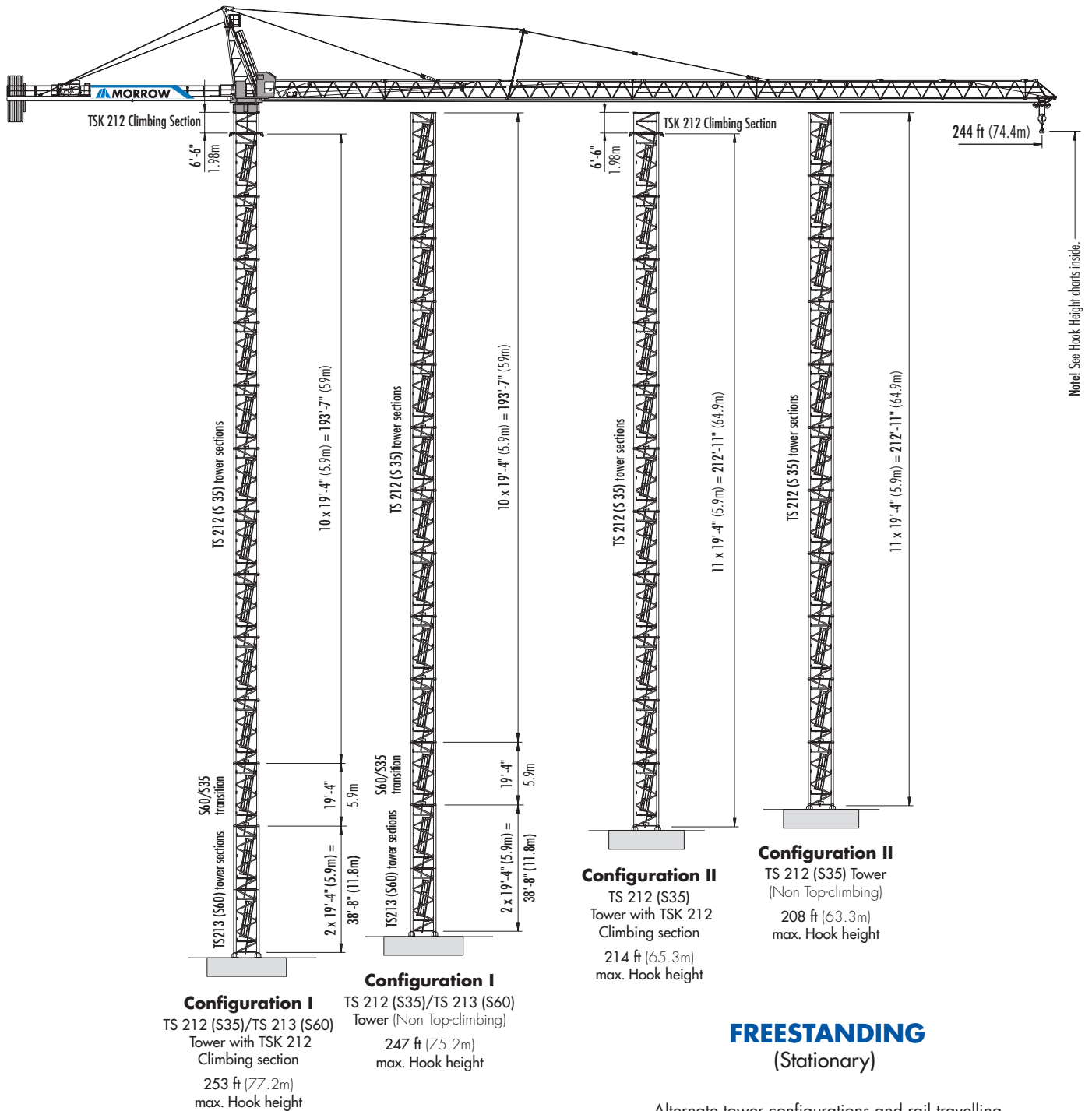
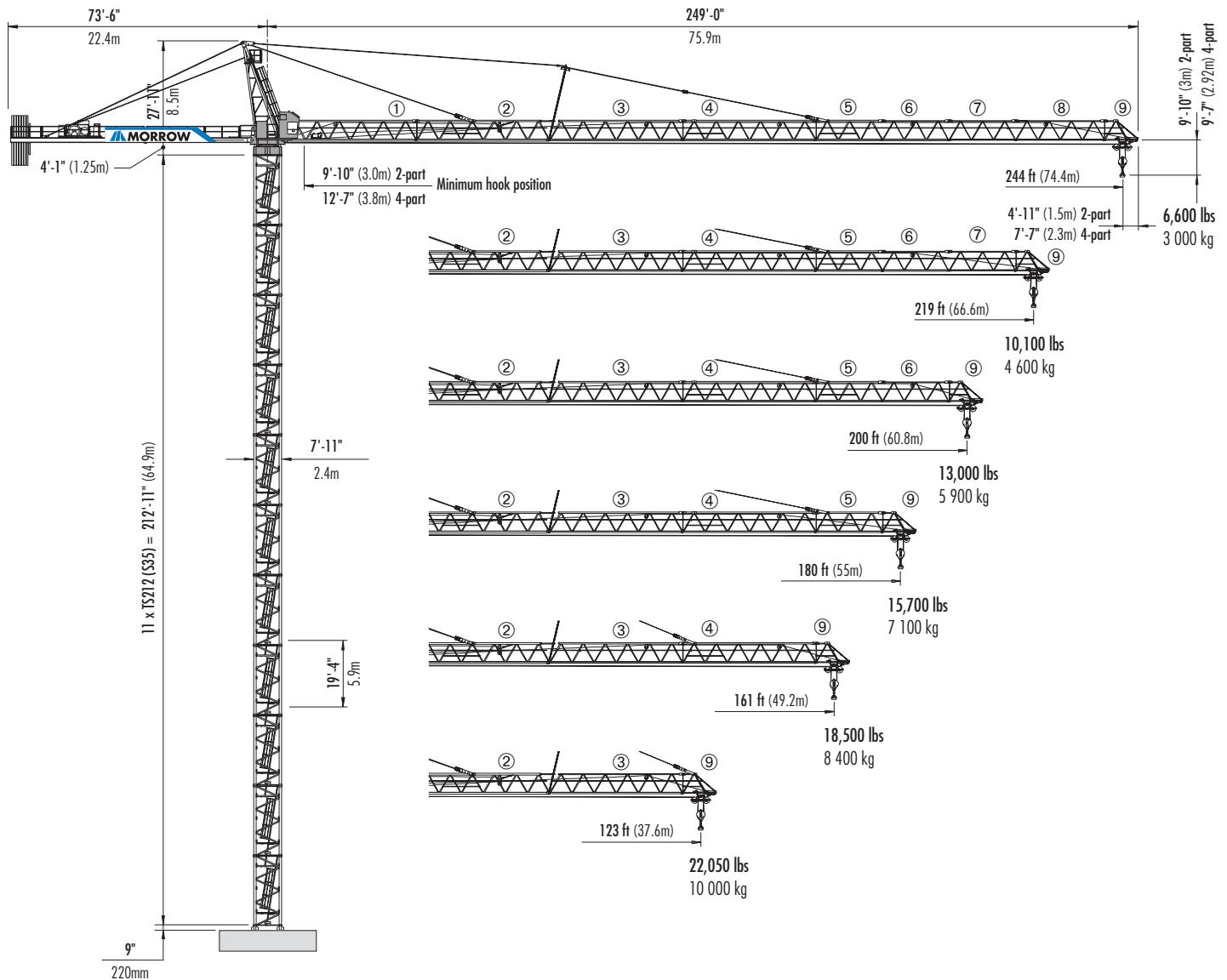


