

Construction Materials



Tough Stuff Harbour Cranes for Handling Construction Materials

Technology Built on Solid Rock

Gottwald Port Technology Harbour Cranes

Handling materials for the construction industry is an important task at ports and terminals around the world. The construction materials handled include sand, gravel, clinker and marble as well as cement.

To ensure punctual delivery of construction industry products to buyers around the world, terminal operators must be able to depend on the handling equipment they use. This equipment must demonstrate an outstanding degree of mobility, versatility and flexibility in terms of the lifting gear that can be fitted, thus guaranteeing high handling rates.

Gottwald Has the Right Solutions

The demands of terminal operators are well met by Gottwald

- HMK Mobile Harbour Cranes,
- HSK Portal Harbour Cranes and
- HPK Harbour Pontoon Cranes.

The success of these three crane types speaks for itself. They are in operation in special and multipurpose terminals of sea, river and canal ports around the world and discharge construction industry products in a flexible, rapid and safe manner.

The 4-rope grab models of the Gottwald Harbour Cranes have been designed primarily for professional bulk handling, while the universal 2-rope crane models mainly handle all different types of cargo – including bulk material, when fitted with a motor grab.

Gottwald Harbour Cranes are highly versatile and are used for handling containers, general cargo, fruit, bulk, steel and construction industry products such as:

- cement
- sand
- gravel
- clinker
- marble
- stone or rock
- wood products



The Advantages of Gottwald Harbour Cranes:

- diesel-electric operation – power generated in the crane itself
- operation using external power supply with on-board diesel-generator set being bypassed
- high lifting capacities and handling rates
- wide working radii for good access to ship and stack yard
- easy crane travel with high manoeuvrability
- rapid change of lifting gear
- low specific investment costs
- service-friendly design
- short delivery lead-times
- high resale values

HMK 300 E discharging marble at the Port of Carrara, Italy



HSK 330 EG at the Port of Sevastopol, Ukraine



**For Special Requirements:
HSK Portal Harbour Cranes**

With a full range of rail-mounted HSK Portal Harbour Cranes, Gottwald offers a solution for handling construction industry products in the tight confines of narrow quays.

HSK cranes use the same proven technology as the tyre-mounted HMK Mobile Harbour Cranes. Further parameters for determining the portal are the track gauge and height of the portal which depend on the conveyor belts or truck and rail operation. These factors must be taken into consideration to allow railway trains or trucks to pass underneath.

**More than Just Efficient
Handling Equipment**

Gottwald's portfolio goes far beyond the supply of modern handling equipment. The company plans and optimises entire ports and terminals. Using computer modelling techniques, Gottwald's engineers can accurately predict the behaviour of handling equipment and the flow of materials when a project is still only in the planning stage.



Portal of a Gottwald HSK Portal Harbour Crane using an external power source

**HMK 330 EG handling clinker
at Mina Saqr in Ras al Khaimah, United Arab Emirates**





The high cab position of Gottwald Harbour Cranes affords an excellent view of the vessel from above



Pontoon-mounted HPK 330 EG for mid-stream operations at the Port of South Louisiana, USA



HMK 90 E handling wood products at the Port of Belfast, United Kingdom



Gottwald 4-rope grab cranes are perfect for the professional handling of construction materials such as clinker and sand while the 2-rope Harbour Crane models are ideal for handling marble or large stones.



... And Great at Handling Wood Products and Steel

In addition to the usual types of construction materials, wood products and steel, being important basic raw materials for the construction industry, can also be handled quickly and reliably with Gottwald Harbour Cranes.

Various types of materials are handled with ease by Gottwald Harbour Cranes for the construction industry



Gottwald Harbour Cranes

Quick, Efficient and Reliable Handling of Diverse Construction Materials

There are good reasons why many terminal operators around the world choose Gottwald Harbour Cranes for handling all types of construction industry products.

State-of-the-art Technology

Harbour Cranes from Gottwald Port Technology are tuned to state-of-the-art technology and operate on diesel-electric or on-shore mains power.

The diesel-generator set in the crane itself supplies sufficient power to allow all crane functions to be carried out independently of one another at maximum speed, enabling high handling rates.

An external power source for crane operation has its additional benefits:

- lower operating and maintenance costs
- particularly environmentally-friendly crane operation

Different Crane Types

Depending on the construction materials to be handled and the required handling rates, Gottwald Port Technology offers its customers Harbour Cranes either as a 4-rope grab or 2-rope model.

