



Grove Maniowoc National Crane Potain



Potain Igo MA 21

Product Guide



Features

- Integrated axles and counterweight
- 1800 kg (3968 lb) maximum capacity
- 700 kg (1543 lb) capacity at 26 m (85 ft)
- 26 m (85 ft) maximum operating hook radius
- 26,4 m (87 ft) maximum hook height with 26 m (85 ft) jib set at 20°
- 19,3 m (63 ft) maximum hook height with jib horizontal



Features



Remote control with indicators

The remote control with indicators, in combination with variable frequency drives for all main functions, allows the Igo MA 21 operator to easily operate the crane from within an approximate three-hundred foot radius.



Small footprint with advantageous reach

The Igo MA 21's minimal space requirement and excellent reach capabilities makes it a suitable choice for single family homes and multi-family building complexes.

Integrated axles and counterweight

Supplied with integrated axles and counterweight, the Igo MA 21 is transported as job-site ready and is quick to set-up without the need of assist equipment. Compact transport weight and dimensions makes moving the Igo MA 21 easy whether using the fifth wheel or the pintle hook attachment.

The Igo MA 21 features electrical operation, providing a quiet, clean lifting solution to customers who may be limited by noise and emissions regulations.



Flexible power supply

Able to be operated using an electrical supply of either 480V 3-phase or 220V single-phase, the Igo MA 21 can be powered by the supply available on the jobsite eliminating the need to bring in a generator.



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Specifications



Jib

26 m (85 ft) radius standard bi-folding offsettable galvanized lattice jib. Removable jib extensions can allow additional horizontal jib operating radii of 21 m (69 ft) or 24 m (79 ft). One (1) tie bar line with adjustable lengths allows jib to be offset 20°. Two (2) erecting speeds controlled from the remote, opening and aligning are carried out automatically by one (1) hydraulic cylinder.



Mast

Galvanized folding mast with hydraulic cylinder for erection. Two (2) erecting speeds controlled from the remot. No locking necessary. 360° rotation possible while raising the mast.



Chassis

Supplied with a permanently attached axle set. Crane can be transported using the fifth wheel attachment or pintle hook. Outriggers swing and are locked into position. 4,2 m (13.8 ft) square outrigger spread with 2,13 m (7 ft) slewing radius. Level bubble integrated into the chassis. Outrigger pads are stowed on the crane during transport.



*Ballast

Supplied with permanently attached ballast blocks. Top portion of blocks are removable for lighter transport weights if needed.



Electrical requirement

220 volt 60 Hz single-phase or 480 volt 60 Hz three-phase measured at the turntable. Earth rod and electric cable stored on the crane during transport.



Reeving

SM hookblock for 2-part line.



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



*Optional Anemometer

Electronic wind speed meter (anemometer) to alert the operator of wind speed conditions. Provides selective display on the radio remote.



Swing

RVF 22 slewing mechanism with maximum swing speed of 1.0 rpm. Progressive control of speed with anti-load swinging system makes aligning the load and jib easier.



Hoist

8 LVF 9 Optima: 7.5 HP variable frequency hoist with 0,9 t (1.0 USt) line pull. Three notch, progressive speed change according to the accelerating or decelerating ramps.



