



Grove Manitowoc National Crane Potain



Potain HDT 80

Product Guide



Features

- 6000 kg (13,228 lb) maximum capacity
- 1350 kg (2976 lb) maximum capacity at 45 m (148 ft)
- 45 m (148 ft) maximum operating hook radius
- 53,7 m (176 ft) maximum hook height with 45 m (148 ft) jib raised
- 34,2 m (112 ft) maximum hook height with jib horizontal



FEM 1.001-A3



Features



High performance, simplicity, reliability, and unmatched productivity

Offering multiple mast heights and jib lengths, the HDT 80 allows continuous operation whether you're on a spacious job in the country or a highly congested site in the city. Along with its physical versatility, the HDT 80 features electrical operation, providing a quiet, clean lifting solution to customers who may be limited by noise and emissions regulations.

Variable height cab

The fully enclosed variable height cab provides better visibility and optimum efficiency on the jobsite by allowing the operator to place himself at the any height on the mast for the best vantage point for operation.



Remote control with indicators

The remote control with indicators, in combination with variable frequency drives for all main functions, allows the HDT 80 operator to easily maneuver the crane from within an approximate three-hundred foot radius.

Transport axle sets

Simplify road transport with Potain's optional transport axle set SL122 / J215M. This trailer adjusts pneumatically and travels at speeds up to 80 km/h (50 mph). Other axle sets are available for on-site transportation.





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Specifications



Jib

31 m (102 ft) radius standard bi-folding offsettable lattice jib. Two (2) tie bar lines with adjustable lengths allow jib to be offset 30°. Two (2) erecting speeds controlled from the remote, opening and aligning are carried out automatically by hydraulic cylinders.



*Optional jib extension

9 m (30 ft) removable jib extension allows radius of 40 m (131 ft). Additional 5 m (16 ft) jib extension provides a maximum radius of 45 m (148 ft).



Mast

Galvanized telescoping three (3) section mast provides three (3) possible operating heights (measured at jib feet): 13,6 m (45 ft), 22,9 m (75 ft), 32,2 m (106 ft) mast sections lock into position automatically.



Chassis

Outriggers swing and are locked into position. 4,5 m (14.8 ft) square outrigger spread with 3,3 m (10.8 ft) slewing radius. Slewing radius with *cab is 3,7 m (12.1 ft). Level bubble integrated into the chassis. Outrigger pads are stowed on the crane during transport.



*Ballast

Ballast requirement for the crane consists of thirteen (13) slabs each weighing 2850 kg (6283 lb).



*Optional hydraulic ballasting derrick

Uses the hoisting winch to ballast the crane or dismantle/attach *fifth-wheel. Stows alongside the jib during transport.



Electrical requirement

480 volt, 60 Hz measured at the turntable. Earth rod and electric cable stored on the crane during transport.



Reeving

SM/DM block for 2 or 4-part line. One pin removal to change between SM and DM. Pure SM1 (section of hookblock removed) is possible with gain of 100 kg (220 lb) lifting capacity.



*Optional Anemometer

Electronic wind speed meter (anemometer) to alert the operator of wind speed conditions. Provides selective display on the radio remote. Crane can be operated with wind gusts up to 72 km/h (45 mph).



Controls

Wireless remote control provides information to the operator about **wind speed, radius, hook height, load, and moment. Lights and buzzers alert the operator when nearing limits of operation.

Auxiliary remote attached by umbilical cord ensures continual operation in case of battery or other malfunction of the wireless remote control.



Swing

RVF+61 slewing mechanism with maximum swing speed of 0.8 RPM. Progressive control of speed with counter-slewing possible, anti-load swinging system makes aligning the load and jib easier.



Hoist

20 LVF 15: 20 HP variable frequency hoist with 1,5 t (1.7 USt) line pull. Three notch, progressive speed change according to the accelerating or decelerating ramps.



Trolley

5 DVF 5: 6.5 HP variable frequency motor with 3 notches for progressive speed change according to acceleration or deceleration ramps controlled by the frequency converter.



Hydraulic equipment

Hydraulic cylinders are used for raising the mast, unfolding the jib, and slewing the derrick. All actions are carried out by the remote control.



*Optional transport axle sets

Axle sets are available for both jobsite and highway applications. Jobsite axle sets for the HDT 80 are rated for 25 kp/h (15.5 mph); highway axle set is rated for 80 kp/h (50 mph).



*Optional equipment

* STANDARD NORTH AMERICAN SPECIFICATION: Includes 45 m (148 ft) luffing jib, variable height cab, hydraulic ballasting derrick, high outrigger pads, wireless remote control, and Dialog Wind.

