

Technical Data

Table of Contents		Page
1.0 Main Dimensions	2.0 Weights	2.3.0 Main Drive
3.0 Slewing Gear	3.6.0 Luffing Gear	3.7.0 Travel Gear
4.9.0 Stability Requirement (Percentage of Tipping Load)	4.10.0 Classification of Crane and Mechanisms	5.0 Hoist
4.11.0 Lighting	4.12.0 Surface Treatment	5.0 Ambient Conditions

1.0 Main Dimensions

Length of chassis without stabiliser pads	approx.	18.7 m
Width of chassis without stabiliser pads *	approx.	9.6 m
Size of stabiliser pads *		2.0 m x 4.5 m
Propping base (length, width)		15.0 m x 13.0 m
Tail radius		7.5 m
Height of boom pivot point	approx.	23.2 m
Crane operator viewing height	approx.	26.5 m
Boom length		53.0 m
Maximum radius		51.0 m
Minimum radius		11.0 m
Hoisting height on hook above quay *	11 m to 42 m radius	48.0 m
	51 m radius	33.0 m
Hoisting height on hook below quay		12.0 m

2.0 Weights

Counterweight		100.0 t
Total weight of operational crane***	up to	480.0 t

3.0 Main Drive

Type of drive system		Diesel – electric
----------------------	--	-------------------

Mobile Harbour Crane

G HMK 7408



3.1 Diesel Engine

Manufacturer	Cummins
Model	QST 30-G2 NR1
Engine type	Diesel
Cooling	Water
Nominal output	895 kW at 1800 rpm
Number of cylinders	12
Fuel consumption (at full load)	max. 216 g/kWh

3.2 Fuel Tank

Volume of main fuel tank in chassis	approx.	7500 l
Volume of intermediate tank in superstructure	approx.	1000 l
Possible operating time without refueling (depending on operating mode and intensity)		up to 190 h

4.0 Hoist

Number of rope drums	1
Number of ropes	2
Hoisting speeds:	
	to 18.0 t 90.0 m/min
	45.0 t 44.0 m/min
	63.0 t 33.0 m/min
100.0 t	22.0 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:	without load	to 300 m/min	to 63.0 t
	t to 200 m/min	to 100.0 t	to 80 m/min

6.0 Luffing Gear

Maximum luffing speeds:	81 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		8

Mobile Harbour Crane G HMK 7408



Number of steered axles		8
Number of driven axles		2
Number of wheels		32
Tyre size		14.00-24
Climbing ability		6.0 %
Vertical axle compensation	+250 mm / -250 mm	
Minimum inner curve radius	approx.	5.3 m
Minimum outer curve radius	approx.	15.7 m
Maximum crab steering angle	approx.	25°

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 %
Motor grab operation	≤ 50 %

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
Motor grab operation	50.0 t	A8
Normal-load operation	63.0 t	A6
Heavy-load operation	100.0 t	A3

10.2 Classification of Mechanisms

Hoist:		
Container operation (single lift)		M7
Motor grab operation	50.0 t	M7
Normal-load operation	63.0 t	M6
Heavy-load operation	100.0 t	M3
Slewing gear:		
Container operation (single lift)		M7

Mobile Harbour Crane G HMK 7408



Motor grab operation	50.0 t	M7
Normal-load operation	63.0 t	M7
Heavy-load operation	100.0 t	M7
Luffing gear:		
Container operation (single lift)		M7
Motor grab operation	50.0 t	M7
Normal-load operation	63.0 t	M7
Heavy-load operation	100.0 t	M7
Travel gear:		M4

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 $\geq 60 \mu\text{m}$
Intermediate coat:	Two-component epoxy resin $\geq 60 \mu\text{m}$
Top coat:	Two-component acrylic-polyurethane $\geq 50 \mu\text{m}$
Total coating thickness:	$\geq 170 \mu\text{m}$

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.