Trolley

1 DVF 4: 1.5 HP variable frequency motor with three 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.

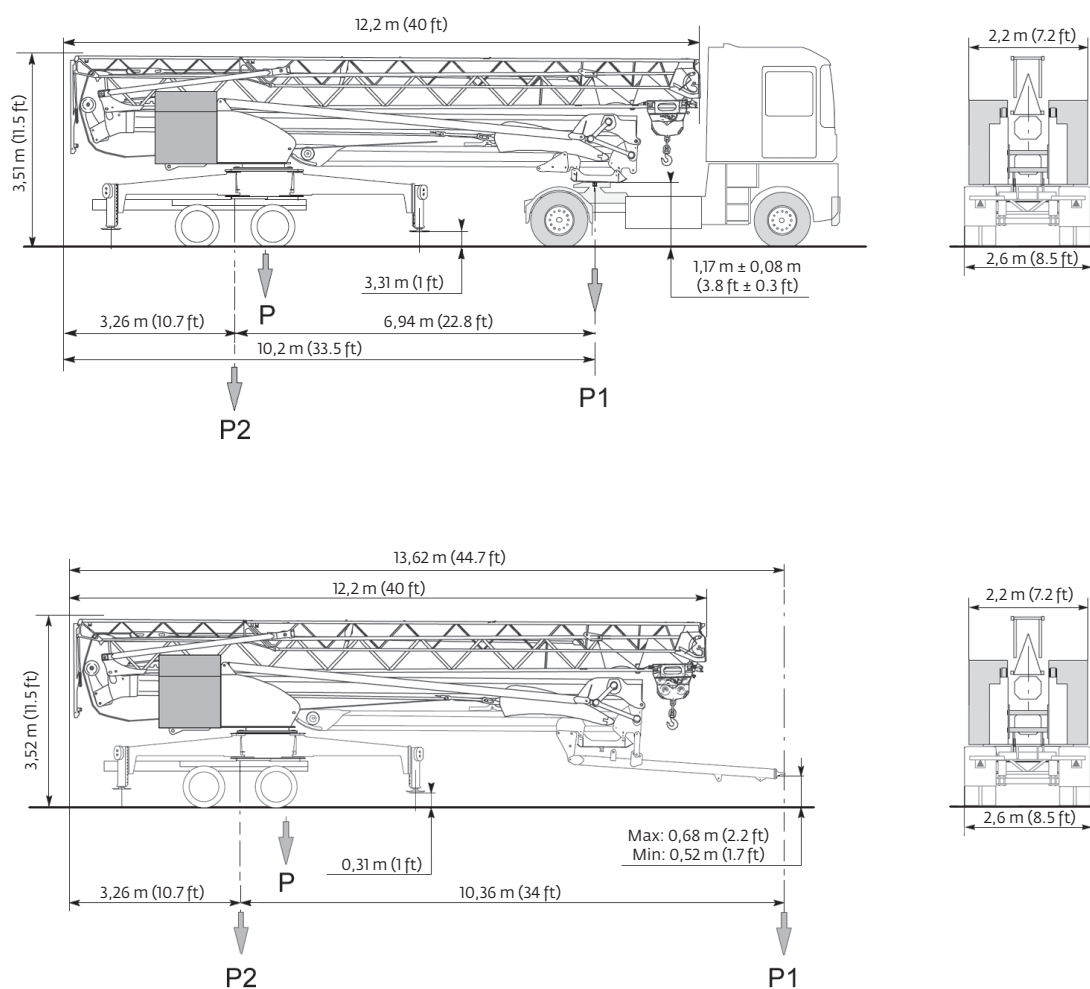
*Optional equipment

- * STANDARD NORTH AMERICAN SPECIFICATION: includes Dialog Wind and cold weather kit.
- * Automatic greasing of the slewing ring
- * Hydraulic leveling of the outriggers

Consult price list for additional options.



