

Grove Maniowoc National Crane Potain



Potain Igo T 70 A

Product Guide



Features

- 4000 kg (8818 lb) maximum capacity
- 1450 kg (3197 lb) capacity at 40 m (131 ft)
- 40 m (131 ft) maximum operating hook radius
- 44,5 m (146 ft) maximum hook height with jib set at 30°
- 35 m (115 ft) maximum hook height with jib horizontal
- Variable height mast from 15 m (49 ft) to 35 m (115 ft) with optional mast inserts



Features



Mast inserts

Increase your working height by up to 15 m (49 ft) with optional mast inserts. Each insert is 6 m (20 ft) and provides the operator with additional heights under hook.

SmartCom technology

SmartCom is an embedded control system in CAN bus network which is based on a man to machine interface located in the control panel. This electronic system offers various functionalities which make putting the crane into service, as well as controlling the safety devices, faster and easier and makes crane maintenance easier than ever.



Cab

Two cab options are available for the Igo T 70 A: the Ultra View cab is equipped with integrated controls and provides maximum operator comforts; the Cab 800 provides operators with an areal view and offers basic comforts.



North American Highway Axle

Simplify road transport with the North American Highway Axle and adaptation kit 203. Multiple pin positions for optimal weight distribution, DOT compliance and an optional attachable 3rd axle make this an ideal solution for your transportation needs.

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Specifications



Jib

40 m (131 ft) radius standard offsettable lattice jib. Jib can be offset to 30°. Opening and aligning are carried out automatically by three hydraulic cylinders.



Mast

Telescoping lattice mast is made vertical by one hydraulic cylinder. Hook heights of 15 m (49 ft), 17 m (56 ft), and 20 m (66 ft) achievable with standard mast. 360° rotation possible during raising sequence.



*Optional mast inserts

Three 6 m (20 ft) mast inserts available to reach a maximum hook height of 35 m (115 ft). Increasing mast height with one insert provides hook heights of 23 m (75 ft) and 26 m (85 ft); second mast insert provides hook heights of 29 m (95 ft) and 32 m (105 ft); third mast insert provides hook height of 35 m (115 ft).



Chassis

Outriggers swing and lock into position. 4,5 m (14.8 ft) square outrigger spread with 2,7 m (8.9 ft) slewing radius. Outrigger pads are stowed on the crane during transport (600 mm x 600 mm [23.6 in x 23.6 in]).



*Ballast

Ballast requirement for the crane consists of, at minimum, 15 slabs each weighing 2200 kg (4850 lb). An additional slab is required if cab is mounted as well as another if mast insert(s) is used. Maximum counterweight is permissible in all configurations except when forbidden, please consult the crane's manual for details.



*Optional hydraulic ballasting derrick

Removable and able to be used on other Igo T 70 A units, the hydraulic ballasting derrick uses the hoisting winch and is controlled by the remote control.



Electrical requirement

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



Reeving

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



Hydraulic equipment

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



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. Battery charger and extra battery are provided with crane.

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



Anemometer

Electronic wind speed meter to alert the operator of wind speed conditions. Provides selective display on the radio remote. Maximum in service wind speed is 72 km/h (45 mph) and maximum out of service wind speed is 150 km/h (93 mph).



Swing

RVF 151 Optima +: 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 with the jib easier. Multiple rpm speeds possible depending upon parameter selected.



Hoist

15 LVF 11 Optima: 15 hp variable frequency hoist with 1.1 t (1.2 USt) line pull. 3 notch, progressive speed change according to the accelerating or decelerating ramps. Optima allows the hoist to adapt its speed to the weight of the load.



Trolley

3 DVF 5: 3 hp variable frequency hoist with 500 kg (1102 lb) line pull. Three (3) notch winch, progressive speed change according to acceleration or deceleration ramps controlled by the frequency converter.



*Optional transport axle sets

Axle sets are available for both jobsite and highway applications. Jobsite axles are rated at either 10 km/h (6 mph) or 25 km/h (15.5 mph); highway axle set is rated at 80 km/h (50 mph).

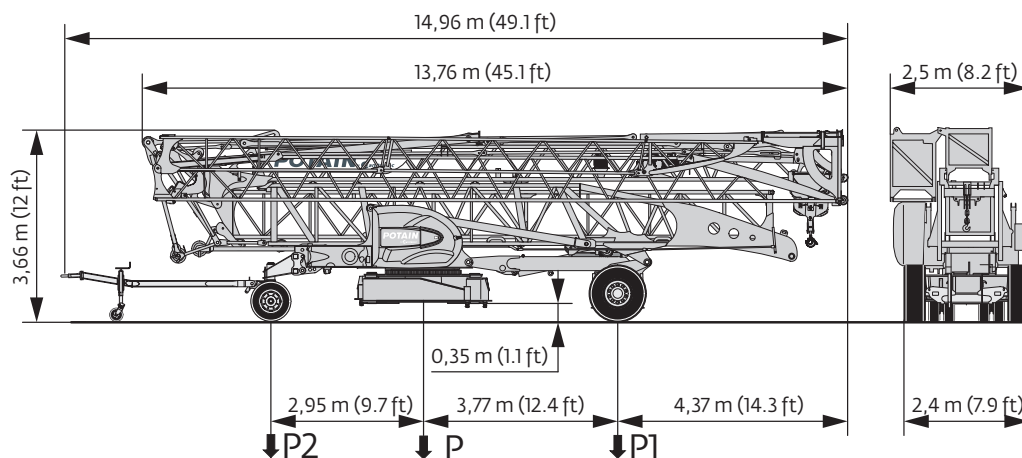
*Optional equipment

- STANDARD NORTH AMERICAN SPECIFICATION: includes offsettable jib, pre-equipment for interference system, three mast inserts, Top Zone and sixteen (16) slabs of counterweight.
- Mast inserts 6 m (20 ft)
- Fixed height cab (Ultra View or Cab 800)
- Access ladders
- Transport axles and kits
- Top Zone
- Top Tracing

