



SMB International GmbH

# ▶ Ship loading systems



**Bulk goods loading plants**

**Sack loading**

**MADE IN GERMANY**



## Loading of bulk goods

Cascade chutes from *SMB Shiploading* are necessary if the flow rate of the bulk goods is slowed down and when the granularity of the bulk goods has to be damaged as little as possible. The arising dust is more or less „sucked in and trapped“ by the suction of the sliding goods. An encapsulated dust extraction unit is especially useful as an option for the cascade lines especially if the bulk goods can generate dust explosion areas or if the dust emissions have to be minimized.



### Save costs: Insist on quality !

- Shorten docking times
- Minimise insurance costs
- Lower transportation costs

Conversion of old plants or increasing their capacity for shipping companies. After all, if a ship is loaded quickly, the docking time can be shorter and the transportation will therefore be faster. This will reduce the risk of damaging sensitive goods – high insurance costs are avoided.

Ship loading facilities for ships ranging from 5000 to 10000 (weight tonnage) have already been realised by *SMB Shiploading*. The capacity ranges up to 2500 t / h where  $d = 1$ .

## Sack loading

The conveyor belt boom can swing out over the ship up to a length of 30 m. The spiral chute is suspended vertically at the outside edge of the boom. This is used to position the sacks exactly according to position in the ship's hold.



The chutes can be fitted with a central turntable, amongst other items, for even alignment of the sacks. Or with a 2 or 3 stage telescopic loading head with a maximum length of 8 m to transport the sacks into the last corner of the storage area (hold) by pressing a button. The spiral chute has been specially constructed for this task – by copying nature as an example. The chute wraps helically around the central pipe; the precisely welded segments of the chute have a precisely calculated gradient to keep the chute speed steady. *SMB Shiploading* is proud of this unique spiral chute – not without reason.

## Combined bulk goods and sack loading

The spiral chute for the sacks and the cascade lines for the bulk goods are mounted on the same boom for this combi loader for sacks and bulk goods. Either sacks or bulk goods can be loaded.



Bulk goods

Sacks

Sack /  
bulk goods

Portal Reclaimer  
Semi portal Reclaimer

**Bulk goods loading plants**  
**Sack loading**

**SMB ship loading systems:  
Spiral chute used globally**

The optimum exploitation of waterways is a cheap transportation alternative. Freight shippers load smaller ships to reach ports far inland or for transshipping freight. A requirement for this cheap transportation is the ship is loaded quickly, safely and by using the full extent of the available space in the hold.

*SMB Shiploading* offers you the best possible global solution for this task. We have gathered more than 20 years of experience in this application - the list of global references from more than 100 ship loading systems speaks for itself. And it does not matter here whether a stationary loading system is used or whether mobile loading systems can travel along the quayside on rails. All the important components and modules are manufactured by *SMB Shiploading* itself.

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... icker, the docking times will  
... cheaper. The chutes greatly  
... nsurance and transportation  
  
... dwt to 90,000 dwt (dead  
... *SMB Shiploading*. The loading









Application:  
Transport inside hold storage



Application:  
Dosing head for corn



Application:  
slings bulk material in the corners of cargo hold

stationary	mobile
 Bulk goods, stationary	 Bulk goods, mobile
 Sack, stationary	 Sack, mobile
	 Ship loader combined
	 Portal Reclaimer Semi Portal Reclaimer

The ship loading system from *SMB Shiploading* is always the right choice, whether grain, fertilizer, sulphur, slag, plaster or ash is being loaded; whether you are working with sacks for river ships or sea-going ships or whether cement works are using the ship loader on rivers.

**Your advantages as a user:**

- sturdy construction type
- safe and quick loading of sacks and bulk goods
- targeted increase in capacity for old systems
- globally known spiral chute for loading sacks
- a cascade chute slows down the loading of bulk goods

**Reclaimer / portal scraper**

A scraper (reclaimer) from *SMB Shiploading* is called for if bulk goods have to be loaded from the dump back onto the conveyor belt. Scraper chains or bucket lifts are used to loosen up and remove the bulk goods fully automatically. The fully portal reclaimer or semi portal reclaimers are used in extremely large hangers or out in the open.

**Bucket lifts**

A bucket lift is used as a rising conveyor to take over the upwards transportation of bulk goods. *SMB Shiploading* therefore extends the product program for loading systems and transportation tasks. Storage, transportation and loading - *SMB Shiploading* offers you all the systems for these ship applications. Everything from one source - from the project work up to commissioning.

**SMB** International  
**MBA** Instruments  
**SMB** Shiploading  
**SMB** Filling  
**SMB** Palletizing  
**SMB** Logistics

**SMB** Group

**Automatic Systems for Filling, Storage and Conveying**

**Our know-how : Your benefit**

You will find a safe solution for your task, whether you want to deposit huge paper rolls, drums or pallets in compact warehouses or grain in silos because we do not just show you how to warehouse your items or to measure how full they are, but we also construct fully automatic filling systems for you, whether these are for liquids or solid materials. Loading sacks on to ships ? An ideal application for the spiral chute. And palletizing for cardboard boxes ? We only need to ask you: „with, or without box turner ?“

Turntables, chain conveyers, welding systems, rotating and moving carriages, drive in and shuttle systems. You can get this and a lot more from SMB and MBA. Precisely coordinated according to your wishes and ideas. As a turnkey project. In an extremely sturdy and high value quality. Also for use in explosion endangered zones. Have a word with us.

- **High future safety**
- **Quick reaction**
- **Enormous saving in costs**
- **Realisation strictly according to deadline**
- **Extreme stability**

because of products constructed systematically on a modular basis  
 because of complete production in our company  
 in maintenance and servicing because of standard remote diagnostics  
 of turn key projects because of planning right up to commissioning from one source  
 because of a welded steel chassis

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**SMB International GmbH**

- Bucket lift
- Acceleration belt
- Spiral chute
- Dust extraction plant
- Belt conveyor
- Dosing head for bulk goods
- Loading head with telescopic conveyor