Transport

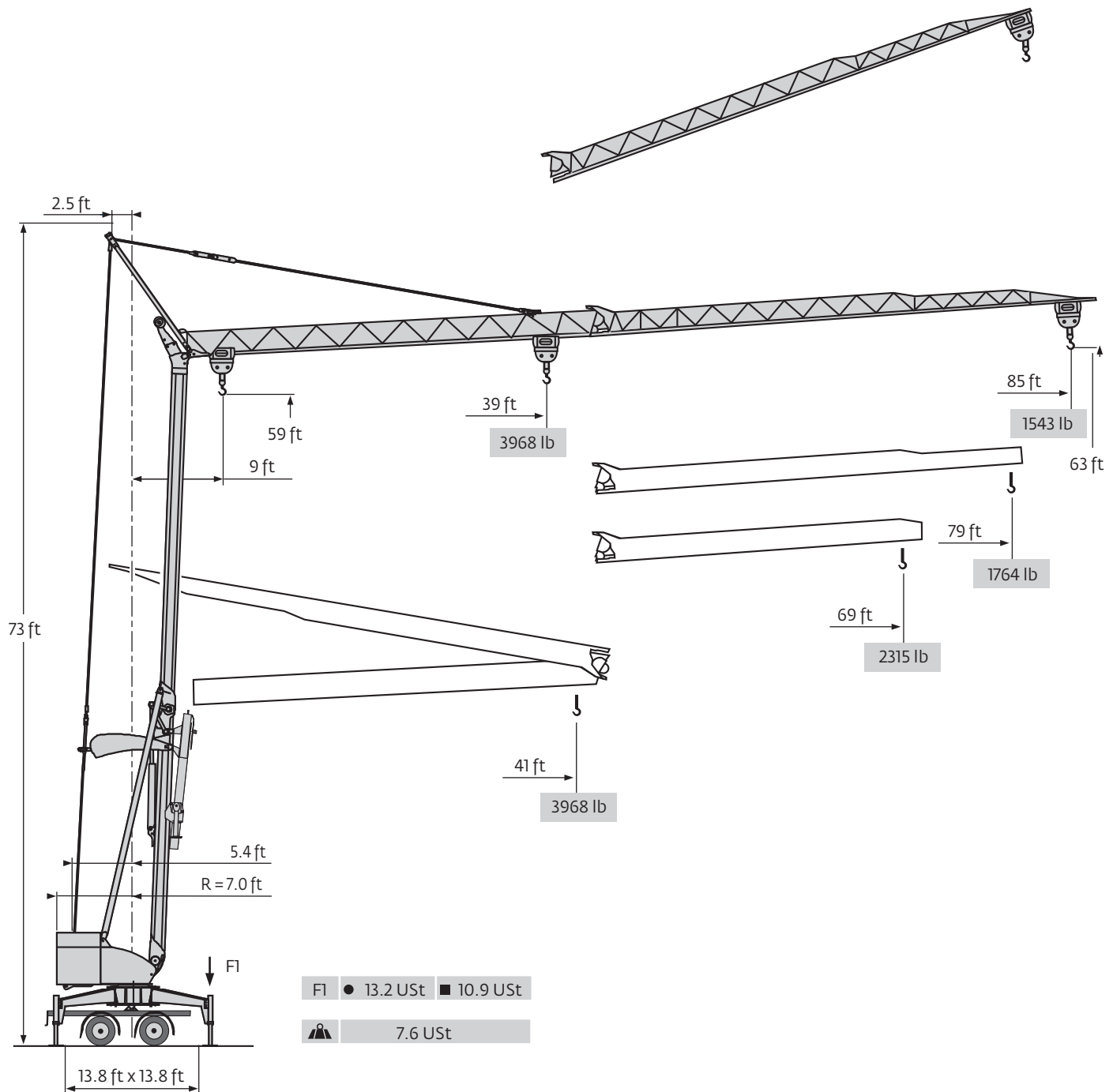


Transport weights		
	Full counterweight	Partial counterweight*
5th wheel		
Gross	18 270 kg (40,278 lb)	15 640 kg (34,480 lb)
Front (P1)	1470 kg (3241 lb)	1620 kg (3571 lb)
Rear (P2)	16 800 kg (37,037 lb)	14 020 kg (30,908 lb)
Pintle hook		
Gross	18 270 kg (40,278 lb)	15 640 kg (34,480 lb)
Front (P1)	1095 kg (2414 lb)	1250 kg (2756 lb)
Rear (P2)	17 175 kg (37,864 lb)	14 390 kg (31,724 lb)
*2 x 1260 kg (2778 lb) blocks removed		