High Handling Rates

Designed mainly as all-purpose equipment, the 2-rope crane model is used for the professional handling of various types of cargo. Its lifting gear can thus be changed quickly and easily, whenever required. When fitted with a motor grab, this 2-rope crane model can also discharge bulk materials at high handling rates. Contrary to the universal purpose of the 2-rope crane model, the 4-rope grab crane with its robust construction has been specially made to meet the high-performance

Gottwald Harbour Cranes can be operated on diesel-electric power or from an external power source



Mobile Harbour Crane with an active dust-protection system handling sand

requirements of continuous-duty bulk-handling operation, demanding handling rates of up to 1,500 t/h. When equipped with the appropriate lifting gear, however, the 4-rope grab model is equally suited to handling all kinds of cargo.

Wide Working Radii

Thanks to the wide working radii, the long distance between the ship or vessel and the stackyard can be bridged. The cab mounted high on the tower affords an optimal view of the entire work area.



The diesel-generator set in the crane itself



External power supply from on-shore mains source



A Solid Base for Material Handling

State-of-the-art Gottwald Harbour Crane Technology

2-rope cranes as the ideal solution for handling general cargo

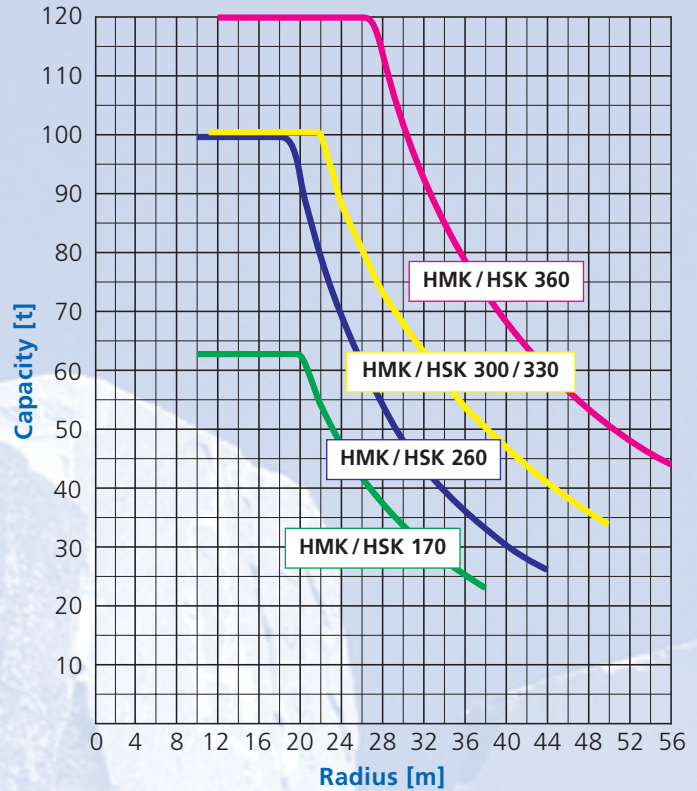
Crane type	Maximum capacity on hook [t]	Capacity on hook [t] / Maximum radius [m]	HSK Track gauge [m]	HSK Portal height [m]
HMK / HSK 170	63	23.4 / 38	10 to 20	4 to 8
HMK / HSK 260	100	26.4 / 44		
HMK / HSK 300 / 330	100	33.4 / 50		
HMK / HSK 360	120	44.4 / 56		

HPK Harbour Pontoon Crane data on request

4-rope cranes as the ideal solution for professional bulk handling

Crane type	Grab type	Max. handling rate [tph]	Lifting capacity [t] / up to max. radius [m]	
			Classification according to FEM 1.001 A7	A8
HMK / HSK 170 E	Motor	650	32 / 25	25 / 29
HMK / HSK 170 EG	4-rope	750	32 / 25	25 / 29
HMK / HSK 260 E	Motor	800	40 / 31	34 / 30
HMK / HSK 260 EG	4-rope	1,000	40 / 31	34 / 30
HMK / HSK 300 E	Motor	850	50 / 31	40 / 32
HMK / HSK 330 EG	4-rope	1,200	50 / 31	40 / 32
HMK / HSK 360 E	Motor	900	50 / 44	–
HMK / HSK 360 EG	4-rope	1,500	–	50 / 44

HPK Harbour Pontoon Crane data on request



For every distinct application, Gottwald has the right Harbour Crane – from smaller cranes for rapid handling of fruit through to the largest cranes available for container, steel, bulk and construction materials handling.

For high-speed, economic handling of construction industry products Gottwald offers a series of Harbour Cranes of various performance categories. The lifting capacities, working radii and the working speeds of Gottwald Harbour Cranes undergo continuous review and development to meet the standards of state-of-the-art technology and customer requirements.



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