

# A. Harvey & Company Limited

## LHM 150 vs. LHM 180



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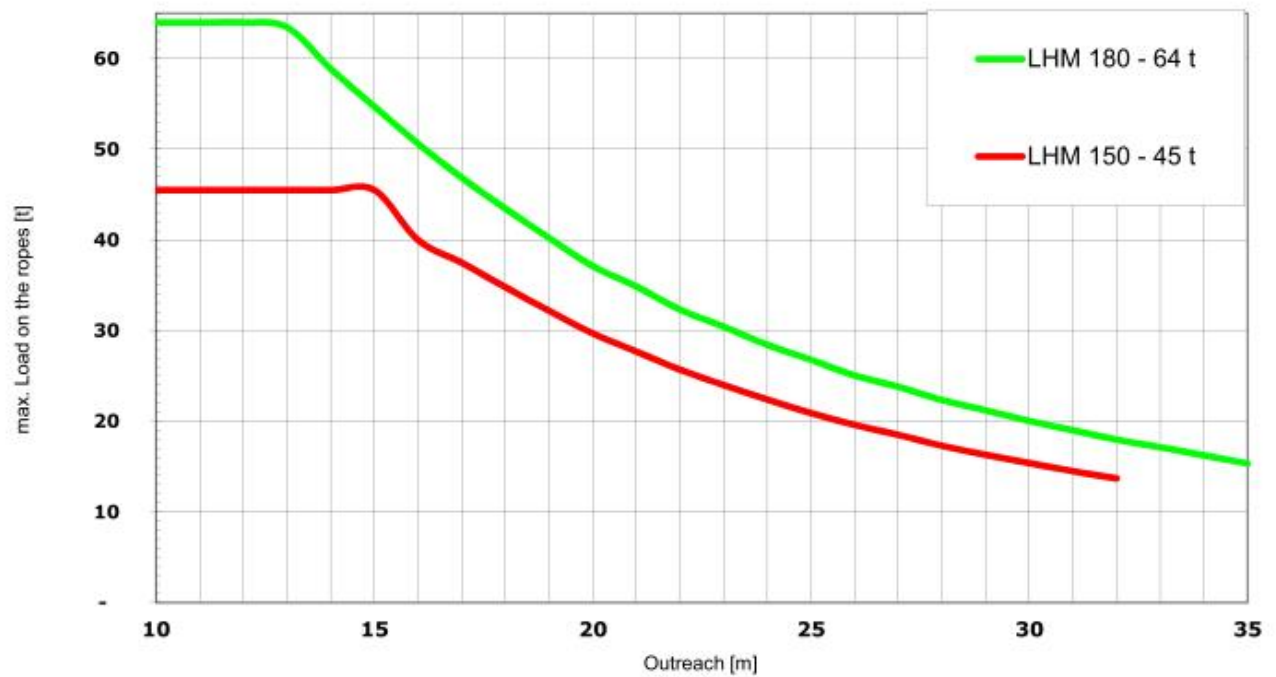
# LIEBHERR

# Load Curve Comparison

	LHM 150 - 45 t	LHM 180 - 64 t
9	45,5	64,0
10	45,5	64,0
11	45,5	64,0
12	45,5	64,0
13	45,5	63,5
14	45,5	58,9
15	45,5	54,7
16	40,0	50,6
17	37,5	46,9
18	34,8	43,5
19	32,2	40,2
20	29,7	37,1
21	27,7	34,9
22	25,7	32,3
23	24,0	30,4
24	22,4	28,4
25	20,9	26,8
26	19,6	25,1
27	18,5	23,8
28	17,3	22,3
29	16,3	21,2
30	15,4	20,0
31	14,5	19,0
32	13,7	18,0
33		17,1
34		16,2
35		15,3

Hook traverse dead weight (SWL = 45 t) = 1.3 t  
 Hook traverse dead weight (SWL = 64 t) = 2.2 t

Comparison  
 LHM 150 vs LHM 180  
 General Cargo



		LHM 180		LHM 150 - 140308	
<b>Operating Speeds:</b>					
Hoisting / Lowering	appr. 1 sec	31 m/min with	42 t	22 m/min with	40 t
		42 m/min with	30 t	25 m/min with	36 t
		50 m/min with	25 t	36 m/min with	25 t
		70 m/min with	18 t	70 m/min with	12,5 t
		90 m/min with	empty hook		
Slewing	appr. 5-6 sec	1,6 rpm		1,5 rpm	
Luffing		48 m/min	average horizontal speed	40 m/min	average horizontal speed
<b>Main Dimensions:</b>					
Supporting base		10 m x 10 m		9 m x 9 m	
Overall width in travelling mode and deployed outriggers		10,8 m		9,8 m	
Overall length of undercarriage		12,6 m		14,9 m	
Overall width of undercarriage		5,4 m		4,8 m	
Length of boom		34,8 m		33 m	
Overall height (top of tower)		23,5 m		20 m	
<b>Max. hoisting height (measured at crane rope socket)</b>					
above quay at minimum radius		42 m		34 m	
above quay at maximum radius		19 m		18 m	
below quay		13 m		15 m	
<b>Requirements on Quay:</b>					
<b>Assumed Conditions:</b>					
Normal	=	all static loads are included			
Extreme	=	all static loads and dynamic factors are included			
<b>Max corner loading:</b>					
Extreme	boom 45°	144,6 t		130,3 t	
(dynamic incl. wind)	boom 90°	105,2 t		90,4 t	
<b>Max. area pressure</b>					
Extreme	boom 45°	32,9 t/m <sup>2</sup>		29,6 t/m <sup>2</sup>	
(dynamic incl. wind)	boom 90°	23,9 t/m <sup>2</sup>		20,5 t/m <sup>2</sup>	
<b>Drive System:</b>					
Prime mover		Diesel Engine		Diesel Engine	
Make		LIEBHERR		LIEBHERR	
Type		D 9508 A7		D9408TI-E A3	
Output on the drive shaft		450 kW at 1900 rpm acc. ISO 9249		400 kW at 1900 rpm acc. ISO 9249	
Max. torque		2856 Nm		2300 Nm at 1400 rpm	
Average consumption		215 g/kWh		215 g/kWh	
Fuel tank capacity		5600 l		4500 l	