



# LEADING THE FIELD WITH EXCEPTIONAL GRAIN HANDLING EQUIPMENT

Grain handlers have to meet some of the most challenging dry bulk material demands. Agricultural dry bulk import and export terminals are subject to massive surges in intake from the seasonality of crop harvests. Additionally, this is organic material, so processing grain, grain storage systems and grain handling equipment must be designed to handle it in a sensitive way to avoid spoilage.

Bruks Siwertell is the only manufacturer of grain handling equipment that can deliver all the ship unloading and loading, grain processing and grain storage system needs of these operators. With our Siwertell screw-type ship unloaders, we can discharge grain and other agri-bulk commodities at rated capacities up to 1,800t/h. Added to this, our grain handling equipment capabilities also include the highest continuous rated loading capacities, which are in excess of 3,000t/h.

Our grain handling equipment provides exceptional environment-friendly performance with minimal dust and no spillage. Furthermore, the same machines, ship unloaders and loaders, can handle soybeans, meals and other non-free flowing foodstuff materials at these high capacities.



Efficient, clean <u>conveying</u> and <u>grain storage systems and reclaiming</u> <u>technology</u> can be matched to our grain handling ship unloaders and loaders.

#### READ CUSTOMER CASES FOR GRAIN HANDLING

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



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## **GENTLE GRAIN HANDLING IS THE KEY**

Cargo degradation is a key consideration in grain handing equipment. A successful material handling system for grain must offer extremely low degradation and crushing rates, minimizing the production of fines; powdery particles smaller than the individual grains.

Fines make grain difficult to aerate and increase spoilage rates during processing grain and grain storage. Fines must be removed before milling, so their presence in high enough levels can down-grade the quality of entire grain shipments. Furthermore, the greater the number of fines produced, the higher the levels of dust emissions, raising the risk of fire and explosion in grain storage systems and silos and other confined areas.

Siwertell ship unloaders are ideal for grain handling; their steady conveying velocity, with no high-impact particle collisions or crushing forces means that they avoid the cargo degradation concerns that traditionally accompany pneumatic unloaders, but maintain equivalent throughputs.

Our ship loaders and conveying systems offer similar gentle grain handling equipment characteristics. We can provide independent test results to confirm the low levels of cargo degradation caused by our loaders, unloaders and conveying systems.

Stationary & Rail-mounted unloaders

#### **PORT-MOBILE UNLOADER ADVANTAGES**

Bruks Siwertell has added a port-mobile ship unloader to its outstanding range of grain handling equipment solutions. Optimized on many key levels from its stable, lightweight steel structure through to its gentle cargo handling, smooth cargo discharge, and operational performance, the unloader offers full port mobility, excellent efficiency and rated capacities and reduced investment costs.

The port-mobile ship unloader, like the road-mobile unloader, uses simplified, standard technology, which keeps maintenance and wear parts costs relatively low compared with other unloading systems on the market.

port-mobile unloadeRS





# **THROUGH-SHIP PERFORMANCE**

Although rated capacities are important performance indicators, it is our market-leading through-ship performance that really sets us apart from competitor systems such as grab cranes, pneumatic systems and bucket elevators. The excellent through-ship performance and reduced clean-up requirements delivered by our grain handling equipment ensures quick turnarounds that minimize the time grain carrying bulk vessels and barges spend alongside loading and discharge berths.

## **GRAIN HANDLING CLEANLINESS**

Bruks Siwertell's grain handling systems easily comply with the strict environmental regulations that apply in many ports. Our totally enclosed systems eliminate spillage and offer close-to-zero dust emissions. Read more about our market-leading grain handling equipment, processing grain and our grain storage system solutions; whether you are interested in a stand-alone unit or a fully integrated terminal system, we can design a solution to maximize the potential of your grain handling operations.

ship loading

conveying systems

# PLANNED SERVICE STOPS KEEP BRAZIL'S GRAIN UNLOADERS IN THEIR PRIME

Brazil has vast agricultural reserves and is a world-leader in food production. Technological advances coupled with its natural resources means that Brazil is a strong competitor with the US as the world's largest soybean and corn producer and exporter.

Ports in Brazil are booming, and like the advances in the country's agricultural equipment and infrastructure, their in-port grain handling systems, and grain processing and grain storage equipment, have had to step up to the challenge too. Today, Bruks Siwertell has numerous high-capacity grain ship unloaders operating in the country, with some machines running for about 3,500 hours/year.

With such a large intake of grain, the Siwertell ship unloaders are in service all of the time, throughout the whole year, so to be able to guarantee a continuous operation they all must have a planned maintenance stop once a year.

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#### **HIGH-CAPACITY GRAIN LOADING IN AUSTRALIA**

The privately-owned Newcastle Agri Terminal (NAT) in New South Wales, Australia, is a major grain port development. It commenced operations in early 2014, aiming to set new standards in grain loading and rail discharge speeds, while minimizing dust emissions and noise generation.

Our grain handling equipment delivery to the operator includes a heavy-duty travelling-belt type Siwertell SBL 1600TT ship loader. The unit has a belt width of 1,600mm and is designed to load Panamax ships up to a maximum size of 60,000 dwt and a maximum beam of 32m.

READ FULL customer CASE



# SIWERTELL GRAIN UNLOADERS - TECHNICAL SPECIFICATIONS

	Road-mobile unloaders	Siwertell 400 PMU	Siwertell 600 PMU	Siwertell 490 F	Siwertell 640 M	Siwertell 790 D
Capacity	240-400t/h	400t/h	600t/h	600t/h	1,200t/h	1,800t/h
Vessel size	Small <15,000 dwt	Panamax 60,000 dwt	Panamax 60,000 dwt	Panamax 60,000 dwt	Post-Panamax 80,000 dwt	Capsize 180,000 dwt
Materials	Grain, corn, feedstuff products, and soya bean	Grain, corn, and soya bean	Grain, corn, and soya bean	Grain, corn, feedstuff products, soya bean and soya meal	Grain, corn, feedstuff products, soya bean and soya meal	Grain, corn, feedstuff products, soya bean and soya meal
Mobility options	Road-mobile, on gantry or stationary	Port-mobile with rubber tyres	Port-mobile with rubber tyres	With rubber tyres, on rails or stationary	On rails or stationary	On rails or stationary



#### **PORT-MOBILE GRAIN UNLOADER**

The latest addition to Bruks Siwertell's grain handling solutions is the standardized port-mobile unloader. Optimized on many key levels from its stable, lightweight steel structure through to its gentle cargo handling, smooth cargo discharge, and total operational costs, the unloader offers full port mobility, excellent efficiency and rated capacities and reduced investment costs.

Read more





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