- * Top Tracing
- * Wind speed alarm
- * Transport axles and kits

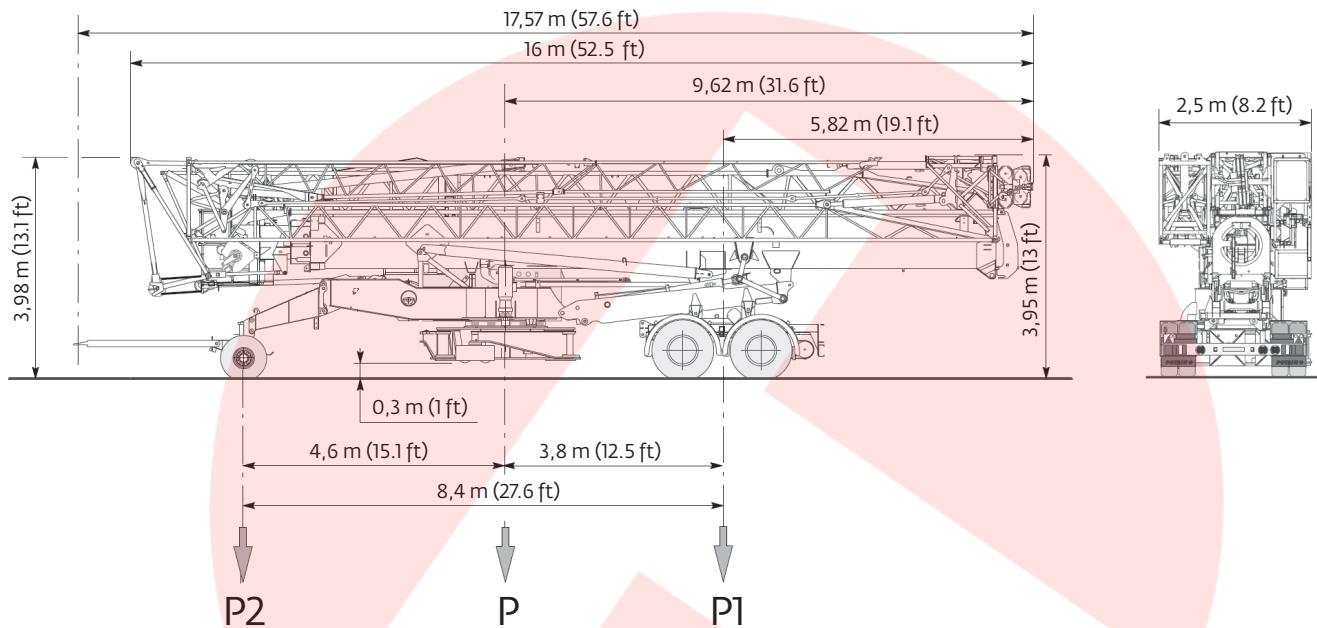
Consult price list for additional options.