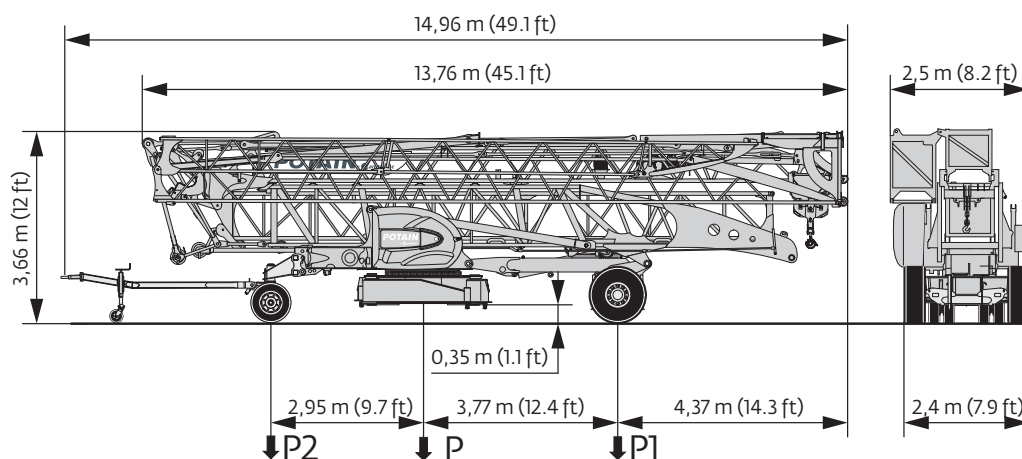
Consult price list for additional options

Transport

DJ100 / S120 10 km/h (6 mph)



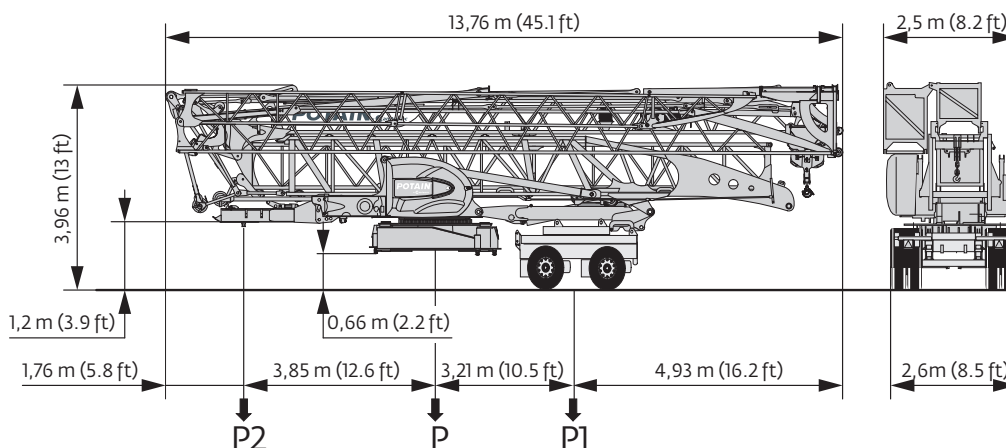
DJ105 / S125 25 km/h (16 mph)



NOTE: Dimensions are approximate and subject to change without notice.

Weights

North American Highway 2-Axle



*Other axle sets are available.

Chassis data (in transport position)

	DJ100 / S120 10 km/h (6 mph)		DJ105 / S125 25 km/h (16 mph)		North American Highway 2-Axle	
	meters	(feet)	meters	(feet)	meters	(feet)
Overall length	14,96	49.1	14,96	49.08	13,76	45.1
Overall height	3,66	12.0	3,66	12.01	3,96	13.0
Overall width	2,5	8.2	2,5	8.2	2,5	8.2
Overhang	4,37	14.34	4,37	14.34	3,21	10.5

Weights

Crane weight less counterweight:	16 430 kg		36,222 lb	
Counterweight for operation (15 slabs):	33 000 kg		72,753 lb	
Crane with counterweight:	49 430 kg		108,975 lb	

