GOTTWALD port technology

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.	23.0 m
Crane operator viewing height	approx.	26.1 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 40 m radius	47.0 m
	51 m radius	29.0 m
Hoisting height on hook below quay		12.0 m

2.0 Weights

Counterweight		95.0 t
Total weight of operational crane***	up to	420.0 t

3.0 Main Drive

Type of drive system	Diesel – electric

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.	7000 l
Volume of intermediate tank in superstructure	approx.	1000 l
Possible operating time without refueling (depending on operating mode and intensity)		up to 220 h

4.0 Hoist

Number of rope drums		1
Number of ropes		2
Hoisting speeds:		
	to 12.0 t	120.0 m/min
	45.0 t	47.0 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		1
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	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°

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	40.0 t	A7
Normal-load operation	47.0 t	A6
Normal-load operation	63.0 t	A5
Heavy-load operation	100.0 t	A3

10.2 Classification of Mechanisms

Hoist:		
Container operation (single lift)		M7
Motor grab operation	40.0 t	M7
Normal-load operation	47.0 t	M7
Heavy-load operation	100.0 t	M3
Slewing gear:		
Container operation (single lift)		M7
Motor grab operation	40.0 t	M7
Normal-load operation	47.0 t	M7
Heavy-load operation	100.0 t	M7
Luffing gear:		
Container operation (single lift)		M7
Motor grab operation	40.0 t	M7
Normal-load operation	47.0 t	M7
Heavy-load operation	100.0 t	M7
Travel gear:		M4

11.0 Lighting

Boom head *	Metal vapour lamp	2 x 2000 W
Bottom of boom *	Metal vapour lamp	1 x 2000 W
Front of tower *	Metal vapour lamp	2 x 400 W
Rear of tower *	Metal vapour lamp	1 x 400 W