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



Dimensions



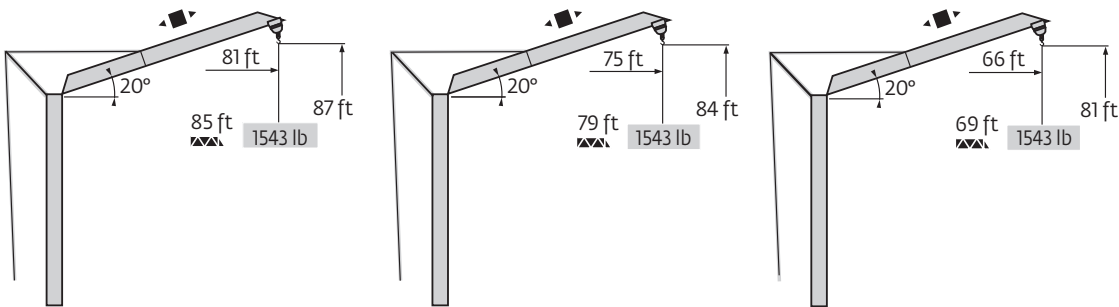
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Load charts

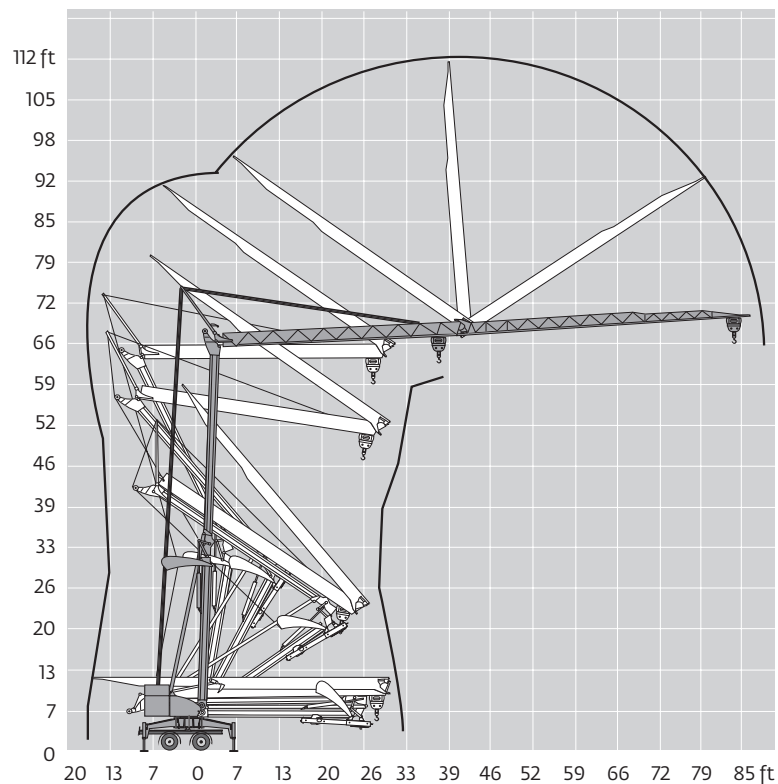


85 ft	9	▶	41 ft	ft	39	43	46	49	52	56	59	62	66	69	72	75	79	82	85	ft
▲▲▲	3968 lb				3968	3594	3285	3020	2789	2590	2414	2260	2127	2006	1896	1797	1709	1620	1543	lb
79 ft	9	▶	41 ft	ft	40	43	46	49	52	56	59	62	66	69	72	75	79	ft		
▲▲▲	3968 lb				3968	3715	3384	3120	2888	2679	2502	2337	2205	2072	1962	1863	1764	lb		
69 ft	9	▶	41 ft	ft	44	46	49	52	56	59	62	66	69	ft						
▲▲▲	3968 lb				3968	3770	3461	3208	2976	2789	2612	2458	2315	lb						