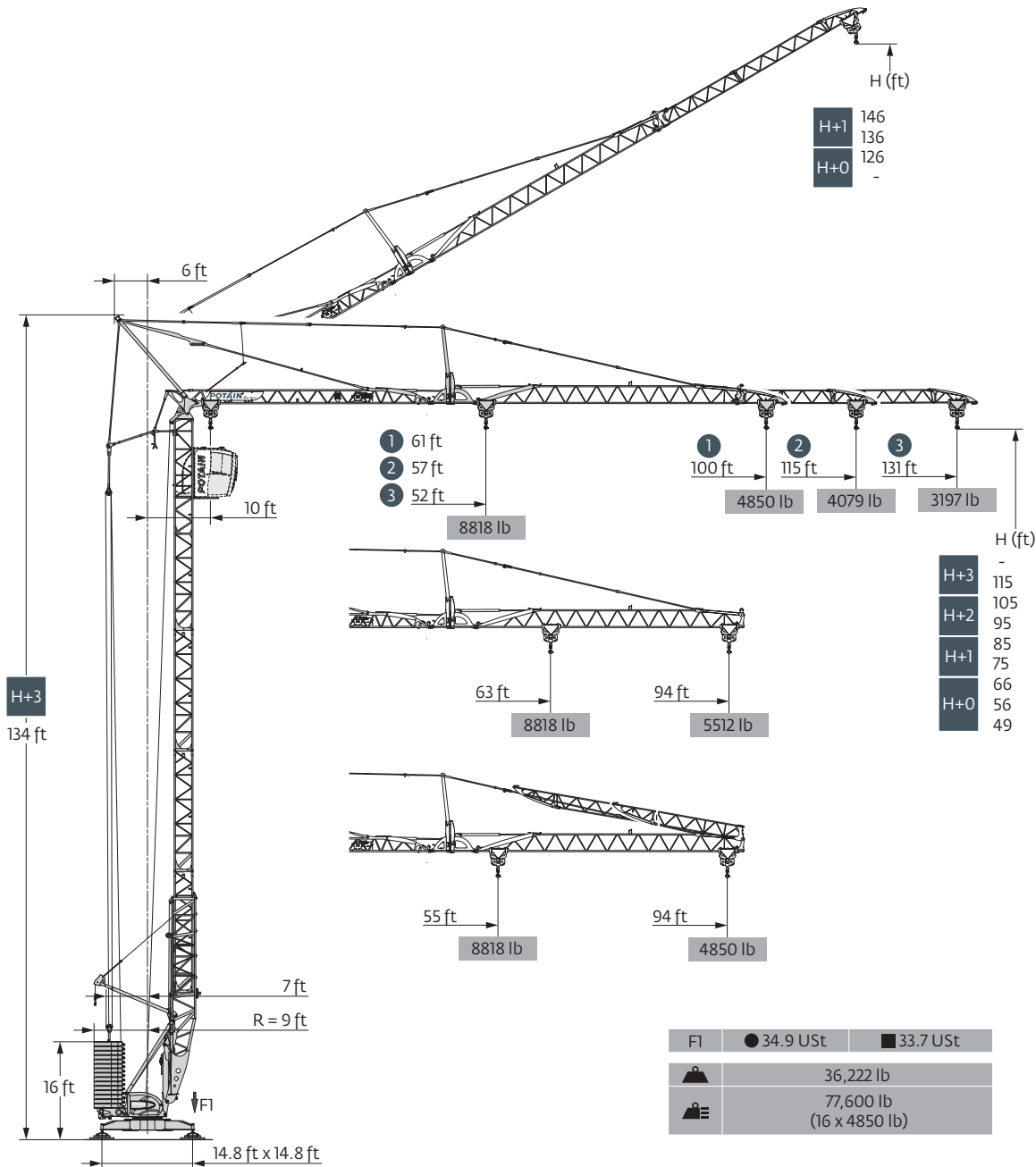
Crane with transport equipment

	DJ100 / S120 10 km/h (6 mph)		DJ105 / S125 25 km/h (16 mph)		North American Highway 2-Axle	
	kilograms	(pounds)	kilograms	(pounds)	kilograms	(pounds)
In transport with no counterweight:						
Gross (P)	16 970	37,412	17 260	38,052	17,890	39,441
Rear (P1)	9540	21,032	9750	21,495	12,350	27,227
Front (P2)	7430	16,380	7510	16,557	5540	12,214