Pecco SK 405-20

TOWER CRANE



Pecco SK 405-20



Counterweights

102 hp Hoist Unit

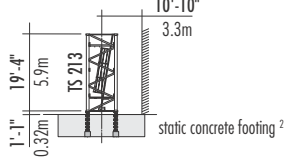
244-ft Jib	219-ft Jib	200-ft Jib	180-ft Jib	161-ft Jib	123-ft Jib
•AAAAAAB•••	••BB•AAAAAAB	AAAAAAB•B•••	••••BBAAAAAA	•••••BBAAAAA	AAAAB•••••••
51,040 lbs	50,600 lbs	47,400 lbs	47,400 lbs	40,570 lbs	30,530 lbs
23 150 kg	22 950 kg	21 500 kg	21 500 kg	18 400 kg	13 850 kg

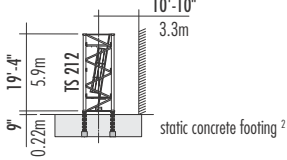
NOTE: Counterweight information above applies to 2-part and 4-part operation. Weight of the A Block is 6,835 lbs (3 100 kg); wt. of the B Block is 3,200 lbs (1 450 kg). Counterweights must be installed from rear to front, i.e. towards the tower. It is recommended that the weight of each counterweight be verified before installation. Counterweight figures displayed in the chart above are for crane with 102 hp hoist unit. If another hoist unit is installed, refer to the Pecco SK 405-20 Operation Manual or contact Morrow.

IMPORTANT: SK 405 counterjib equipped with 12 counterweight block mounting slots. The "•" indicates an empty slot.

Hook Heights

Alternate tower combinations are possible. Refer to Operation manual or contact Morrow for information.