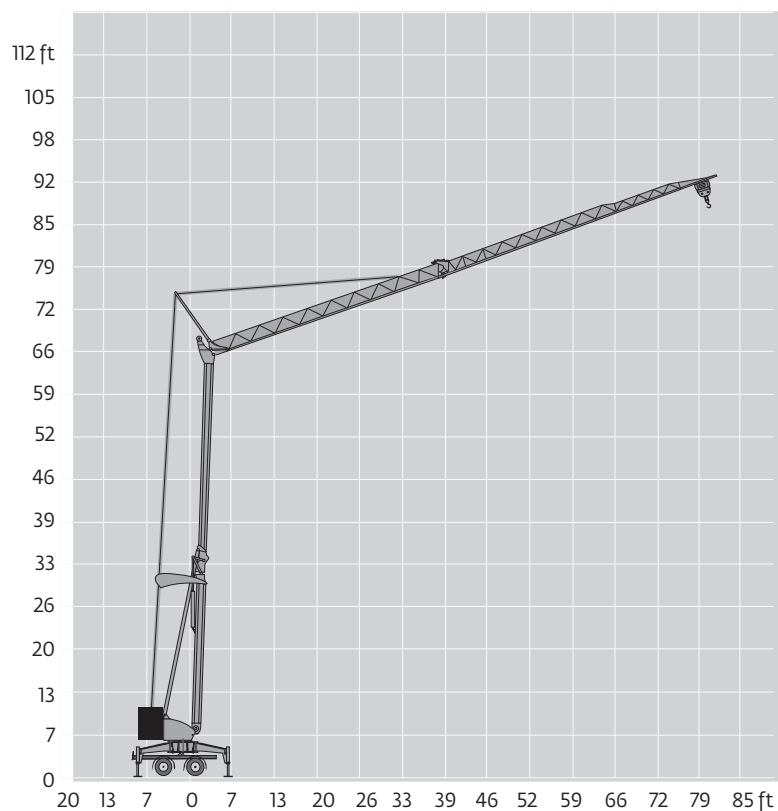




Crane profile and working range









Igo MA 21: jib raised 20°

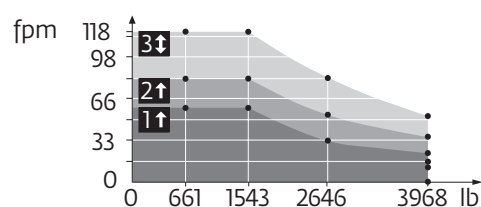








Mechanisms

							hp	kW
	8 LVF 9 Optima	220 V \pm 1	fpm	↑ 11 ↓ 11	↑ 23 ↓ 52	↑ 59 ↓ 118	3.3	2.4
		20 A	lb	3968	3968	1543		
		220 V \pm 2	fpm	↑ 11 ↓ 11	↑ 36 ↓ 52	↑ 82 ↓ 118	5.2	3.8
		32 A	lb	3968	3968	1543		
		480 V \pm 3	fpm	↑ 11	↑ 52	↑ 118	7.5	5.5
			lb	3968	3968	1543		
	1 DVF 4	–	fpm	46 → 118 (0 → 1543 lb) - 46 → 92 (1543 → 3968 lb)			1.5	1.1
	RVF 22	–	rpm	0 → 1			1.5	1.1
CEI 38  IEC 38				kVA				
220 V(+6% -10%) 60 Hz \pm 480 V(+6% -10%) 60 Hz				220 V 20 A : 4.6 kVA 220 V 32 A : 7.4 kVA 480 V : 11 kVA				

