

## Steel & Scrap



Hooking up to success  
**Harbour Cranes for Steel and Scrap Handling**

# A Reliable Factor in Steel Handling

## Gottwald Port Technology Harbour Cranes

Steel, formed, moulded or rolled into semi-finished products such as sheets, pipes, tubing, rails, wires and sectional bars in rolling mills, is an important starting material in the mechanical engineering, automobile, shipbuilding and construction industries.

To ensure punctual delivery of the semi-finished 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 around the world are well met by Gottwald HMK Mobile Harbour Cranes and HSK Portal Harbour Cranes.

The success of both crane types speaks for itself. They are in operation around the world – in special terminals belonging to steelworks and rolling mills located near the coast, and in multipurpose and scrap terminals of sea, river and canal ports.

Gottwald HMK and HSK Harbour Cranes are highly versatile and can be used for handling containers, bulk materials and general cargo, including steel products such as:

- coils
- sheet metal
- pipes and tubing
- sectional bars
- billets
- wires
- scrap



HMK 260 E handling steel wire in the Port of Monfalcone, Italy

### 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



Gottwald HSK 300 E Portal Harbour Crane fitted with a lifting beam handling sheet steel at Sidmar in the Port of Ghent, Belgium



**HSK 170 EG with magnetic lifting gear handling sheet steel in the Port of Tuapse, Russia**



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

With a full range of rail-mounted HSK Portal Harbour Cranes, Gottwald also offers a solution for steel and scrap handling in the tight confines of narrow quays.

HSK cranes use the same proven technology as the tyre-mounted HMK Mobile Harbour Cranes. In the HSK cranes, however the chassis is replaced by a portal designed to accommodate the track gauge, height and rail loading requirements and to allow railway trains or heavy goods vehicles to pass underneath. Thus HSK Portal Harbour Cranes cater for the connecting traffic relating to handling steel products.

**More than Just Efficient  
Handling Equipment**

Gottwald's portofolio 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 at the planning stage.



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



**HSK 170 EG handling steel coils in the Port of Vladivostok, Russia**



**HMK 300 E, equipped with motor grab, handling scrap in Tornio, Finland**

### **Perfect for Scrap Handling Too**

Gottwald HMK Mobile Harbour Cranes and HSK Portal Harbour Cranes are used successfully in scrap handling too.

Gottwald Harbour Cranes are fitted with different types of grabs depending on the kind of scrap to be handled.

Gottwald Harbour Cranes can be equipped with mechanically, electrically or hydraulically operated lifting gear. This includes:

- coil hooks
- slings
- chains
- magnets
- lifting beams
- telescopic grabs



**Two HMK 260 EG four-rope grab cranes handling scrap at ABP, Immingham, UK**



# On Solid Ground

## Harbour Cranes for Efficient Steel Handling

There are good reasons why many terminal operators around the world choose Gottwald Harbour Cranes for handling steel semi-finished products and scrap.

### High Handling Rates

Harbour Cranes from Gottwald Port Technology are tuned to state-of-the-art technology and operated 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 to be achieved.

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

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

### High Lifting Capacities

Higher lifting capacities result in higher handling rates – thus, Gottwald Mobile and Portal Harbour Cranes can move more steel coils in one lift at the same time.



Two HMK 330 EG cranes handling steel billets by means of a lifting beam and chains at Tercat in the Port of Barcelona, Spain

### Wide Working Radii

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

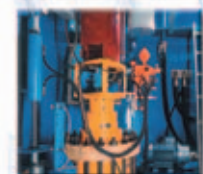
### Various Types of Lifting Gear

On request, Gottwald Harbour Cranes can be supplied with various types of lifting gear suited to handling steel semi-finished products and scrap. Changing the lifting gear is quick, simple and safe.



The diesel-generator set in the crane itself

External power supply from on-shore mains source



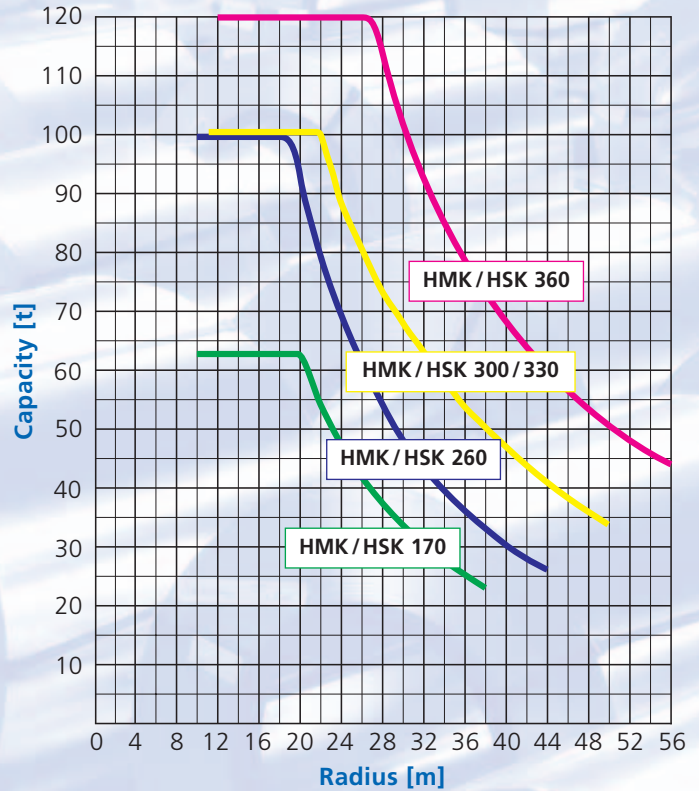
Gottwald Harbour Cranes can be operated on diesel-electric power or from an external power source

# Formidable Performance

## State-of-the-art Gottwald Harbour Crane Technology

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

For high-speed, economic steel and scrap handling, Gottwald offers a series of state-of-the-art Mobile and Portal 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.



A globally organised network of service points with a wide range of services ensures comprehensive care and support for all Gottwald products



Gottwald Port Technology GmbH • Postfach 18 03 43 • 40570 Düsseldorf, Germany  
 Phone: +49 211 7102-0 • Fax: +49 211 7102-3651 • info@gottwald.com • www.gottwald.com

