

Mobile Harbour Crane G HMK 6407 B

Technical Data

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1.0 Main Dimensions

Length of chassis without stabiliser pads	approx.	17.7 m
Width of chassis without stabiliser pads	approx.	9.0 m
Size of stabiliser pads *		2.0 m x 4.5 m
Propping base (length, width)		14.0 m x 12.5 m
Tail radius		7.5 m
Height of boom pivot point	approx.	17.6 m
Crane operator viewing height	approx.	20.7 m
Boom length		51.5 m
Maximum radius		51.0 m
Minimum radius		11.0 m
Hoisting height on hook above quay *	11 m to 37 m radius	46.0 m
	51 m radius	24.5 m
Hoisting height on hook below quay		12.0 m

2.0 Weights

Counterweight		100.0 t
Total weight of operational crane***	approx.	420.0 t

3.0 Main Drive

Type of drive system		Diesel – electric
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3.1 Diesel Engine

Manufacturer		Cummins
Model		QST 30-G5 NR1
Engine type		Diesel
Cooling		Water
Nominal output		1112 kW at 1800 rpm
Number of cylinders		12
Fuel consumption (at full load)		max. 204 g/kWh

3.2 Fuel Tank

Volume of main fuel tank in chassis	approx.	7000 l
Volume of intermediate tank in superstructure	approx.	1000 l
Possible operating time without refueling (depending on operating mode and intensity)		up to 150 h

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4.0 Hoist

Number of rope drums		2
Number of ropes		4
Hoisting speeds:		
	to 28.0 t	110.0 m/min
	40.0 t	90.0 m/min
	45.0 t	82.0 m/min
	50.0 t	78.0 m/min
	63.0 t	69.0 m/min
	100.0 t	42.0 m/min

5.0 Slewing Gear

Number of slewing gear drive units		2
Slewing speeds:		
	to 63.0 t	to 1.6 rpm
	to 100.0 t	to 0.6 rpm
Maximum peripheral speeds at boom head:		
Grab operation, with load	without load	to 350 m/min
Normal-load operation, with load	to 50.0 t	to 300 m/min
Heavy-load operation, with load	to 63.0 t	to 200 m/min
	to 100.0 t	to 80 m/min

6.0 Luffing Gear

Maximum luffing speeds:	to 63.0 t	82 m/min
	to 100.0 t	34 m/min
Average luffing speeds:	to 63.0 t	65 m/min
	to 100.0 t	27 m/min

7.0 Travel Gear

Travel speed	up to	80.0 m/min
Total number of axles		7
Number of steered axles		7
Number of driven axles		2
Number of wheels		28
Tyre size		14.00-24
Climbing ability		6.0 %
Vertical axle compensation		+250 mm / -250 mm
Minimum inner curve radius	approx.	4.9 m
Minimum outer curve radius	approx.	14.5 m
Maximum crab steering angle	approx.	25°

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8.0 Ambient Conditions

Permissible wind speeds:

Crane in operation	to	24 m/s
Crane in travel operation	to	24 m/s
Crane out of service	to	46 m/s

At wind speeds above 46 m/s, the boom head should be lowered and secured.

Permissible ambient temperatures: *	minimum	-20°C
	maximum	+35°C

9.0 Stability Requirement (Percentage of Tipping Load)

Normal-load operation / heavy-load operation	≤ 75 %
Four-rope grab operation	≤ 60 %

10.0 Classification of Crane and Mechanisms

Classification in accordance with: FEM 1.001, 3rd edition, 1998

10.1 Crane Classification

Container operation (single lift)		A7
Four-rope grab operation	40.0 t	A8
Four-rope grab operation	50.0 t	A7
Normal-load operation	63.0 t	A5
Heavy-load operation	100.0 t	A3

10.2 Classification of Mechanisms

Hoist:

Container operation (single lift)		M8
Four-rope grab operation	40.0 t	M8
Normal-load operation	63.0 t	M6
Heavy-load operation	100.0 t	M3

Slewing gear:

Container operation (single lift)		M8
Four-rope grab operation	40.0 t	M8
Normal-load operation	63.0 t	M8
Heavy-load operation	100.0 t	M8

Luffing gear:

Container operation (single lift)		M7
Four-rope grab operation	40.0 t	M7
Normal-load operation	63.0 t	M7
Heavy-load operation	100.0 t	M7

Travel gear:

M4

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11.0 Lighting

Boom head *	Metal vapour lamp	2 x 1000 W
Bottom of boom *	Metal vapour lamp	1 x 1000 W
Front of tower *	Metal vapour lamp	2 x 400 W
Rear of tower *	Metal vapour lamp	1 x 400 W

12.0 Surface Treatment

Surface treatment of the steel structure:		EN ISO 12944
Surface preparation:		Sa 2.5 (ISO 8501-1)
Edge protection:	Two-component epoxy resin with micaceous iron ore	
Primer coat:	Two-component epoxy resin	≥ 60 µm
Intermediate coat:	Two-component epoxy resin	≥ 60 µm
Top coat:	Two-component acrylic-polyurethane	≥ 50 µm
Total coating thickness:		≥ 170 µm

Key:

- * Data for basic equipment. Alternative special equipment available
- ** Data for special equipment
- *** Depending on the configuration selected

Subject to technical modification without prior notice.