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

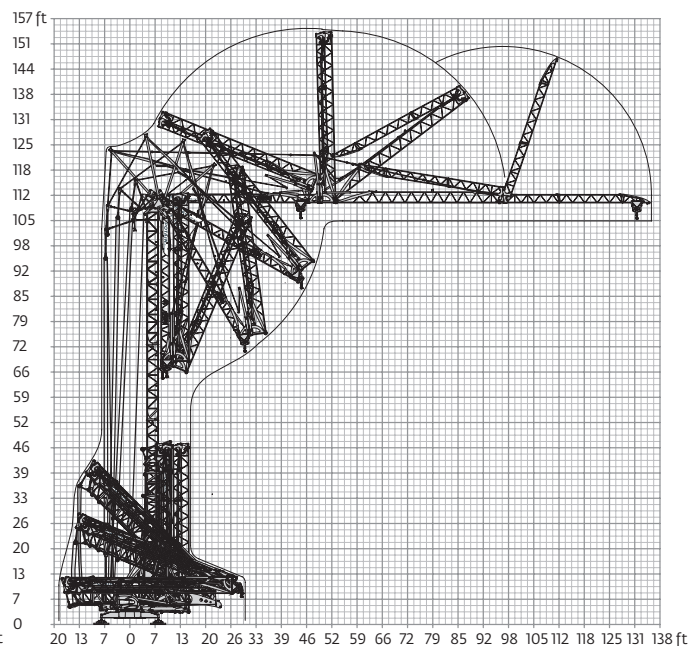
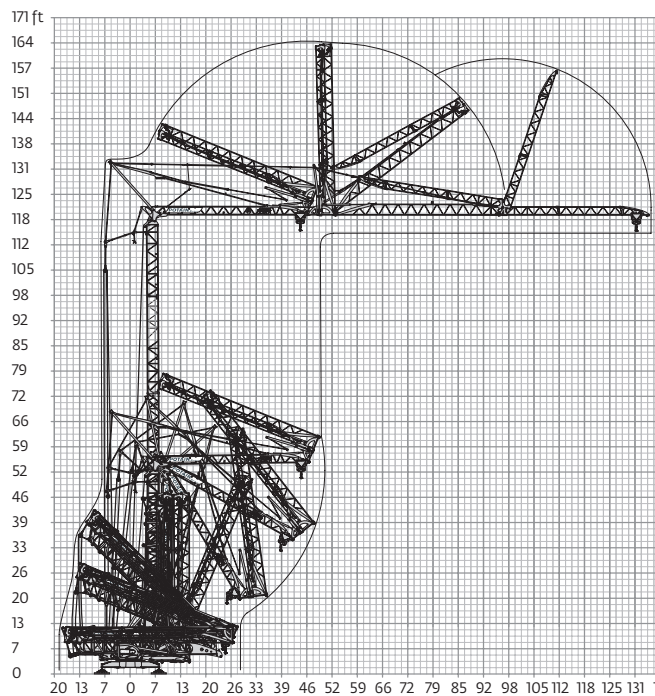
This information is for reference use only. Operators manual should be consulted and adhered to.
Please contact Bigge Crane and Rigging Co. at 888-337-BIGGE or email info@bigge.com for further information.

Dimensions



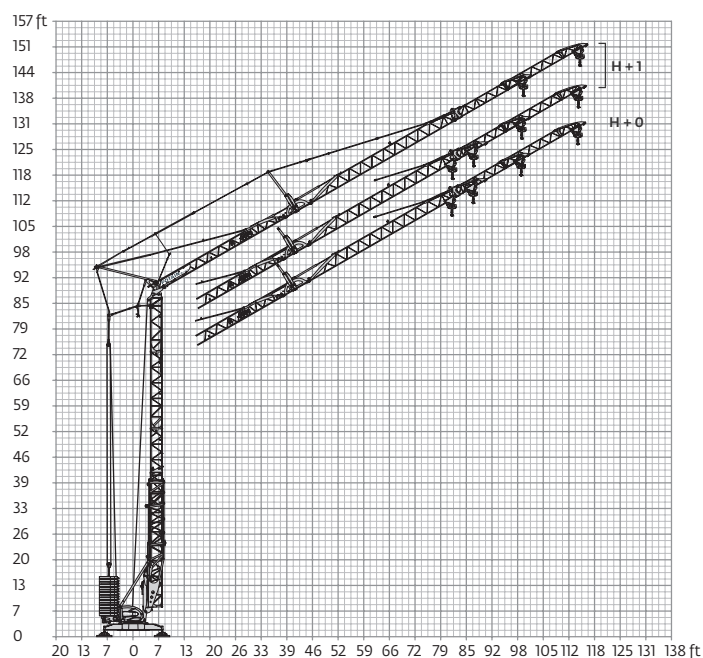
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE

Crane profile & working range



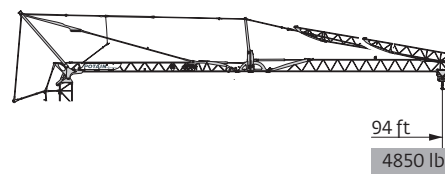
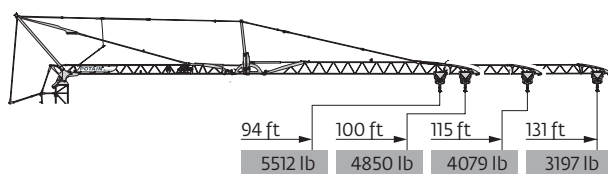
There are two possible profiles for the Igo T 70 A that are beneficial for erecting and dismantling on congested job sites.

Jib raised 30°



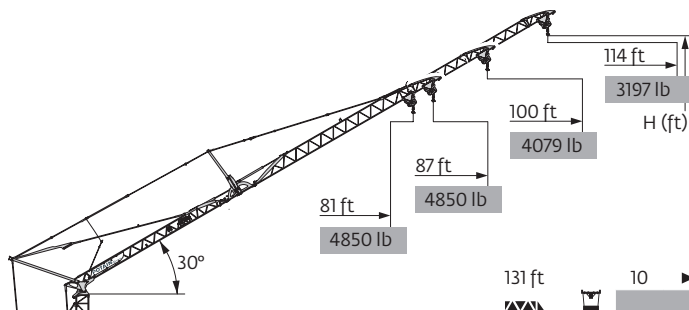
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Load charts