Configuration I ^{2,3}					
SK 405 on TS 212 (S35) and TS 213 (S60) tower					
					
No. of Tower Sections	Tower Section Type	Non Top-climbing Configuration without TSK 212 climbing section installed		Top-climbing Configuration TSK 212 climbing section required	
		feet	meters	feet	meters
1	TS213 (S60)	14	4.4	21	6.4
2	TS213 (S60)	34	10.3	40	12.3
3	S60/S35 transition	53	16.2	60	18.2
4	TS212 (S35)	73	22.1	79	24.1
5	TS212 (S35)	92	28	98	30
6	TS212 (S35)	111	33.9	118	35.9
7	TS212 (S35)	131	39.8	137	41.8
8	TS212 (S35)	150	45.7	157	47.7
9	TS212 (S35)	169	51.6	176	53.6
10	TS212 (S35)	189	57.5	195	59.5
11	TS212 (S35)	208	63.4	215	65.4
12 ¹	TS212 (S35)	227	69.3	234	71.3
13 ¹	TS212 (S35)	247	75.2	253	77.2

Configuration II ^{2,3}					
SK 405 on TS 212 (S35) tower					
					
No. of Tower Sections	Tower Section Type	Non Top-climbing Configuration without TSK 212 climbing section		Top-climbing Configuration TSK 212 climbing section required	
		feet	meters	feet	meters
1	TS212 (S35)	14	4.3	21	6.3
2	TS212 (S35)	33	10.2	40	12.2
3	TS212 (S35)	53	16.1	59	18.1
4	TS212 (S35)	72	22	79	24
5	TS212 (S35)	91	27.7	98	29.9
6	TS212 (S35)	111	33.8	117	35.8
7	TS212 (S35)	130	39.7	137	41.7
8	TS212 (S35)	150	45.6	156	47.6
9	TS212 (S35)	169	51.5	176	53.5
10	TS212 (S35)	188	57.4	195	59.4
11 ¹	TS212 (S35)	208	63.3	214	65.3

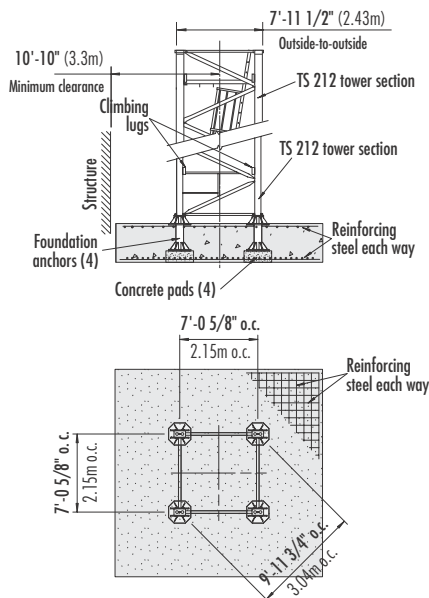
¹ Lower top climbing unit to base of tower prior to operating crane.

² Hook heights for cross base and rail-travelling crane configurations available upon request.

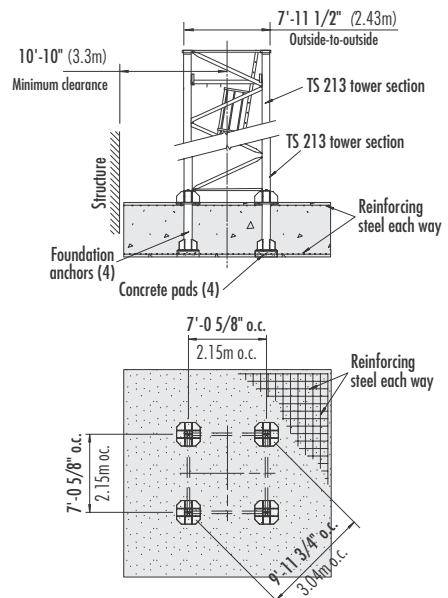
³ If top climbing configuration is required, a TSK 212 climbing section **MUST** be installed.

Consult crane Operation Manual before erecting, operating, servicing or dismantling crane.