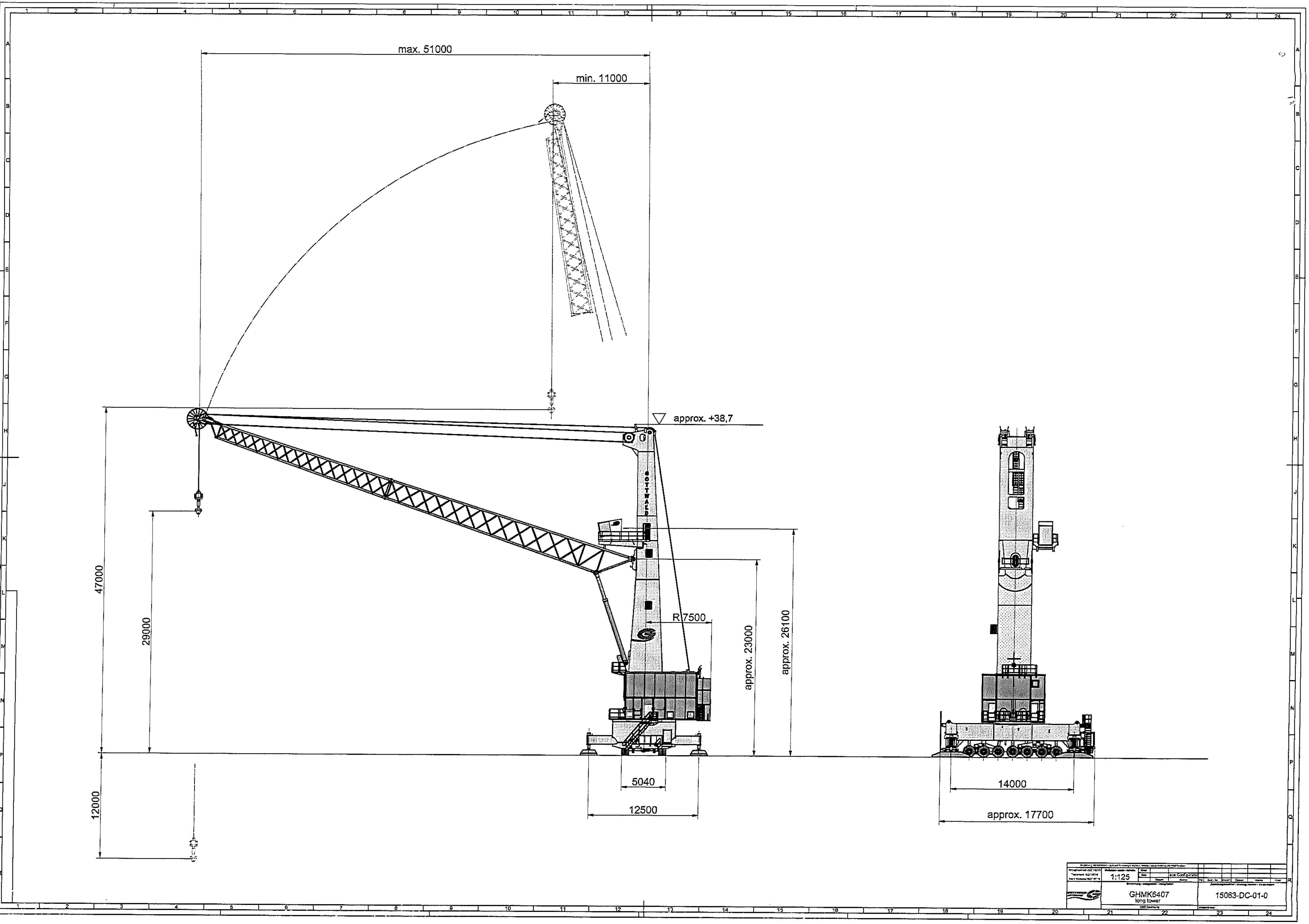
12.0 Surface Treatment

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.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GOTTWALD
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12500
14000
approx. 17700
1:125
GHMK6407
long tower
15063-DC-01-0

Lifting Capacity Chart

Radius [m]	Capacities [t]				
	Heavy Lift	Heavy Lift	General cargo	Container	Grab
	on ropes (75%)*	on hook (75%)*	on hook (Curve 2 / 75%)	on spreader 1 singlelift (75%)*	on hook (50%)*
11	103,2	100,0	47,0	45,0	40,0
12	103,2	100,0	47,0	45,0	40,0
13	103,2	100,0	47,0	45,0	40,0
14	103,2	100,0	47,0	45,0	40,0
15	103,2	100,0	47,0	45,0	40,0
16	103,2	100,0	47,0	45,0	40,0
17	103,2	100,0	47,0	45,0	40,0
18	103,2	100,0	47,0	45,0	40,0
19	103,2	100,0	47,0	45,0	40,0
20	103,2	100,0	47,0	45,0	40,0
21	103,2	100,0	47,0	45,0	40,0
22	103,2	100,0	47,0	45,0	40,0
23	103,2	100,0	47,0	45,0	40,0
24	103,2	100,0	47,0	45,0	40,0
25	99,2	96,0	47,0	45,0	40,0
26	95,2	92,0	47,0	45,0	40,0
27	90,2	87,0	47,0	45,0	40,0
28	87,2	84,0	47,0	45,0	40,0
29	83,2	80,0	47,0	45,0	40,0
30	81,2	78,0	47,0	45,0	40,0
31	78,2	75,0	47,0	45,0	40,0
32	75,2	72,0	47,0	45,0	40,0
33	72,2	69,0	47,0	45,0	40,0
34	70,2	67,0	47,0	45,0	40,0
35	68,2	65,0	47,0	45,0	38,8
36	65,2	62,0	47,0	45,0	37,5
37	62,7	59,5	47,0	45,0	36,2
38	61,2	58,0	47,0	45,0	34,9
39	59,2	56,0	47,0	45,0	33,6
40	57,7	54,5	47,0	43,8	32,0
41	55,7	52,5	47,0	41,8	31,1
42	53,8	50,6	47,0	39,9	30,3
43	52,0	48,8	47,0	38,1	29,5
44	50,4	47,2	47,0	36,5	28,7
45	48,7	45,5	45,5	34,8	27,9
46	47,2	44,0	44,0	33,3	27,1
47	45,8	42,6	42,6	31,9	26,2
48	44,4	41,2	41,2	30,5	25,5
49	42,7	39,5	39,5	28,8	24,4
50	41,2	38,0	38,0	27,3	23,5
51	39,8	36,6	36,6	25,9	22,6

Deadweight of hook swivel gear SMAG SW100: 3,2 t **1.1769.1052-4**

Deadweight of spreader 1 Stinis VATC II E: 10,7 t

* Indicates the percentual utilization of the tipping load