Transport

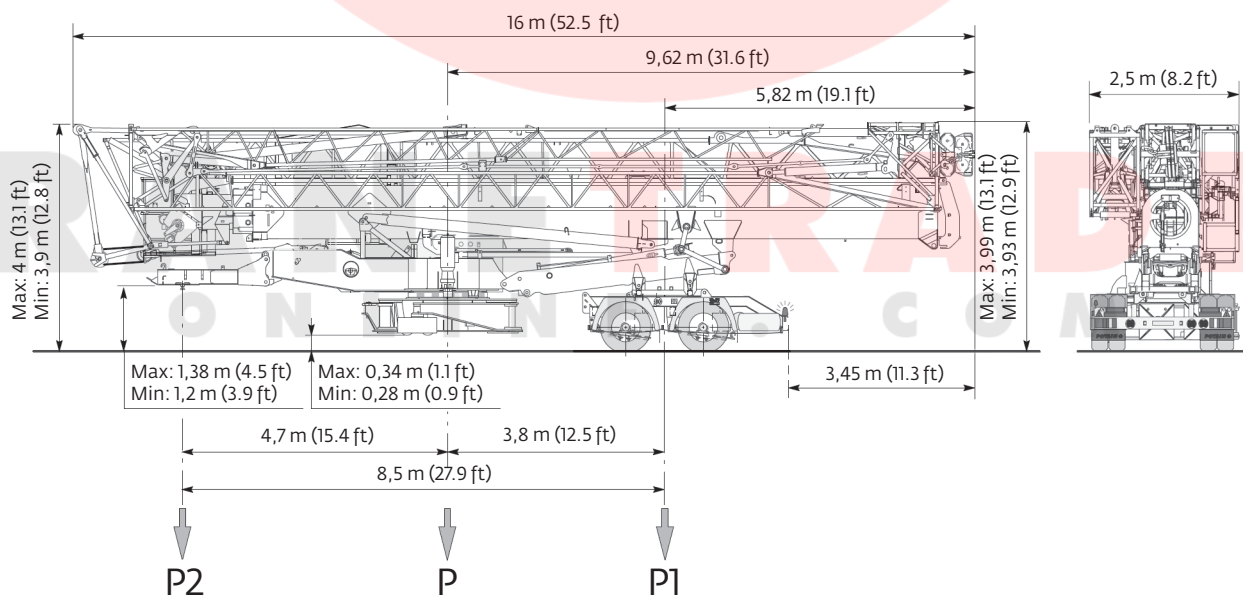
DJ126M / S215M

25 km/h / 15.5 mph



SL121 / S215M

25 km/h / 15.5 mph

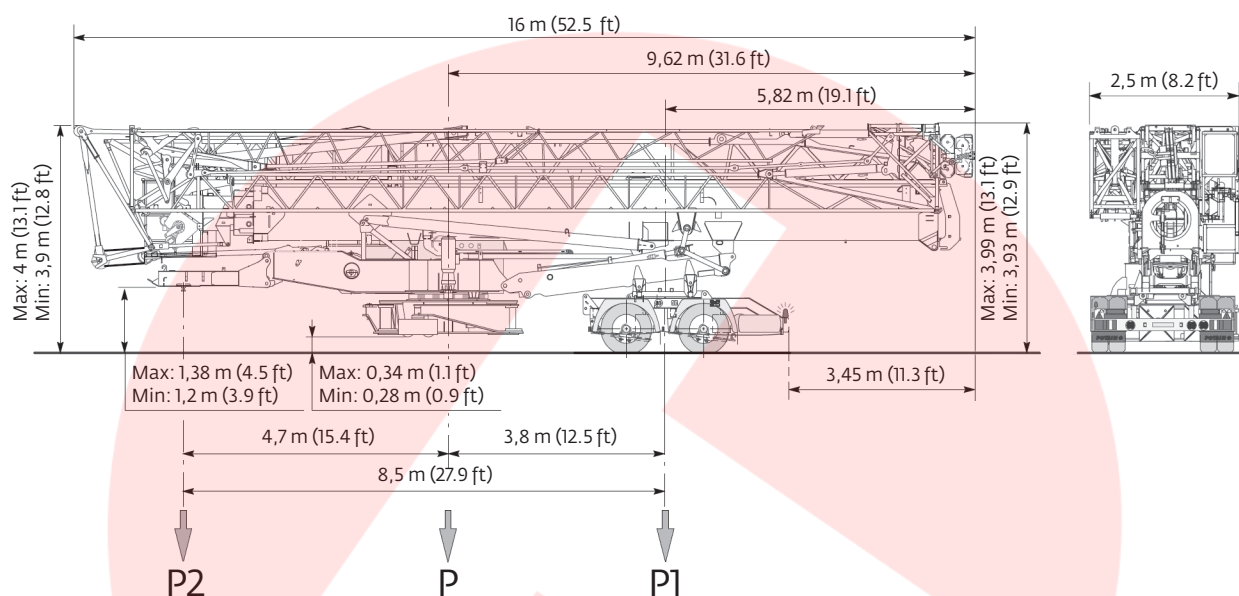


NOTE: Dimensions and weights may vary due to manufacturing tolerances.



Weights

SL122 / J215M 80 km/h / 50 mph



Chassis data (in transport position)

	DJ126M / S215M 25 km/h / 15.5 mph (meters) (feet)		SL121 / S215M 25 km/h / 15.5 mph (meters) (feet)		SL122 / J215M 80 km/h / 50 mph (meters) (feet)	
Overall length	17,57	57.6	16	52.5	16	52.5
Overall height	3,98	13.1	Max: 4 Min: 3,9	Max: 13.1 Min: 12.8	Max: 4 Min: 3,9	Max: 13.1 Min: 12.8
Overall width	2,5	8.2	2,5	8.2	2,5	8.2
Overhang	5,82	19.1	5,82	19.1	5,82	19.1

Weights

Crane weight less counterweight:	23 400 kg	51,587 lb
Crane weight for operation (13 slabs):	37 050 kg	81,680 lb
Crane with counterweight:	60 450 kg	133,267 lb