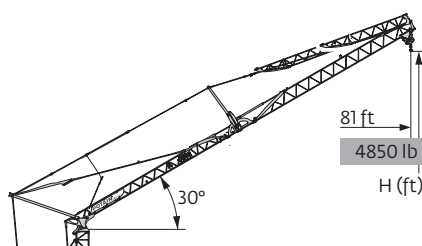
131 ft	10	52	59	66	72	79	85	86	92	98	105	112	118	125	131	ft
▲▲▲		8818	7650	6746	5997	5401	4894	4850	4475	4101	3792	3527	3285	3064	2866	lb
								4850	4475	4101	3792	3527	3285	3064	2866	lb
								4850	4519	4189	3858	3638	3417	3197		lb
115 ft	10	57	59	66	72	79	85	92	93	98	105	112	115			ft
▲▲▲		8818	8378	7385	6592	5930	5379	4916	4850	4531	4189	3880	3748			lb
									4850	4531	4189	3880	3748			lb
									4850	4519	4189	4079				lb
100 ft	10	61	66	72	79	85	92	98	100							ft
▲▲▲		8818	8047	7165	6460	5886	5379	4938	4850							lb
									4850							lb
									4850							lb
94 ft	10	63	66	72	79	85	92	94								ft
▲▲▲		8818	8400	7496	6768	6151	5622	5512								lb
								4850								lb
								4850								lb
131 ft	10	55	59	66	72	79	85	90	92	94						ft
115 ft		8818	8069	7099	6327	5710	5181	4850	4729	4630						lb
▲▲▲								4850	4729	4630						lb
									4850							lb

▲▲▲	131 ft 115 ft 100 ft 94 ft
H+2	105
H+1	95
	85
	75
H+0	66
	56
	49



▲▲▲	131 ft	115 ft	100 ft	94 ft
H+1	146	138	-	-
	136	128	120	117
H+0	126	118	111	107

131 ft	10	75	81	92	102	114	ft
▲▲▲		4850	4409	3781	3329	2866	lb
				4850	4189	3638	lb
115 ft	10	81	87	92	100		ft
▲▲▲		4850	4453	4145	3748		lb
				4850	4519	4079	lb
100 ft	10	87					ft
▲▲▲		4850					lb
							lb
94 ft	10	81					ft
▲▲▲		4850					lb
							lb



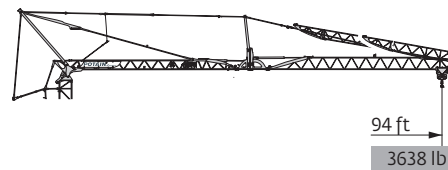
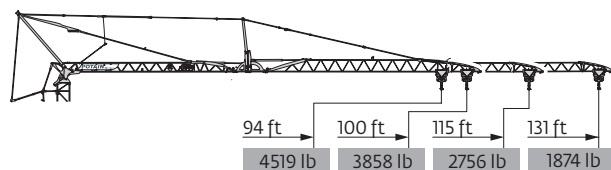
131 ft	10	81	ft
115 ft		4850	lb
▲▲▲		4850	lb

▲▲▲	131 ft 115 ft
H+1	-
	117
H+0	107

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Mechanisms



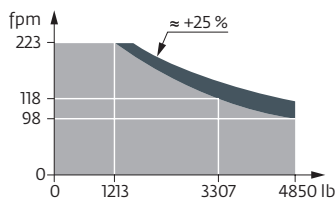
131 ft	10 ▶	63	66	72	79	85	92	98	105	112	118	125	131	ft
▲▲▲	▶	4850	4630	4079	3638	3307	2976	2756	2535	2315	2161	2006	1874	lb
115 ft	10 ▶			73	79	85	92	98	105	112	115	ft		
▲▲▲	▶			4850	4409	3968	3638	3307	3086	2976	2756	lb		
100 ft	10 ▶				83	85	92	100	ft					
▲▲▲	▶				4850	4740	4299	3858	lb					
94 ft	10 ▶				88	92	94	ft						
▲▲▲	▶				4850	4630	4519	lb						