Foundation Details on concrete footing



with TS 212 (S35) Tower



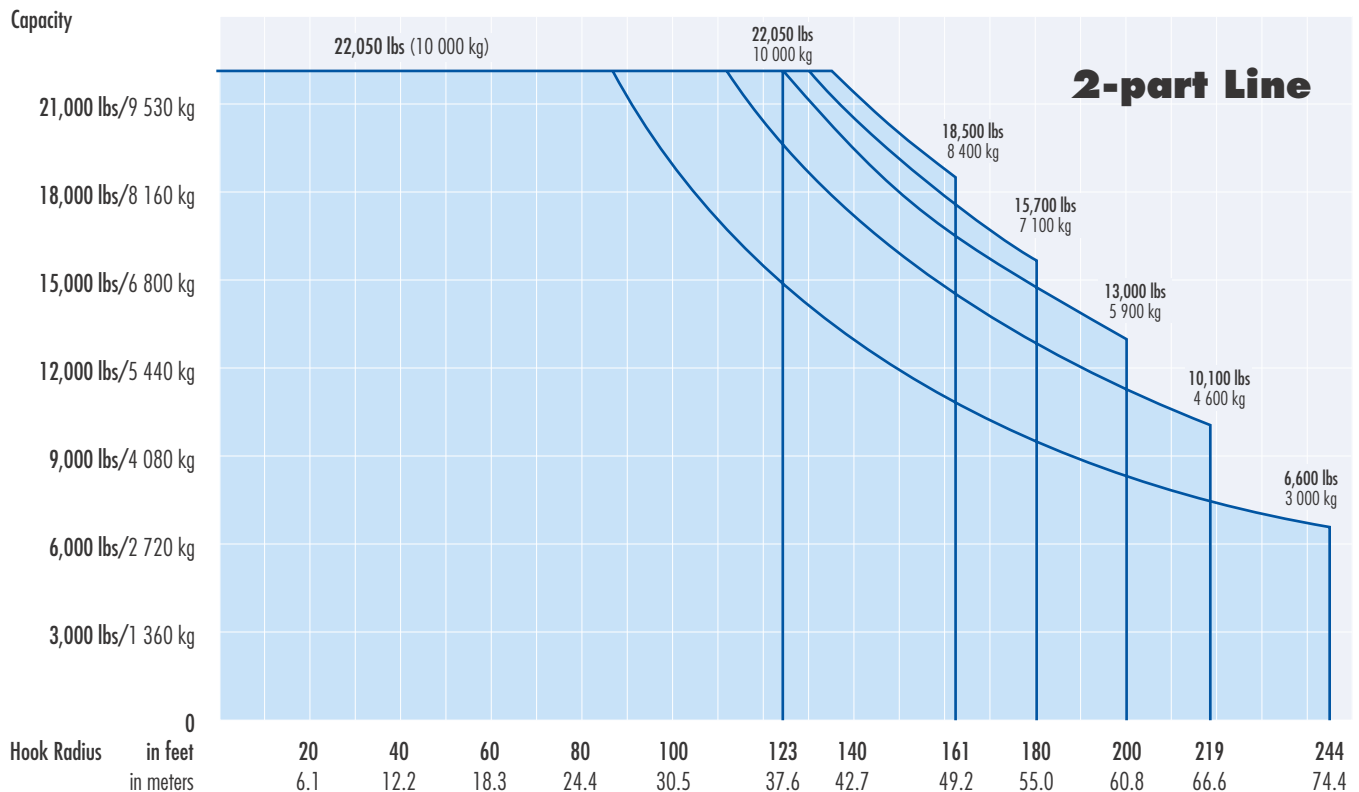
with TS 213 (S60) Tower

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Radius and Capacities

2-part Line

Hook Radius	2-Part Line Max Capacity — Radius	ft m	112 34.1	120 36.6	123 37.6	130 39.6	140 42.7	150 45.7	162 49.2	170 51.8	180 55.0	190 57.9	200 60.8	210 64.0	219 66.6	230 70.1	240 73.2	244 74.4
244 ft 74.4m	22,050 lbs — 89 ft 10 000 kg — 27m	lbs kg	16,900 7 670	15,500 7 030	15,000 6 800	14,200 6 440	13,000 5 900	11,900 5 400	11,000 4 990	10,400 4 720	9,500 4 310	9,000 4 080	8,400 3 810	7,900 3 580	7,500 3 400	7,000 3 180	6,700 3 040	6,600 3 000
219 ft 66.6m	22,050 lbs — 105 ft 10 000 kg — 32m	lbs kg	21,630 9 810	20,400 9 250	19,700 8 940	18,600 8 440	17,000 7 710	15,800 7 170	14,500 6 580	13,700 6 220	12,700 5 760	12,000 5 440	11,500 5 220	10,600 4 810	10,100 4 600			
200 ft 60.8m	22,050 lbs — 123 ft 10 000 kg — 37.6m	lbs kg	22,050 10 000	22,050 10 000	22,050 10 000	21,200 9 620	19,500 8 850	18,100 8 210	16,820 7 630	15,700 7 120	14,600 6 620	13,700 6 210	13,000 5 900					
180 ft 55m	22,050 lbs — 131 ft 10 000 kg — 40m	lbs kg	22,050 10 000	22,050 10 000	22,050 10 000	22,050 10 000	20,800 9 430	19,200 8 710	17,700 8 030	16,700 7 580	15,700 7 100							
161 ft 49.2m	22,050 lbs — 138 ft 10 000 kg — 42m	lbs kg	22,050 10 000	22,050 10 000	22,050 10 000	22,050 10 000	21,700 9 840	20,100 9 120	18,500 8 400									
123 ft 37.6m	22,050 lbs — 123 ft 10 000 kg — 37.6m	lbs kg	22,050 10 000	22,050 10 000	22,050 10 000													