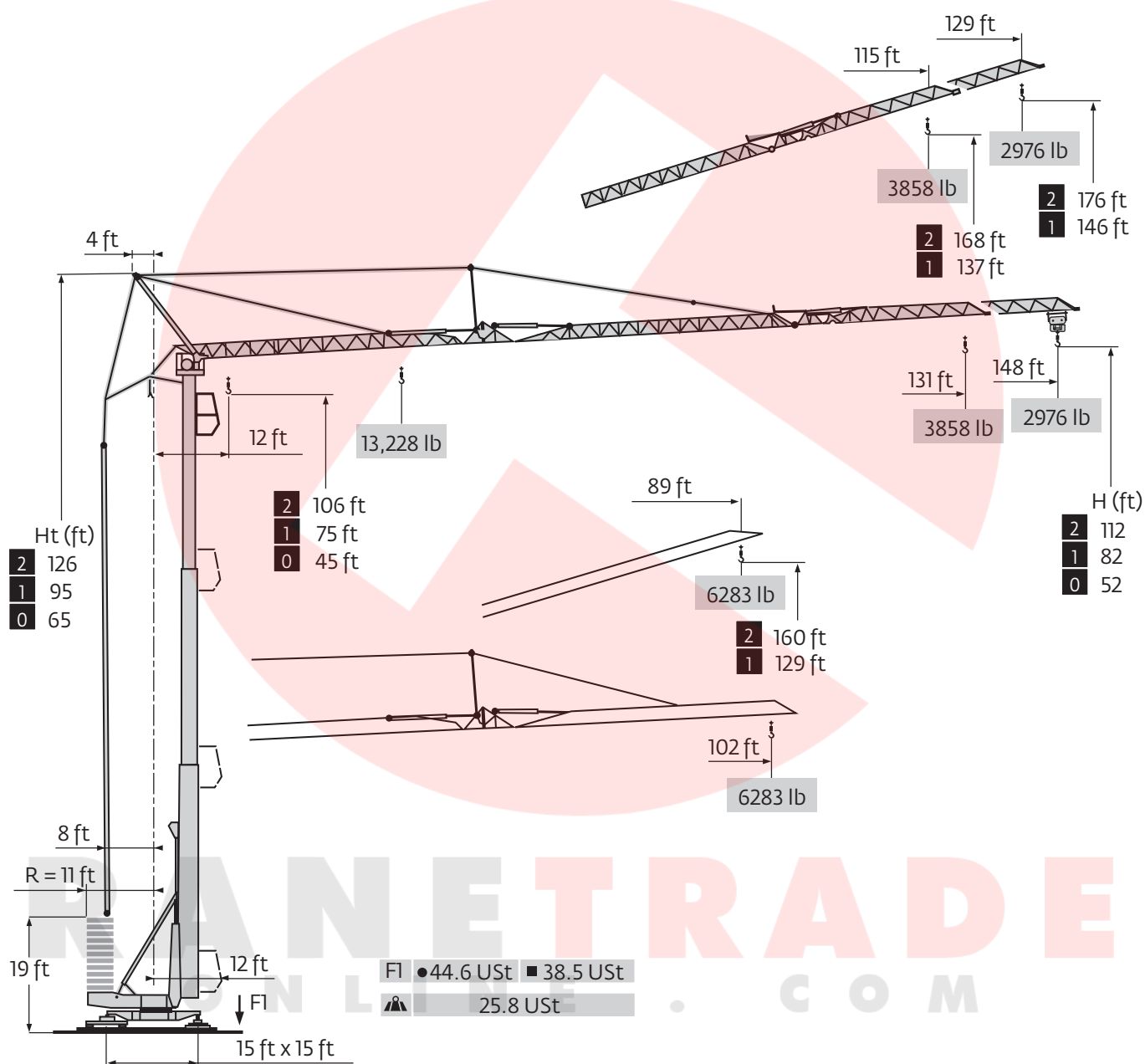
Crane with transport equipment

	DJ126M / S215M 25 km/h / 15.5 mph (kilograms) (pounds)		SL121 / S215M 25 km/h / 15.5 mph (kilograms) (pounds)		SL122 / J215M 80 km/h / 50 mph (kilograms) (pounds)	
In transport with no counterweight:						
Gross (P)	26 950	59,414	26 400	58,201	26 300	57,981
Rear (P1)	18 210	40,146	18 300	40,344	18 200	40,124
Front (P2)	8740	19,268	8100	17,857	8100	17,857

NOTE: Dimensions and weights may vary due to manufacturing tolerances.



Dimensions

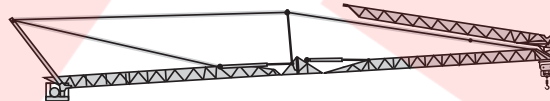




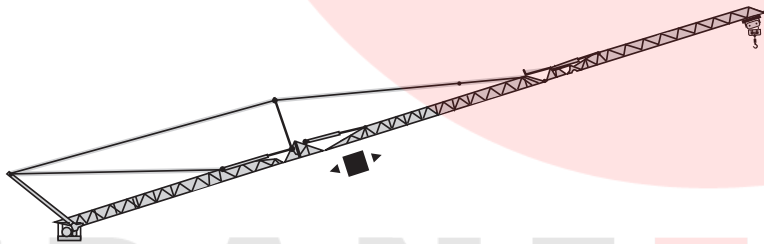
Load charts



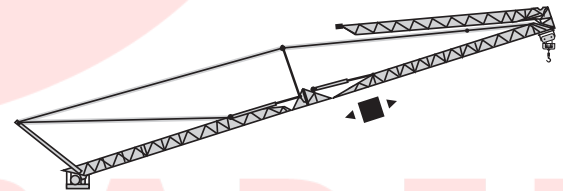
148 ft	11	▶	44	49	56	66	72	78	82	89	98	105	115	121	131	138	148	ft
▲▲▲	13,228	11,321	9678	7915	7022	-	5975	5423	4740	4365	3880	3605	3241	3031	2756		lb	
□	6614 6195 5644 4960 4586 4101 3825 3461 3252 2976																	
131 ft	11	▶	47	49	56	66	72	82	85	89	98	105	115	121	131		ft	
▲▲▲	13,228	12,478	10,681	8741	7771	6636	-	6030	5280	4861	4332	4034	3638		lb			
□	6614 6250 5501 5082 4553 4255 3858																	
102 m	11	▶		54	56	66	72	82	89	97	98	102		ft				
▲▲▲	13,228	12,621	10,351	9226	7893	7187	-	6316	6063		lb							
□	6614 6537 6283																	