8 LVF 9 Optima



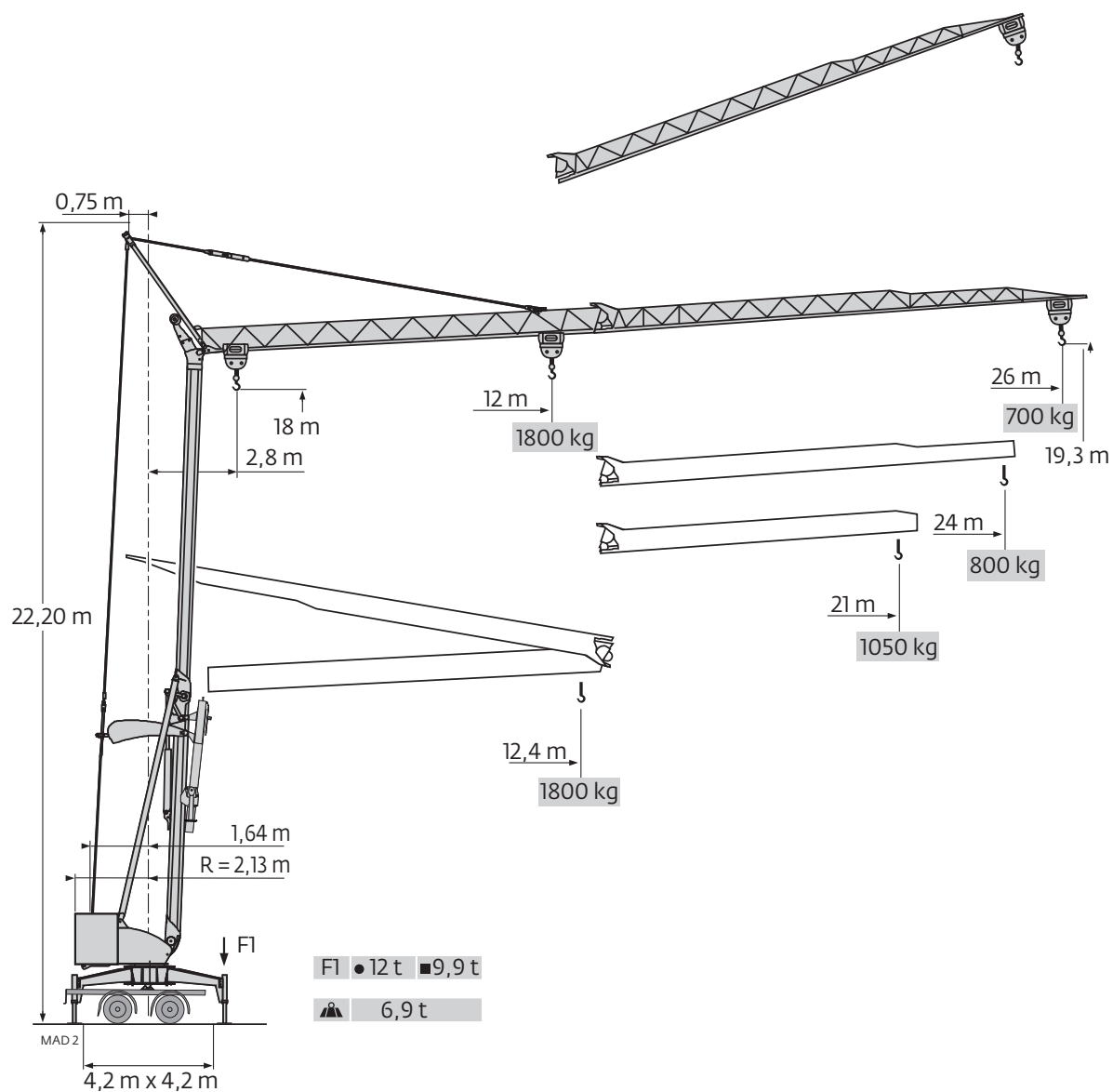
	Hoisting
	Trolleying
	Slewing
	Traveling