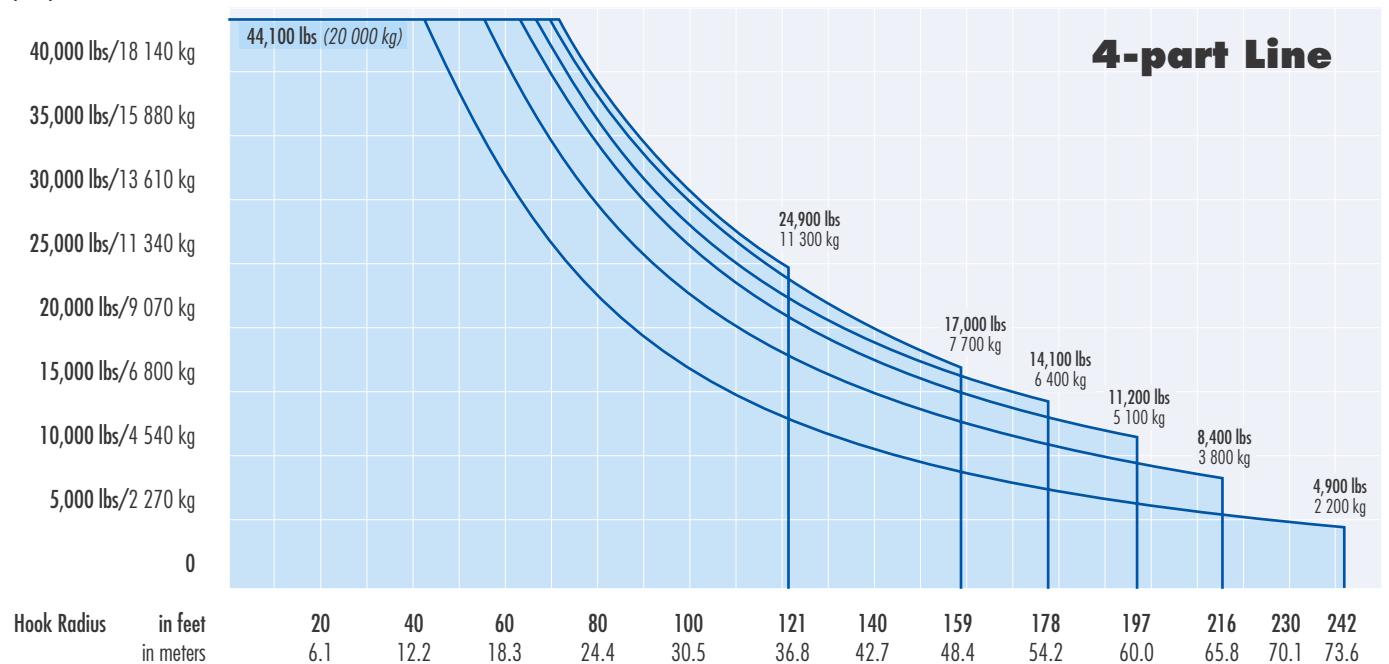


Radius and Capacities

4-part Line

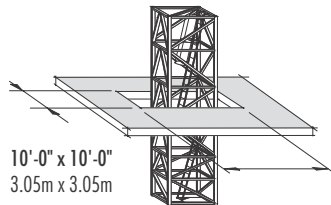
Hook Radius	4-Part Line Max Capacity — Radius	ft m	70 21.3	80 24.4	90 27.4	100 30.5	110 33.5	121 36.8	130 39.6	140 42.7	159 48.4	170 51.8	178 54.2	190 57.9	197 60.0	210 64.0	216 65.8	230 70.1	242 73.6
242 ft 73.6m	44,100 lbs — 46 ft 20 000 kg — 13.9m	lbs kg	26,300 11 930	22,300 10 120	19,400 8 800	16,900 7 670	15,000 6 800	13,200 5 990	12,000 5 440	10,900 4 940	9,100 4 130	8,300 3 760	7,700 3 490	6,900 3 130	6,600 2 990	5,900 2 680	5,700 2 590	5,100 2 310	4,900 2 200
216 ft 65.8m	44,100 lbs — 57 ft 20 000 kg — 17.5m	lbs kg	34,700 15 740	29,700 13 470	25,800 11 700	22,800 10 340	20,400 9 250	18,100 8 210	16,500 7 480	15,000 6 800	12,800 5 810	11,700 5 310	11,000 4 990	10,100 4 580	9,500 4 310	8,700 3 950	8,400 3 800		
197 ft 60.0m	44,100 lbs — 65 ft 20 000 kg — 19.8m	lbs kg	40,300 18 280	34,500 15 650	30,200 13 700	26,700 12 110	23,700 10 750	21,300 9 660	19,400 8 800	17,700 8 030	15,200 6 890	13,800 6 260	13,100 5 940	12,000 5 440	11,200 5 100				
178 ft 54.2m	44,100 lbs — 69 ft 20 000 kg — 20.9m	lbs kg	43,650 19 800	36,800 16 690	32,200 14 610	28,500 12 930	25,500 11 570	22,800 10 340	20,800 9 430	19,000 8 620	16,300 7 390	14,900 6 760	14,100 6 400						
159 ft 48.4m	44,100 lbs — 71 ft 20 000 kg — 21.6m	lbs kg	44,100 20 000	38,200 17 330	33,300 15 100	29,500 13 380	26,500 12 020	23,700 10 750	21,800 9 890	19,900 9 030	17,000 7 700								
121 ft 36.8m	44,100 lbs — 74 ft 20 000 kg — 22.5m	lbs kg	44,100 20 000	40,200 18 230	35,000 15 880	31,000 14 060	27,800 12 610	24,900 11 300											