148 ft	11	▶	46	49	56	66	72	82	83	89	98	102	ft
▲▲▲	13,228	12,247	10,483	8576	7628	6504	-	5908	5181	4960	lb		
□									6614	6129	5401	5181	lb
131 ft	11	▶	49	49	56	66	72	82	88	89	98	102	ft
▲▲▲	13,228	12,985	11,133	9105	8102	6923	-	6283	5512	5291	lb		
□									6614	6504	5732	5512	lb



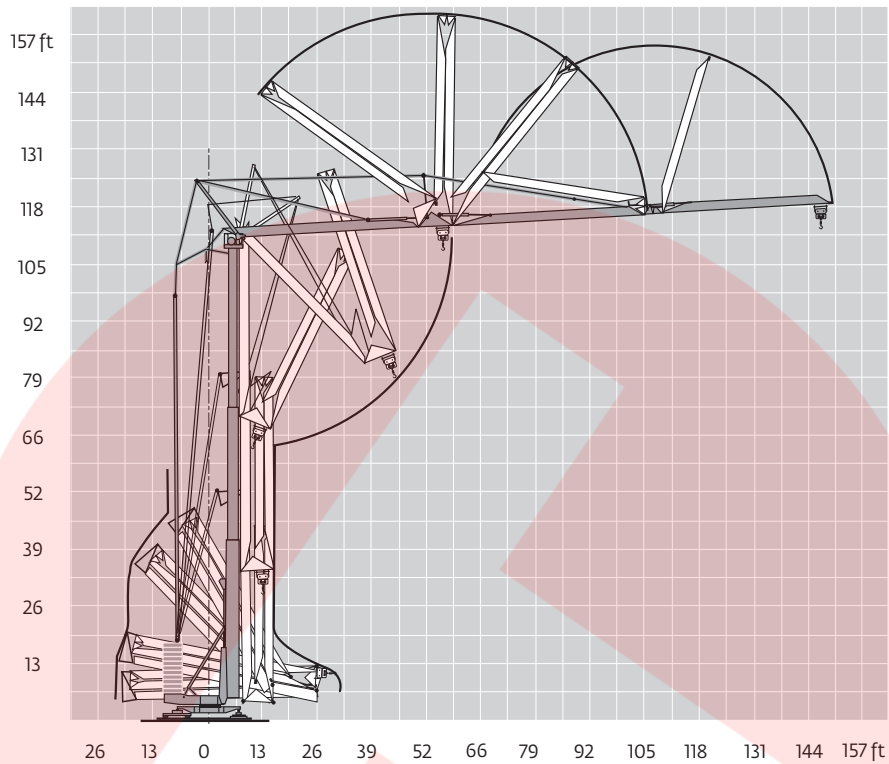
148 ft	11	▶	66	68	72	82	89	98	105	115	121	129	ft
▲▲▲	6614	-	5941	5049	4564	3968	3649	3230	2987	2756	lb		
□	6614	6162	5269	4784	4189	3869	3450	3208	2976	lb			
131 ft	11	▶	72	74	82	89	98	105	115	ft			
▲▲▲	6614	-	5611	5093	4442	4079	3638	lb					
□	6614	5831	5313	4663	4299	3858	lb						
102 ft	11	▶	83	85	89	ft							
▲▲▲	6614	-	6063	lb									
□	6614	6283	lb										



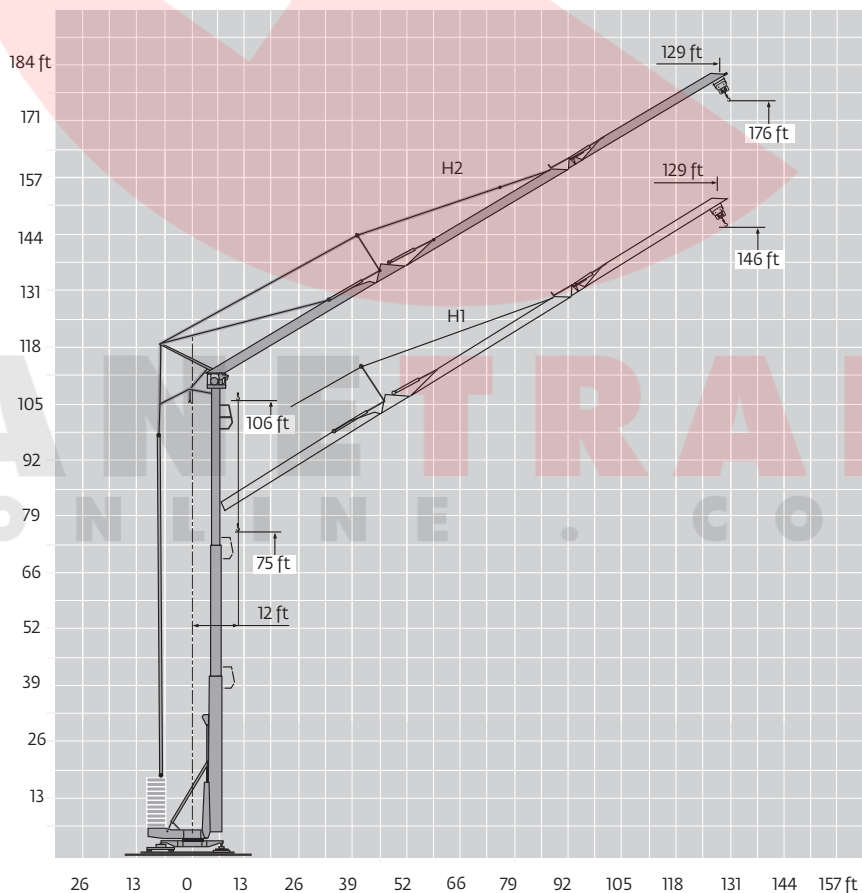
148 ft	11	▶	71	72	73	82	89	ft
▲▲▲	6614	6471	-	5501	4960	lb		
□				6614	5721	5181	lb	
131 ft	11	▶	74	76	82	89	ft	
▲▲▲	6614	-	5864	5291	lb			
□				6614	6085	5512	lb	