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

Potain Igo MA 21 The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane

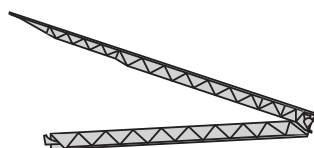


Metric dimensions





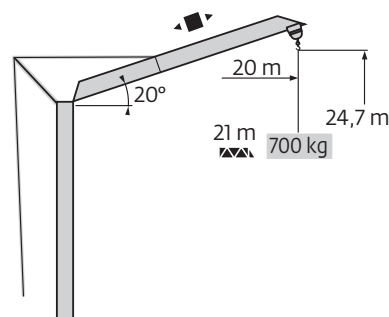
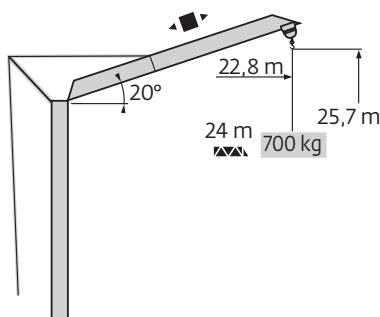
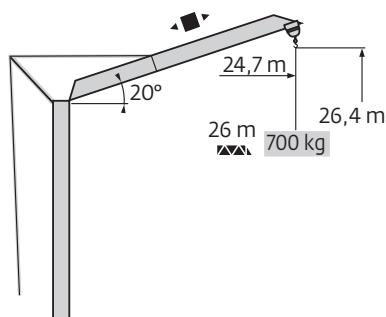
Metric load charts



26 m	2,8 ▶	12,4 m	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26 m
▲▲▲		1800 kg	1800	1630	1490	1370	1265	1175	1095	1025	965	910	860	815	775	735	700 kg

24 m	2,8 ▶	12,4 m	12,3	13	14	15	16	17	18	19	20	21	22	23	24 m
▲▲▲		1800 kg	1800	1685	1535	1415	1310	1215	1135	1060	1000	940	890	845	800 kg

21 m	2,8 ▶	12,4 m	13,4	14	15	16	17	18	19	20	21 m
▲▲▲		1800 kg	1800	1710	1570	1455	1350	1265	1185	1115	1050 kg