▲▲▲	131 ft 115 ft 100 ft 94 ft
H+3	- 115

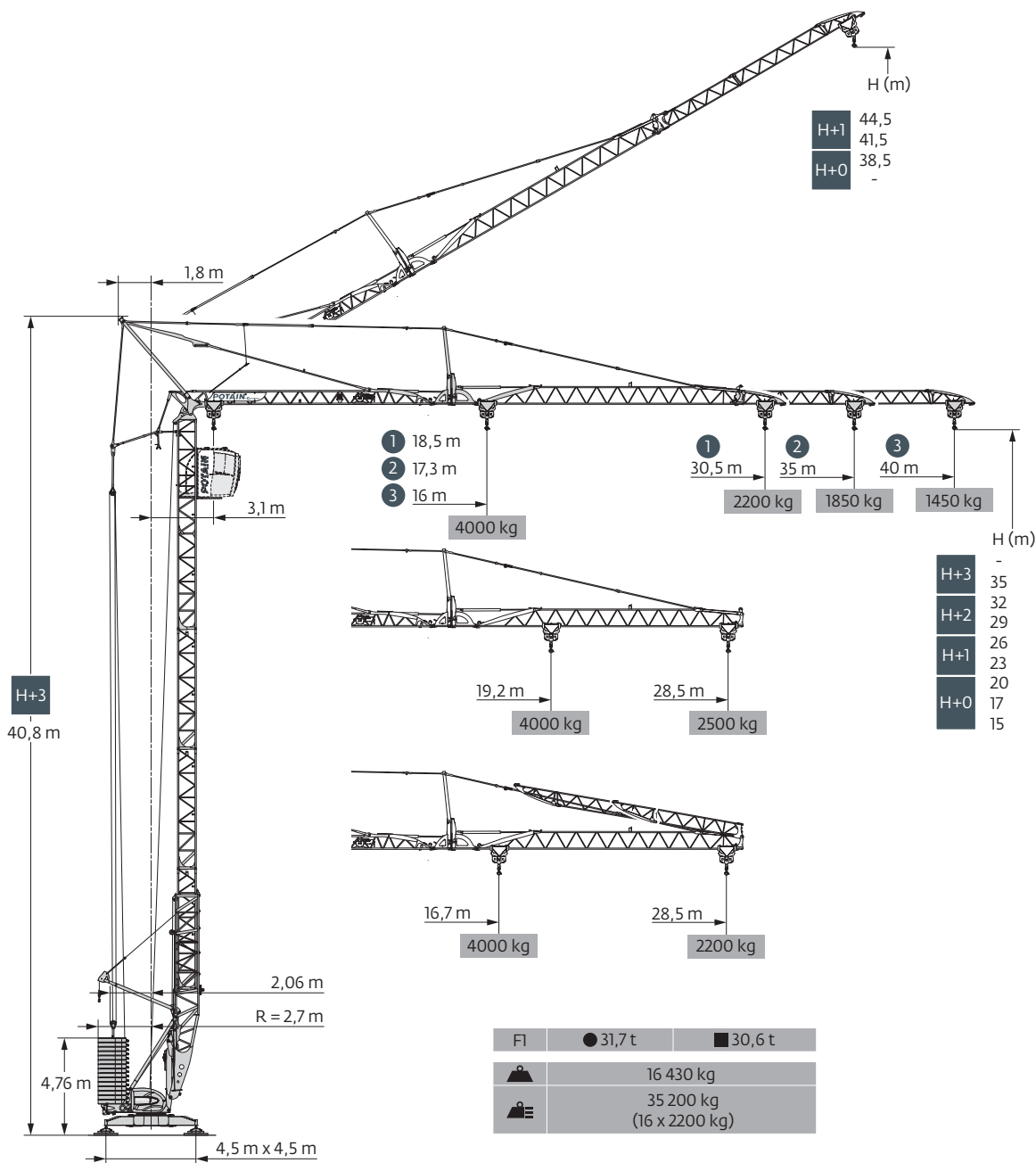
131 ft	10 ▶		74	79	85	92	94	ft
▲▲▲	▶		4850	4519	4079	3748	3638	lb

480 V - 60 Hz													hp	kW
	15 LVF 11 Optima	fpm	11	59	98	118	223	6	30	49	59	112	15	11
		lb	4850	4850	4850	3307	1213	8818	8818	8818	6614	2425		
	3 DVF 5	fpm	49 - 98 - 135 (2866 → 8818 lb) 49 - 98 - 148 (0 → 2866 lb)										3	2.2
	RVF 151 Optima+	rpm	0 → 0.8										5.5	4
														