Capacity



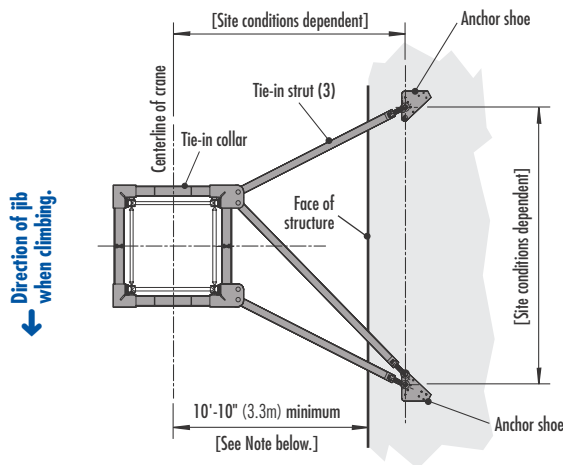
Pecco SK 405-20

NOTE: Recommended slab opening for erection and dismantlement. For other factors including deflection, contact Morrow engineering.



SLAB OPENING

Recommended
(TS 212/S35)



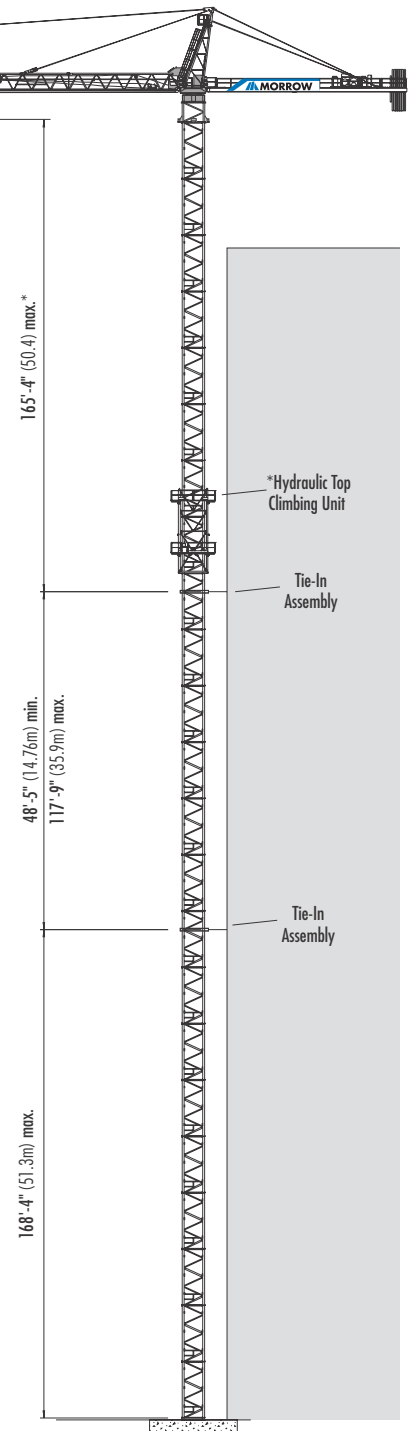
TIE-IN ASSEMBLY with TS 212 (S35) Tower plan view

NOTE: The tie-in assembly shown is an example of a typical installation when using S 35 (TS 212) tower. Please note, however, that factors determining the installation of tie-in assemblies may vary due to project specific requirements. Contact Morrow for additional information.

Consult SK 405-20 Operation Manual before erecting, operating, servicing or dismantling crane.

***NOTE:** Lower the top climbing unit to the uppermost tie-in prior to operating crane at maximum hook height.

Consult Morrow Equipment for specific information regarding dimensions, tie-in locations, reaction forces and slab openings.