Crane profile and working range



HDT 80: jib raised 30°



THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane



Mechanisms

													hp	kW
	20 LVF 15	fpm	13	85	138	171	223	7	43	69	85	112	20	15
		lb	6614	6614	3968	3086	1543	13,228	13,228	7937	6173	3086		
	5 DVF 5	fpm	30 - 73 - 191 (6614 lb)					30 - 73 - 145 (13,228 lb)					6.5	4.8
	RVF+61	rpm	0 → 0.8										8	5.9

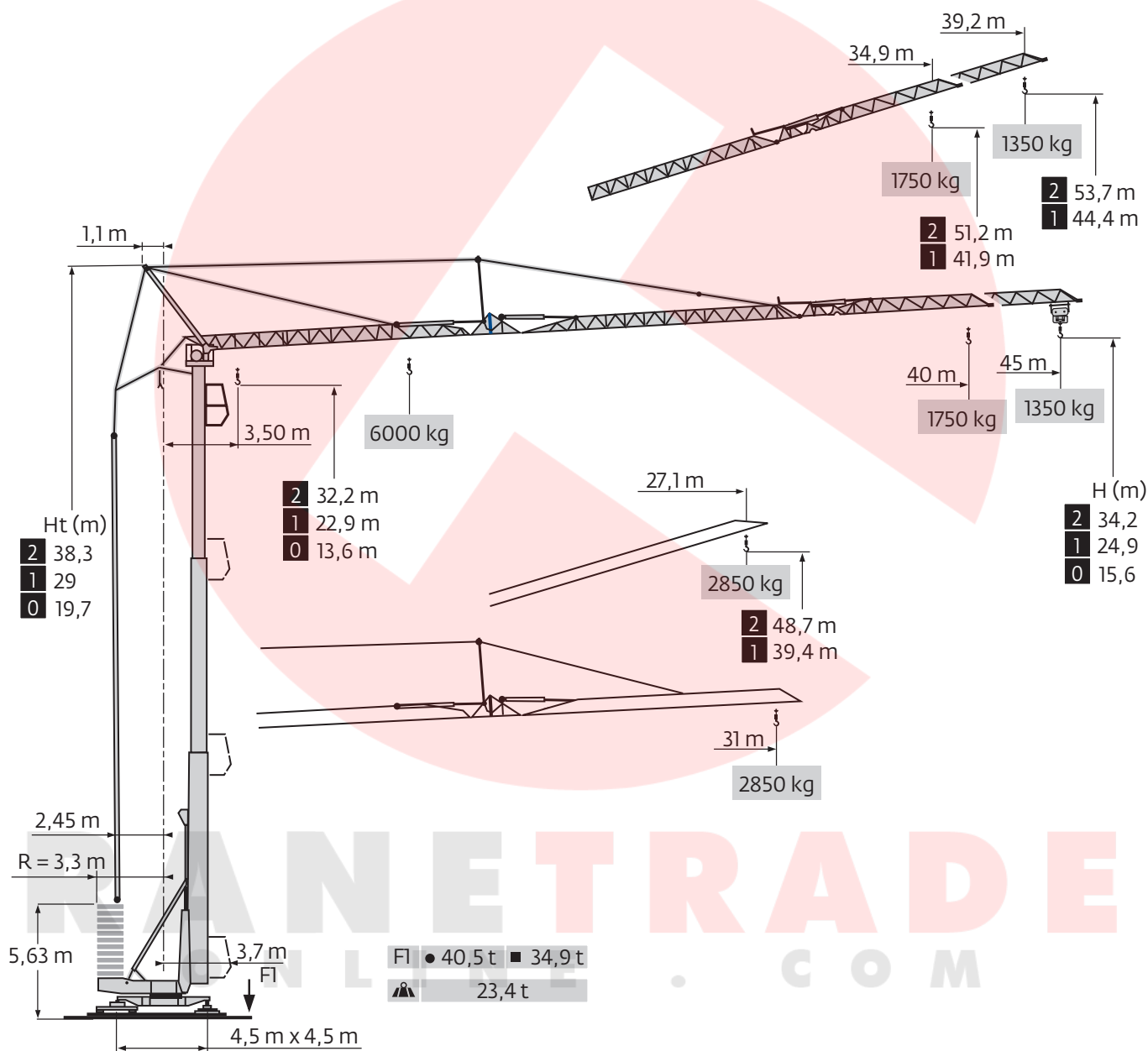
CEI 38 	IEC 38	kVA
480V (+6% -10%) 60 Hz		20 LVF 15 : 43 A

