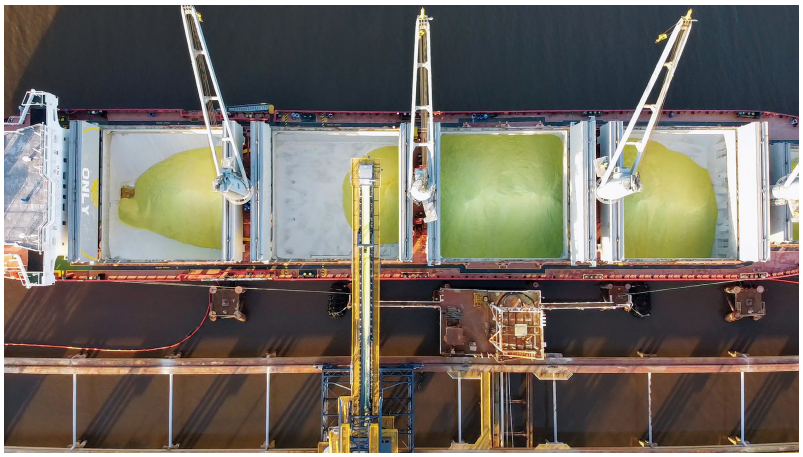

SCAN THE QR-CODE:
And view the Page online, where you will have access to more information

UNIQUE, ENCLOSED SULFUR STORAGE AND HANDLING SOLUTIONS

Bruks Siwertell is one of the only manufactuers able to provide safe, environment-friendly, totally enclosed bulk sulfur ship unloaders and conveying systems. Our sulfur storage and handling systems have served the sector for decades, successfully managing the risks of one of the most volatile dry bulk commodities.

We offer large-scale Siwertell screw-type ship unloaders, which can efficiently discharge bulk sulfur at continuous rated capacities of up to 1,800t/h from vessels up to around Panamax size. Our road-mobile units offer flexible unloading operations and can serve multiple ports, handling sulfur at rates of up to 350t/h. Bruks Siwertell's sulfur ship loaders have equally impressive material handling capabilities and operate at rates of up to 1,500t/h.

SHIP UNLOADING

SHIP LOADING

SULFUR: A HAZARDOUS DRY BULK CARGO

Sulfur is corrosive, polluting and hazardous with the potential to explode and cause fires. It is especially damaging to the environment when handled with machinery such as grab cranes and bucket elevators.

Sulfur storage and handling operations therefore are attracting increasingly strict regulations aimed at eliminating spillage and minimizing dust emissions. Bruks Siwertell is the only manufacturer that addresses all these issues in its sulfur storage and handling range of technology.

SIWERTELL SULFUR SAFETY SYSTEM (4S)

Handling bulk sulfur in a totally enclosed system delivers maximum environmental protection, but its containment comes at an increased risk of explosion and fire.

Bruks Siwertell therefore developed its unique safety system, the Siwertell Sulfur Safety System (4S). 4S minimizes the risk of explosions and safely contains them if they do happen. It also reduces the risk of fires, and, if they occur, detects and extinguishes them.

4S: HOW IT WORKS IN BULK MATERIAL HANDLING

To prevent explosions and fires, 4S sprays water on the cargo at the inlet

feeder and at conveyor transfer points. An automatic system lubricates and cools the end and intermediate bearings to reduce the risk of ignition.

Fire detectors are installed along the conveying line. They automatically start the water spray fire-extinguishing system and stop the conveyors to prevent a fire from spreading to storage areas. Extra thick steel casings can withstand a sulfur explosion, while venting valves relieve the resulting pressure. Stainless steel components minimize corrosion.

conveying systems



TRANSFERABLE SULFUR HANDLING TECHNOLOGY

4S technology has allowed Bruks Siwertell to develop clean, safe unloading systems for other hazardous materials including biomass and fertilizers.

FLEXIBLE DISCHARGE OPTIONS

We offer many sulfur storage and handling solutions. A Siwertell ship unloader can discharge bulk sulfur to a jetty conveyor for further transportation to storage areas, or directly into trucks or rail cars. The most common and efficient way, especially for rail-traveling, gantry-based unloaders, is to integrate the unloader in a complete conveying and storage system. The transfer point to the jetty conveyor is rendered dust-proof by a transfer trolley with an integrated dust-suppression system.

Direct discharge of bulk sulfur to trucks, rail cars, or other port facilities by Siwertell road-mobile unloaders is carried out through specially-designed loading bellows, also fitted with an integrated dust-suppression system.



RAPID DELIVERY SCHEDULE KEEPS CUSTOMERS COMPETITIVE

Occasionally customers require delivery and installation schedules beyond traditional timescales and when these are needed Bruks Siwertell responds. USA-based Martin Operating Partnership's Texas terminal was one such operation to benefit from this capability. It needed new bulk sulfur storage and handling equipment, including belt conveyors and a rail-travelling ship loader, for its sulfur prill facility in Beaumont.

Sulfur prills can be left in the open air, however, when handling this dry bulk material, every measure should be taken to prevent the formation of sulfur dust. The new loader and conveyors are fully enclosed with dust-removal systems, which eliminate spillage and emissions from the export process. It offers uninterrupted loading and is the most efficient way of loading sulfur prill into a vessel.

REAd more



TURNING THE TIDE ON YELLOW PORTS

Switching from handling bulk sulfur with grab cranes to enclosed Siwertell ship unloaders delivers one of the most environmentally impactful results; literally turning ports from dusty yellow to clean.

This positive environmental shift has been enjoyed by multiple operators including Paradeep Phosphates Limited (PPL), a leading stakeholder in India's fertilizer industry. Facing huge environmental problems at its jetty in Bhubaneswar, PPL was looking for a new ship unloader. After a visit to a Siwertell installation in Australia, PPL was convinced that a continuous, screw-type Siwertell ship unloader was the answer to its requirements.

It is now served by a Siwertell ST 640-D rail-mounted unloader, discharging sulfur at a rated capacity of 1,600t/h from vessels up to 60,000 dwt, meeting the strictest environmental regulations.

READ FULL customer CASE

Bruks Siwertell has completed the installation and commissioning of a second Siwertell screw-type ship unloader for leading Indian fertilizer company, Paradeep Phosphates Ltd.

Read full customer case



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