



## Ship unloaders



With a capacity of up to 1,500 tonnes per hour, our machines are the largest in the industry. They deliver unrivalled energy efficiency with the lowest kilowatt per tonne ratio.

Our deep knowledge of the aluminium industry results in the market's leading pneumatic ship unloaders. Tailored to your specifications, our energy efficient unloaders help optimise your operations, costs and performance.

**We are the aluminium industry's leading provider of pneumatic ship unloaders. Our high capacity unloaders are used in more harbours than any of our competitors.**





### Unmatched performance

#### Built to suit

Each ship unloader is custom built to meet your exact needs and specifications. A single machine can unload only alumina or both alumina and coke. Your quay's load distribution requirements determine the portal frame's design. Vessel size and tide conditions dictate the boom and telescope's length.

#### Health, safety and environment (HSE) benefits

Our fully enclosed systems comply with the most stringent emission standards for alumina and coke. Compared to a grab type unloader, our pneumatic ship unloaders travel less, reducing the risk of collisions. They offer quiet operation, no low frequency noise and easy maintenance.

We are certified ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007.

#### Integrated harbour solutions

In addition to the ship unloader, our integrated harbour solutions include dock conveyors, silos, silo feeding systems, silo extraction systems and pneumatic conveying systems for transporting alumina and coke to the plant. All controlled by a single operator.

#### Ship unloaders

We deliver your ship unloader fully assembled and pre-commissioned. Your existing machine is replaced without interrupting the arrival of alumina or coke vessels at your plant. Our ship unloaders can also be delivered in break-bulk for final assembly on site using local contractors.

#### Vacuum blowers

Our blower technology lies at the heart of our system. Our blowers are custom designed to meet your exact process requirements. They are cost effective, highly efficient, low maintenance and long lasting.

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Capacity up to 1,500 tonnes/hour

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Highly efficient and reliable operation

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Designed specifically for the aluminium industry

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Custom built

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3 in 1: unload alumina, coke and fluoride

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Safe and environmentally friendly

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Delivered fully assembled

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One-stop shop for complete harbour facilities

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