessel loading faster and more efficient. Cost savings have also resulted through reduced damage to containers.

These efficiencies have enabled the company to demonstrate to customers and competitors that striving for the highest possible safety standards is not just about excellent business ethics – it makes financial sense too.

This logic also led Flinders Port Holdings' investment into, and collaboration with, Complexica, a leading provider of Al Software for supply and demand optimisation.

The two companies have been collaborating for the past two years to develop AI software to dynamically improve container movements through a 24/7 optimisation process.

Ambitious short term and stretch goals have been set across the business with the company also committing to launch an employee engagement and innovation program to enable all staff to contribute and help shape its approach to work health, safety and wellness as well as its wider plans for addressing environmental, social and governance challenges over the coming years.