	Hoisting
	Trolleying
	Slewing
	Traveling

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Metric dimensions



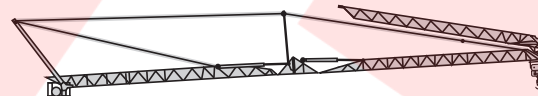
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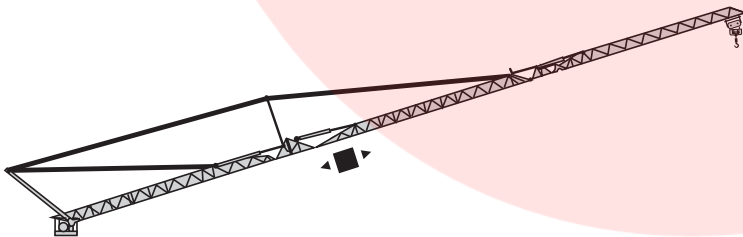
Metric load charts



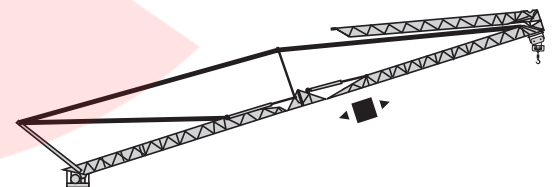
45 m	3,5 ▶	13,3	15	17	20	22	23,7	25	27	30	32	35	37	40	42	45	m
		6000	5135	4390	3590	3185	-	2710	2460	2150	1980	1760	1635	1470	1375	1250	kg
							3000	2810	2560	2250	2080	1860	1735	1570	1475	1350	kg
40 m	3,5 ▶	14,3	15	17	20	22	25	25,8	27	30	32	35	37	40			m
		6000	5660	4845	3965	3525	3010	-	2735	2395	2205	1965	1830	1650			kg
								3000	2835	2495	2305	2065	1930	1750			kg
31 m	3,5 ▶		16,4	17	20	22	25	27	29,7	30	31						m
			6000	5725	4695	4185	3580	3260	-	2865	2750						kg
									3000	2965	2850						kg



45 m	3,5 ▶	14,1	15	17	20	22	25	25,3	27	30	31						m
		6000	5555	4755	3890	3460	2950	-	2680	2350	2250						kg
								3000	2780	2450	2350						kg
40 m	3,5 ▶	14,8	15	17	20	22	25	26,7	27	30	31						m
		6000	5890	5050	4130	3675	3140	-	2850	2500	2400						kg
								3000	2950	2600	2500						kg



45 m	3,5 ▶	20,2	20,8	22	25	27	30	32	35	37	39,2						m
		3000	-	2695	2290	2070	1800	1655	1465	1355	1250						kg
			3000	2795	2390	2170	1900	1755	1565	1455	1350						kg
40 m	3,5 ▶		22	22,6	25	27	30	32	34,9								m
			3000	-	2545	2310	2015	1850	1650								kg
				3000	2645	2410	2115	1950	1750								kg
31 m	3,5 ▶			25,3	26	27,1											m
				3000	-	2750											kg
					3000	2850											kg