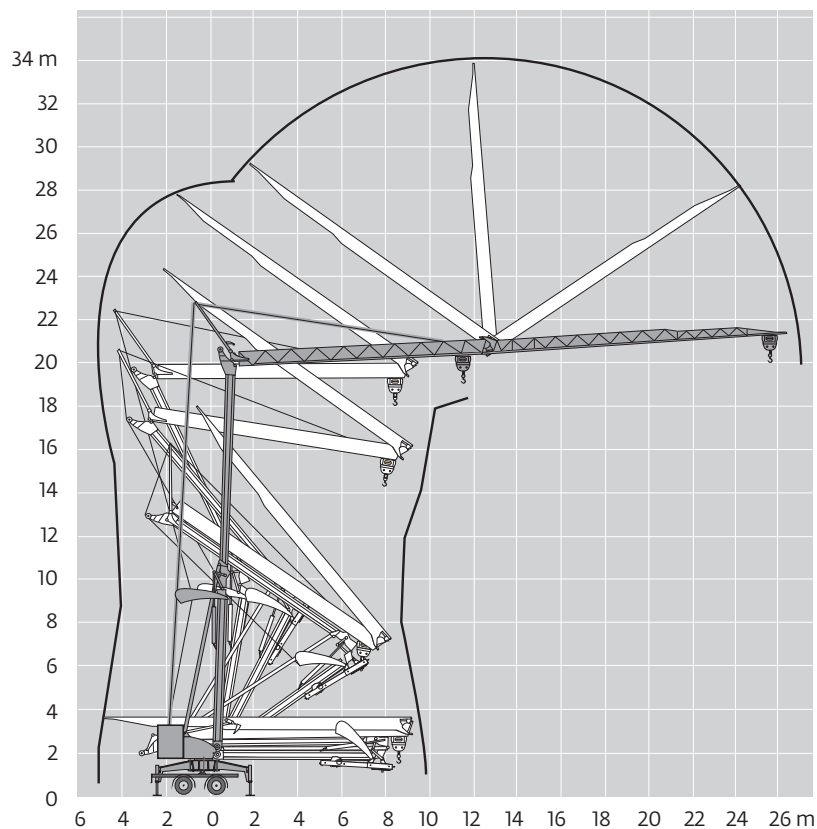


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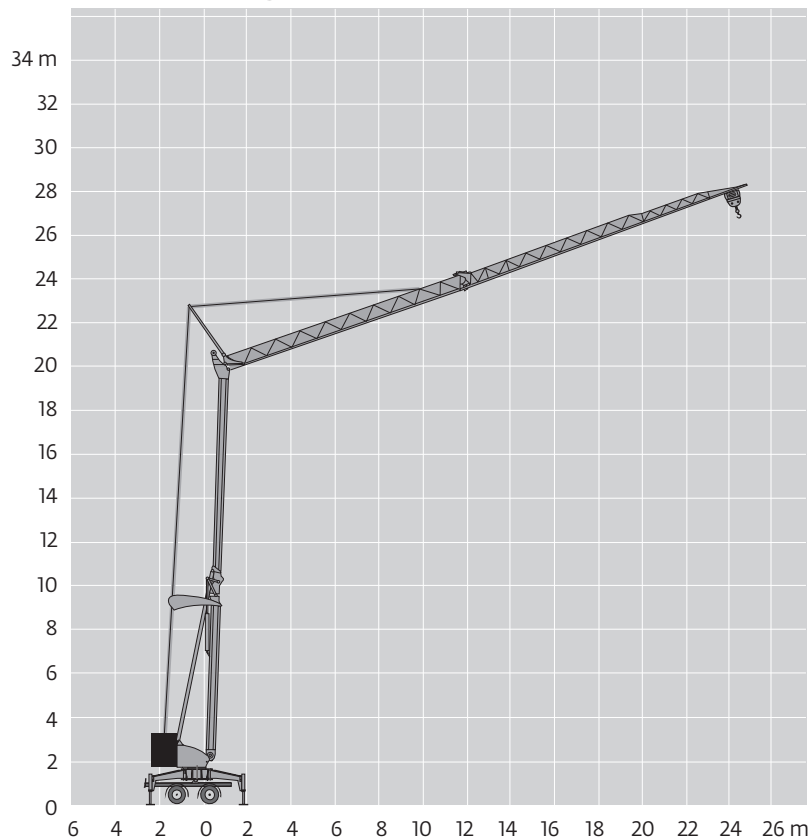
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Metric crane profile and working range



Igo MA 21: jib raised 20°










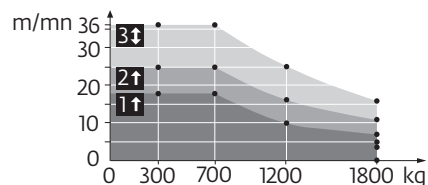
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The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.



Metric mechanisms

							ch - PS hp	kW
	8 LVF 9 Optima	230 V \pm 5% 20 A 1	m/min kg	↑ 3,5 ↓ 3,5 1800	↑ 7 ↓ 16 1800	↑ 18 ↓ 36 700	3,3	2,4
		230 V \pm 5% 32 A 2	m/min kg	↑ 3,5 ↓ 3,5 1800	↑ 11 ↓ 16 1800	↑ 25 ↓ 36 700	5,2	3,8
		400 V 3	m/min kg	↑ 3,5 1800	↑ 16 1800	↑ 36 700	7,5	5,5
	1 DVF 4	–	m/min	14 → 36 (0 → 700 kg) - 14 → 28 (700 → 1800 kg)			1,5	1,1
	RVF 22	–	tr/min U/min rpm	0 → 1			1,5	1,1
CEI 38  IEC 38				kVA				
230 V (+6% -10%) 50 Hz \pm 400 V (+6% -10%) 50 Hz				230 V 20 A : 4,6 kVA 230 V 32 A : 7,4 kVA 400 V : 11 kVA				

8 LVF 9
Optima

	Hoisting
	Trolleying
	Slewing
	Traveling



Symbols glossary



Anemometer



Ballast



Chassis



Controls



Electrical Requirement



Hoist



Hydraulic Equipment



Jib



Jib Extension



Mast



Reeving



Swing



Trolley



Notes



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