

RESOURCES REVIEW

Supply chain efficiency measures high on the agenda

More efficient comminution a step
change to decarbonisation

Secondary prospectivity can become
major source of critical minerals



Supply chain efficiency measures high on the agenda

For Australian miners and their supply chain partners, the ongoing global shipping squeeze has made the last 12 months a challenging period. But it has also focused minds in the sector – pushing decisions on supply chain efficiencies and optimisation up the agenda as businesses look to strengthen the areas of the export process they can control.

Berth #29 Tippler in use – significantly reducing dust emissions and product loss.



APL Boston leaving Flinders Adelaide Container Terminal – South Australia.

This trend has carried over to ports, where forward thinking operators have seen the current climate as further validation of the need to modernise. Flinders Ports is a case in point. It owns and operates seven ports across South Australia, including the state's three deep water ports at Port Giles, Port Lincoln, and Port Adelaide. Over the last year, the company has completed its first ever masterplan while also pushing forward on specific transformation projects, not least digitisation.

This approach reflects the fact that the company has a long-term commitment to being the port and logistics partner of choice to the region's exporters – not least the mining sector. But it also reflects the fact that the company believes there is a strong business case for physical and digital port transformation.

“The current imbalances in global shipping will eventually even out. But when they do, the inherent inefficiencies in some of Australia's export processes will still be there. We, as port operators, need to be planning now to address these issues,” says Flinders Port Holdings CEO, Stewart Lammin.

At Flinders Adelaide Container Terminal, Flinders Port Holdings is investing heavily in digitisation, aiming to make the port one of the most advanced in Australia. In late 2021 the company invested \$5 million into Complexica; an AI company focused on optimising supply chain processes. The two businesses are now completing a trial at FACT, which will see container management at the terminal optimised through AI predictive technology.

Flinders Ports is also exploring other digital and data-backed transformation to ease the pressures linked to the trend in rationalisation with fewer but larger ships servicing the port. This trend drives efficiencies, but it also requires ports to work faster, managing greater throughput in tighter deadlines.

In such a scenario, even marginal efficiency gains through innovation can have a significant material impact on a port's ability to keep exports flowing. And for Mr Lammin, there is an opportunity for Flinders Ports and South Australia to carve out a leadership position in this space, “globally, we have seen data-led disruption coming into the supply chain and logistics industry. From blockchain-backed supply chain traceability to AI assisted port operations - change is coming. This is a significant strategic opportunity for

our business and for the state. We think South Australia has an opportunity to be a serious early adopter in this space due to the relatively integrated and connected make up of our supply chain infrastructure.”

The company's investment in digital transformation comes on the heels of significant capital expenditure focused on its physical assets. As mentioned in this magazine last year, Flinders Ports has invested heavily in its Berth 29 ‘minerals precinct’ at Port Adelaide.

The berth houses a bulk handling facility tailored for hyper-efficient export management of mineral concentrates with direct access to the national road and rail network. With close to a million tonnes of minerals sands, copper concentrates, and iron ore being exported through the berth annually, the site still retains significant capacity to increase volume for current customers or facilitate new throughput.

The last year has also seen significant progress in capital works at the company's Port Pirie facility. Hardstand is being completed across all berths at the port, making bulk exports quicker and safer as well as satisfying government regulations with respect to ‘first point of entry’ for imported break bulk cargoes.

Flinders Ports has also further expanded its collaboration with the Nyrstar Concentrate Smelter. As one of the largest smelters in the world, the facility relies heavily on Flinders Ports to facilitate the import of core inputs and the export of finished product. Over the last year, Nyrstar has commissioned a mobile harbour crane at the port - further increasing the port's capability and future proofing operations at the berth.

For Andrew Pellizzari, GM for Group Development at Flinders Port Holdings, these works are an example of the importance of collaboration with key resource sector clients: “the Nyrstar smelter is a world class facility, producing commodity grade lead, as well as other commodities and it is vital that we continue to enable the smelter to efficiently and safely keep the supply chain of inputs running and also facilitate frictionless export of finished product. Over the last year, we have worked closely with the company to improve efficiencies, especially in the export process, making it easier for finished product to get from smelter, to berth, to ship. We are also focused on minimising any environmental impacts linked to the operations with the introduction of dust suppression techniques and water run off management at the site.”

Significant investment at the company's other ports, including the recently regenerated port of Thevenard, further underlines the company's focus on delivering the port infrastructure South Australia needs in the long-term, regardless of short-term challenges such as COVID and the imbalances in global shipping.

This autumn, Flinders Port Holdings will publish its recently completed 50-year masterplan, which will further outline the company's plans for infrastructure development, much of which impacts the mining and resources sector specifically.

Nationally, Australian ports have been put on notice by the Federal Government's Productivity Commission Maritime Inquiry, which will report later this year on how well the port system is operating and facilitating trade. For Flinders Port Holdings, this is a challenge which is front of mind now and will continue to be so.



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