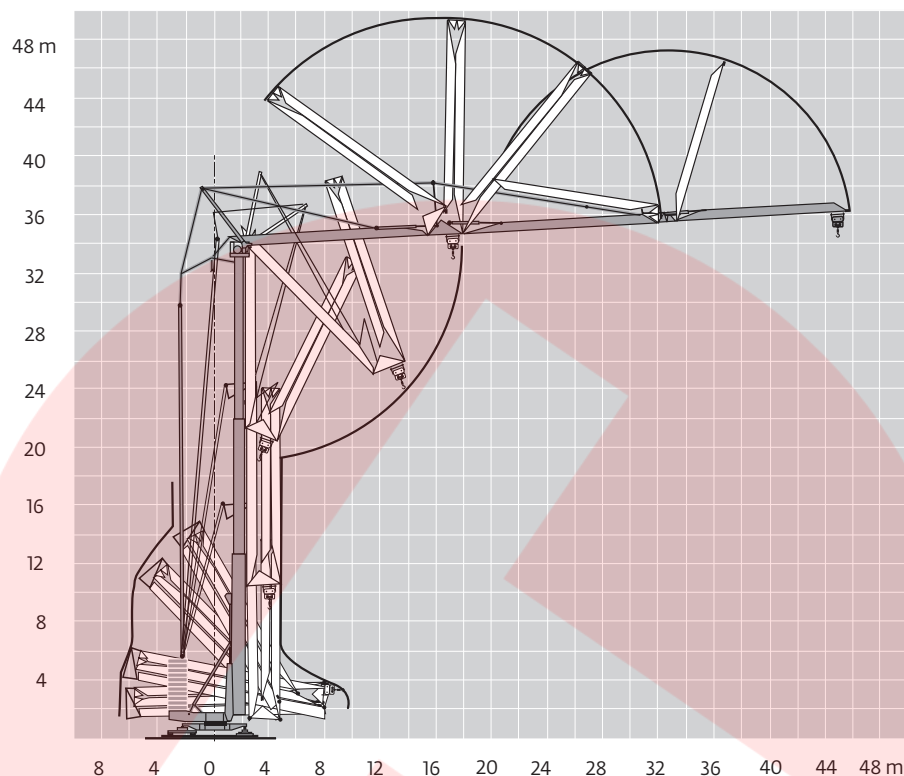
45 m	3,5 ▶	21,6	22	22,2	25	27,1											m
		3000	2935	-	2495	2250											kg
				3000	2595	2350											kg
40 m	3,5 ▶		22,7	23,3	25	27,1											m
			3000	-	2660	2400											kg
				3000	2760	2500											kg

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

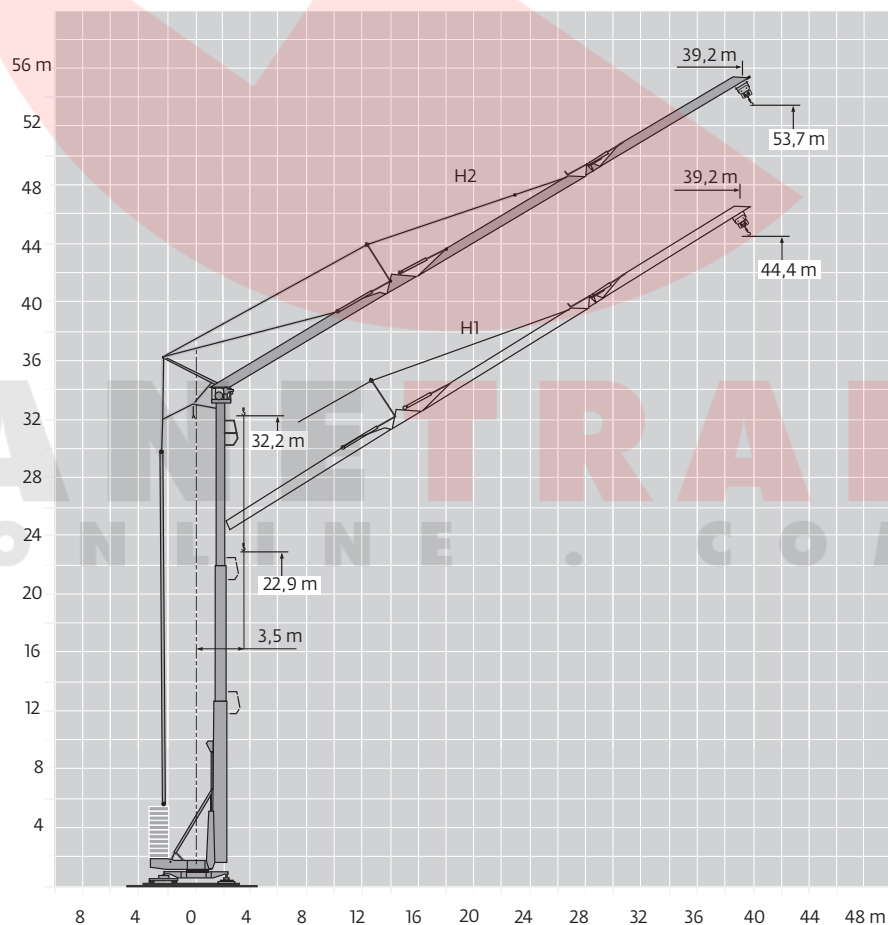
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Metric crane profile and working range



HDT 80: jib raised 30°



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The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane



Metric mechanisms

													hp	kW
	20 LVF 15	m/min	4	26	42	52	68	2	13	21	26	34	20	15
		kg	3000	3000	1800	1400	700	6000	6000	3600	2800	1400		
	5 DVF 5	m/min	9 - 22 - 58 (3000 kg)					9 - 22 - 44 (6000 kg)					6,5	4,8
	RVF+61	rpm	0 → 0,8										8	5,9

CEI 38 	IEC 38	kVA
400V (+6% -10%) 50 Hz		20 LVF 15 : 35 kVA

	Hoisting
	Trolleying
	Slewing
	Traveling

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Symbols glossary



Jib



Mast



Anemometer



Swing



Outrigger



Chassis



Hydraulic equipment



Controls



Electrical requirement



Ballast



Transport axle



Ballasting derrick



Reeving



Hoist



Trolley



Jib extension

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