TOP CLIMBING with TS 212 (S35) Tower plus TSK 212 climbing section

Hoist Speed and Capacity

Hoist Unit	SR WB 76 - 100/5/4F	2-Part Line					
102 hp (76 kW) AC hoist unit 4-speed gearbox Remote-controlled gear shifting Eddy current brake		Gear	Capacity	Hook Speed	Capacity	Hook Speed	
		1	22,050 lbs	@ 112 fpm	10 000 kg	@ 34 m/min	
		2	15,650 lbs	@ 177 fpm	7 100 kg	@ 54 m/min	
		3	9,200 lbs	@ 276 fpm	4 200 kg	@ 84 m/min	
		4	5,500 lbs	@ 440 fpm	2 500 kg	@ 134 m/min	
		4-Part Line					
		1	44,100 lbs	@ 56 fpm	20 000 kg	@ 17 m/min	
		2	31,300 lbs	@ 89 fpm	14 200 kg	@ 27 m/min	
		3	18,520 lbs	@ 138 fpm	8 400 kg	@ 42 m/min	
		4	11,000 lbs	@ 220 fpm	5 000 kg	@ 67 m/min	

2P 5L 250
4P 5L 125

IMPORTANT! Capacities and line speeds indicated will vary depending on the amount of hoist rope installed. This crane model may be equipped with a hoist unit other than that specified in the data above. To verify, check the serial number of the crane and refer to the SK 405-20 Operation Manual for additional information.

Motor Information

Drive Unit	Horsepower	Kilowatts	Speed	
Trolley (VFD)	10.1 hp	7.5 kW	max. 265 fpm	max. 80 m/min
Swing *	3 x 12.1 hp	3 x 9 kW	1.0 rpm	

* **NOTE:** Jibs up to and including 162-ft (49.2m) hook reach require only two swing motors; jibs with 180-ft (55m) hook reach and longer require three swing motors.

Power Requirements

Power supply: 3-phase 480 V, 60 Hz; 3-wire plus ground; no Neutral.

480 V phase-phase, 277 V each phase to ground with 120° phase shift between phases.

Service size: 250 Amperes (for 105 hp/78 kW AC hoist unit) or 300 Amperes (for 165 hp/122 kW AC hoist unit).

NOTES:

1. For electric power provided by an electric utility, do not use open Delta transformers.
2. For electric power provided by a generator, the minimum generator size required is 350kW for 105 hp and 500kW for 165 hp. A properly sized generator is critical to the safe operation of the crane.

Specifications are subject to change without prior notice. Drawings shown in this datasheet are for illustrative purposes only. Refer to the SK 405-20 Instruction Manual. For additional information, contact MORROW. All rights are reserved.