IEC 60204-32	kVA
480 V (+6% -10%) 60 Hz	 → 17 kVA  → 19 kVA

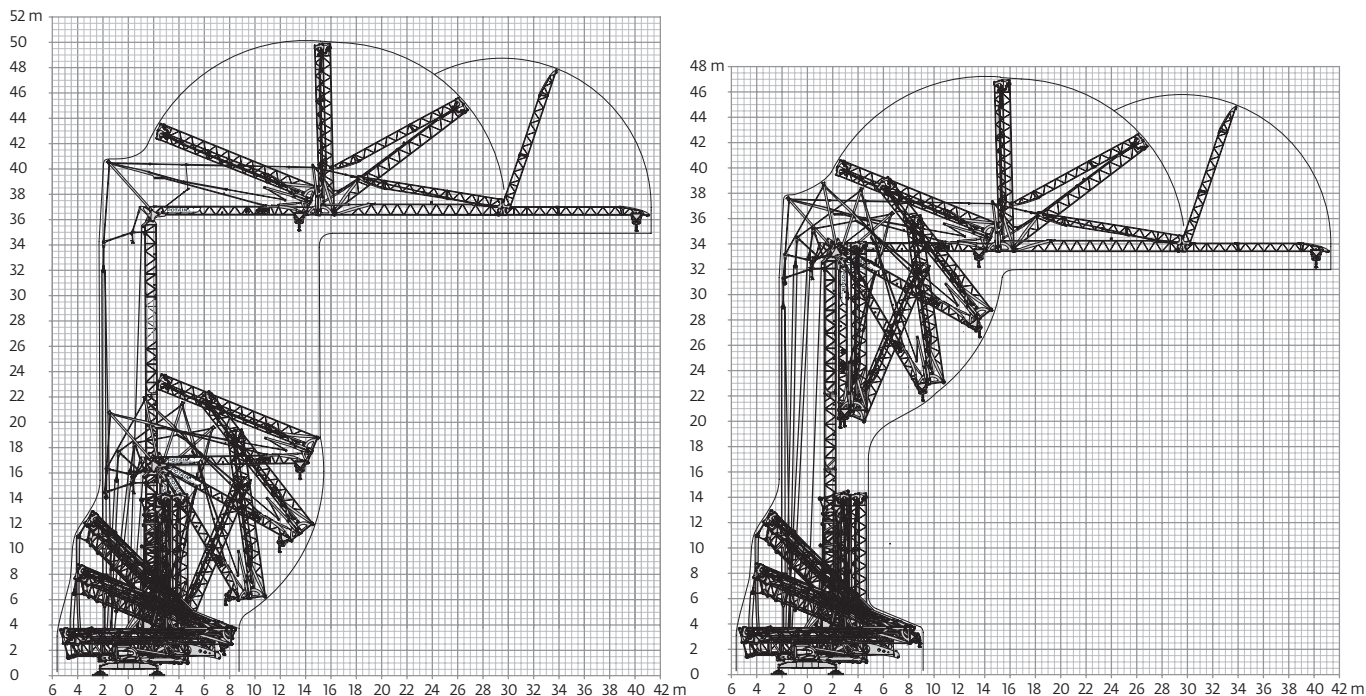


Metric dimensions



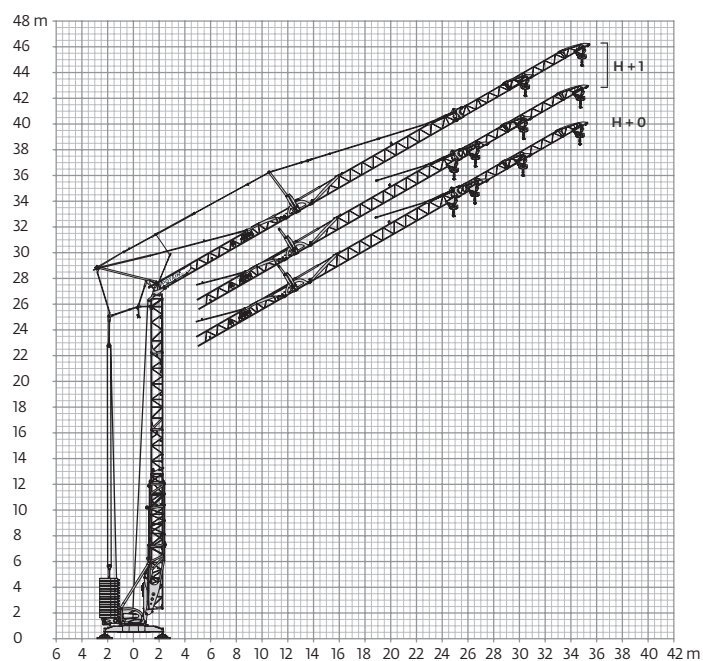
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE

Metric crane profile



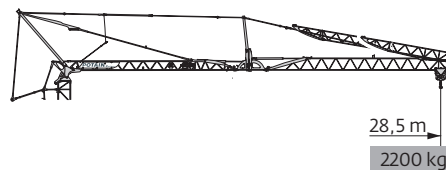
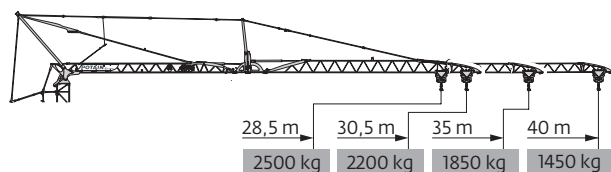
**There are two possible profiles for the Igo T 70 A that are beneficial for erecting and dismantling on congested job sites.*

Jib raised 30°



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Metric load charts



40 m	3,1	▶	16	18	20	22	24	26	26,2	28	30	32	34	36	38	40	m
▲▲▲			4000	3470	3060	2720	2450	2220	2200	2030	1860	1720	1600	1490	1390	1300	kg
▲▲									2200	2030	1860	1720	1600	1490	1390	1300	kg
▲										2200	2050	1900	1750	1650	1550	1450	kg

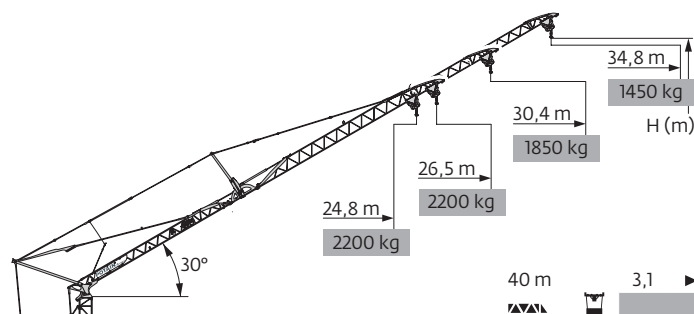
35 m	3,1	▶	17,3	18	20	22	24	26	28	28,4	30	32	34	35	m
▲▲▲			4000	3800	3350	2990	2690	2440	2230	2200	2055	1900	1760	1700	kg
▲▲										2200	2055	1900	1760	1700	kg
▲											2200	2050	1900	1850	kg

30,5 m	3,1	▶	18,5	20	22	24	26	28	30	30,5	m
▲▲▲			4000	3650	3250	2930	2670	2440	2240	2200	kg
▲▲										2200	kg
▲										2200	kg

28,5 m	3,1	▶	19,2	20	22	24	26	28	28,5	m
▲▲▲			4000	3810	3400	3070	2790	2550	2500	kg
▲▲									2200	kg
▲									2200	kg

▲▲▲	40m 35 m 30,5 m 28,5 m
H+2	32
H+1	29
	26
	23
H+0	20
	17
	15

40 m	3,1	▶		16,7	18	20	22	24	26	27,4	28	28,5	m
35 m				4000	3660	3220	2870	2590	2350	2200	2145	2100	kg
▲▲▲										2200	2145	2100	kg
												2200	kg



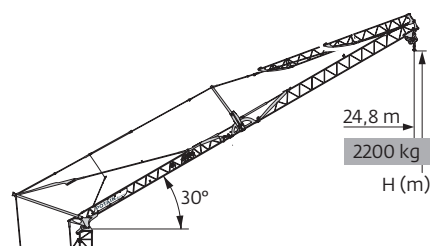
▲▲▲	40 m	35 m	30,5 m	28,5 m
H+1	44,5	42	-	-
	41,5	39	36,7	35,7
H+0	38,5	36	33,7	32,7

40 m	3,1	▶	22,9	24,6	28	31	34,8	m
▲▲▲			2200	2000	1715	1510	1300	kg
▲▲				2200	1900	1650	1450	kg

35 m		3,1	▶	24,7	26,4	28	30,4	m
▲▲▲				2200	2020	1880	1700	kg
					2200	2050	1850	kg

30,5 m	3,1 ▶	26,5 m
▲▲▲		2200 kg
▲▲		2200 kg

28,5 m	3,1	▶	24,8	m
▲▲▲			2200	kg
			2200	kg



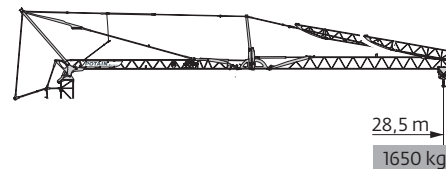
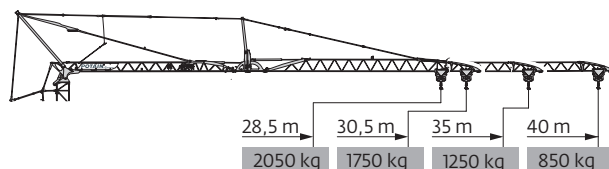
40 m		3,1	▶	24,8	m
35 m				2200	kg
				2200	kg

▲▲▲	40 m 35 m
H+1	-
	35,7
H+0	32,7

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Metric mechanisms



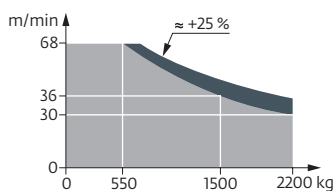
40 m	3,1	▶	19,2	20	22	24	26	28	30	32	34	36	38	40	m
▲▲▲			2200	2100	1850	1650	1500	1350	1250	1150	1050	980	910	850	kg
35 m	3,1	▶			22,3	24	26	28	30	32	34	35			m
▲▲▲					2200	2000	1800	1650	1500	1400	1350	1250			kg
30,5 m	3,1	▶				25,2	26	28	30,5						m
▲▲▲						2200	2150	1950	1750						kg
28,5 m	3,1	▶					26,8	28	28,5						m
▲▲▲							2200	2100	2050						kg

▲▲▲	40m 35 m 30,5 m 28,5 m
H+3	- 35

40 m															
35 m	3,1	▶			22,6	24	26	28	28,5						m
▲▲▲					2200	2050	1850	1700	1650						kg

480 V - 60 Hz													hp	kW
	15 LVF 11 Optima	m/min	3,5	18	30	36	68	1,8	9	15	18	34	15	11
		kg	2200	2200	2200	1500	550	4000	4000	4000	3000	1100		
	3 DVF 5	m/min	15 - 30 - 41 (1300 → 4000 kg) 15 - 30 - 45 (0 → 1300 kg)										3	2,2
	RVF 151 Optima+	rpm	0 → 0,8										5,5	4
														

IEC 60204-32	kVA
480 V (+6% -10%) 60 Hz	 → 17 kVA  → 19 kVA



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Symbols glossary


Anemometer

Hoist

Outrigger

Traveling

Ballast

Hoisting mechanism

Reeving

Traversing trolley

Ballasting derrick

Hydraulic equipment

Reeving 2-part

Traversing trolley and load diagrams

Chassis

Jib

Reeving 4-part

Trolley

Controls

Jib extension

Swing

Wireless control

Electrical requirement

Mast

Transport axle

Notes



Notes



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Baudemont

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Parabiago

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Gawcott

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Korea

Seoul

India

Hyderabad

Pune

Philippines

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Alphaville

China

TaiAn

Zhangjiagang

France

Charlieu

La Clayette

Moulins

Germany

Wilhelmshaven

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Portugal

Baltar

Fânzeres

Slovakia

Saris

USA

Manitowoc

Port Washington

Shady Grove

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