Component List

Description		Dimensions L x W x H	Weight	Description		Dimensions L x W x H	Weight
Tower Top		29'-4" x 7'-1" x 8'-11" 8.95m x 2.15m x 2.73m	8,600 lbs 3 900 kg	Jib Section ①		38'-9" x 6'-2" x 7'-2" 11.8m x 1.87m x 2.17m	7,030 lbs 3 190 kg
Turntable (Complete) ¹ Upper & Lower Part		9'-8" x 7'-9" x 7'-7" 2.95m x 2.35m x 2.3m	21,715 lbs 9 850 kg	Jib Section ②		38'-9" x 6'-1" x 6'-0" 11.8m x 1.84m x 1.82m	6,660 lbs 3 020 kg
Operator's Cab with Platform & Panel		8'-6" x 6'-7" x 7'-10" 2.58m x 2.0m x 2.4m	3,085 lbs 1 400 kg	Jib Section ③		38'-9" x 6'-1" x 6'-0" 11.8m x 1.84m x 1.82m	3,660 lbs 1 660 kg
Tower Section (TSK212)		6'-8" x 7'-10" x 9'-10" 2.02m x 2.4m x 3.0m	6,175 lbs 2 800 kg	Jib Section ④		38'-9" x 6'-1" x 6'-0" 11.8m x 1.84m x 1.82m	4,410 lbs 2 000 kg
Tower Section S35 (TS212)		19'-5" x 7'-10" x 8'-0" 5.92m x 2.4m x 2.44m	9,125 lbs 4 140 kg	Jib Section ⑤		19'-8" x 6'-1" x 6'-0" 6.0m x 1.84m x 1.82m	1,985 lbs 900 kg
Transition Section S60/S35		19'-5" x 7'-11" x 7'-11" 5.92m x 2.41m x 2.41m	9,930 lbs 4 500 kg	Jib Section ⑥		19'-8" x 6'-1" x 6'-0" 6.0m x 1.84m x 1.83m	1,435 lbs 650 kg
Tower Section S60 (TS213)		19'-5" x 7'-11" x 7'-11" 5.92m x 2.41m x 2.41m	9,930 lbs 4 500 kg	Jib Section ⑦		19'-8" x 6'-1" x 6'-0" 6.0m x 1.84m x 1.83m	1,235 lbs 560 kg
Counterjib ² (Complete)		69'-7" x 9'-0" x 5'-7" 21.2m x 2.75m x 1.7m	20,545 lbs 9 320 kg	Jib Section ⑧		26'-0" x 6'-1" x 6'-0" 7.92m x 1.84m x 1.83m	1,390 lbs 630 kg
Counterjib Section #1 (Inner)		31'-10" x 6'-6" x 5'-6" 9.71m x 1.98m x 1.67m	4,740 lbs 2 150 kg	Jib Section ⑨		10'-2" x 6'-0" x 6'-5" 3.1m x 1.82m x 1.95m	990 lbs 450 kg
Counterjib Section #2 (Outer) ³		38'-1" x 9'-0" x 5'-7" 11.6m x 2.75m x 1.7m	15,805 lbs 7 170 kg	Jib Assembly Part 1 ⁶ for all Jib Assemblies	①②	76'-2" x 6'-2" x 7'-2" 23.2m x 1.87m x 2.17m	19,550 lbs 8 870 kg
Hoist Unit ⁴ 102 hp (76 kW)		7'-6" x 5'-5" x 3'-3" 2.29m x 1.66m x 1.0m	5,400 lbs 2 450 kg	Jib Assembly Part 2 ⁷ 244-ft (74.4m)	③④⑤⑥⑦⑧⑨	168'-5" x 6'-1" x 6'-5" 51.34m x 1.84m x 1.95m	15,660 lbs 7 105 kg
Counterweight Block A		14'-9" x 7'-5" x 5'-1" 4.5m x 0.19m x 1.55m	6,835 lbs 3 100 kg	Jib Assembly Part 2 ⁷ 219-ft (66.6m)	③④⑤⑥⑦⑨	143'-1" x 6'-1" x 6'-5" 43.6m x 1.84m x 1.95m	14,100 lbs 6 395 kg
Counterweight Block B		9'-0" x 5'-5" x 3'-11" 2.74m x 0.14m x 1.2m	3,200 lbs 1 450 kg	Jib Assembly Part 2 ⁷ 200-ft (60.8m)	③④⑤⑥⑨	124'-1" x 6'-1" x 6'-5" 37.82m x 1.84m x 1.95m	12,840 lbs 5 825 kg
Trolley (Outer) ⁵ (2-part operation)		5'-7" x 6'-11" x 4'-3" 1.7m x 2.11m x 1.28m	950 lbs 430 kg	Jib Assembly Part 2 ⁷ 180-ft (55m)	③④⑤⑨	105'-1" x 6'-1" x 6'-5" 32.03m x 1.84m x 1.95m	11,980 lbs 5 435 kg
Hook Block		2'-5" x 1'-1" x 5'-10" 0.74m x 0.33m x 1.79m	1,100 lbs 500 kg	Jib Assembly Part 2 ⁷ 161-ft (49.2m)	③④⑨	85'-8" x 6'-1" x 6'-5" 26.1m x 1.84m x 1.95m	10,100 lbs 4 580 kg
Top Climbing Unit with Hydraulics (S35/TS212)		29'-3" x 11'-6" x 11'-6" 8.9m x 3.5m x 3.5m	24,750 lbs 11 230 kg	Jib Assembly Part 2 ⁷ 123-ft (37.6m)	③⑨	47'-8" x 6'-1" x 6'-5" 14.53m x 1.84m x 1.95m	6,000 lbs 2 720 kg

¹ Turntable (Complete) includes swing motors, slewing ring, slewing ring support.

² Includes Counterjib Sections #1 & #2, 102 hp (76 kW) hoist unit with frame, electrical panel and handrails. Does not include wire rope.

³ Counterjib Section #2 includes 102 hp (76 kW) hoist unit and handrails. Does not include wire rope.

⁴ Does not include wire rope.

⁵ Two-part operation requires a single (outer) trolley. Four-part operation requires two (inner and outer) trolleys. Inner and outer trolley dimensions and weights are the same.

⁶ Jib Assembly Part 1 includes jib sections, pendant cables, jib A-frame, trolley drive unit, trolley wire rope, 2-part trolley (outer) and hook block. If 4-part application is used, weight increases by 2,050 lbs (930 kg) for additional trolley (inner) and hook block.

⁷ Jib Assembly Part 2 includes jib sections and pendant cables.

NOTE: Weights and dimensions are approximate. Scale all components before installing. Please consult SK 405-20 Operation Manual before erecting, operating, servicing and dismantling crane or crane components. Specifications are subject to change without prior notification. Contact Morrow Equipment for additional information.