



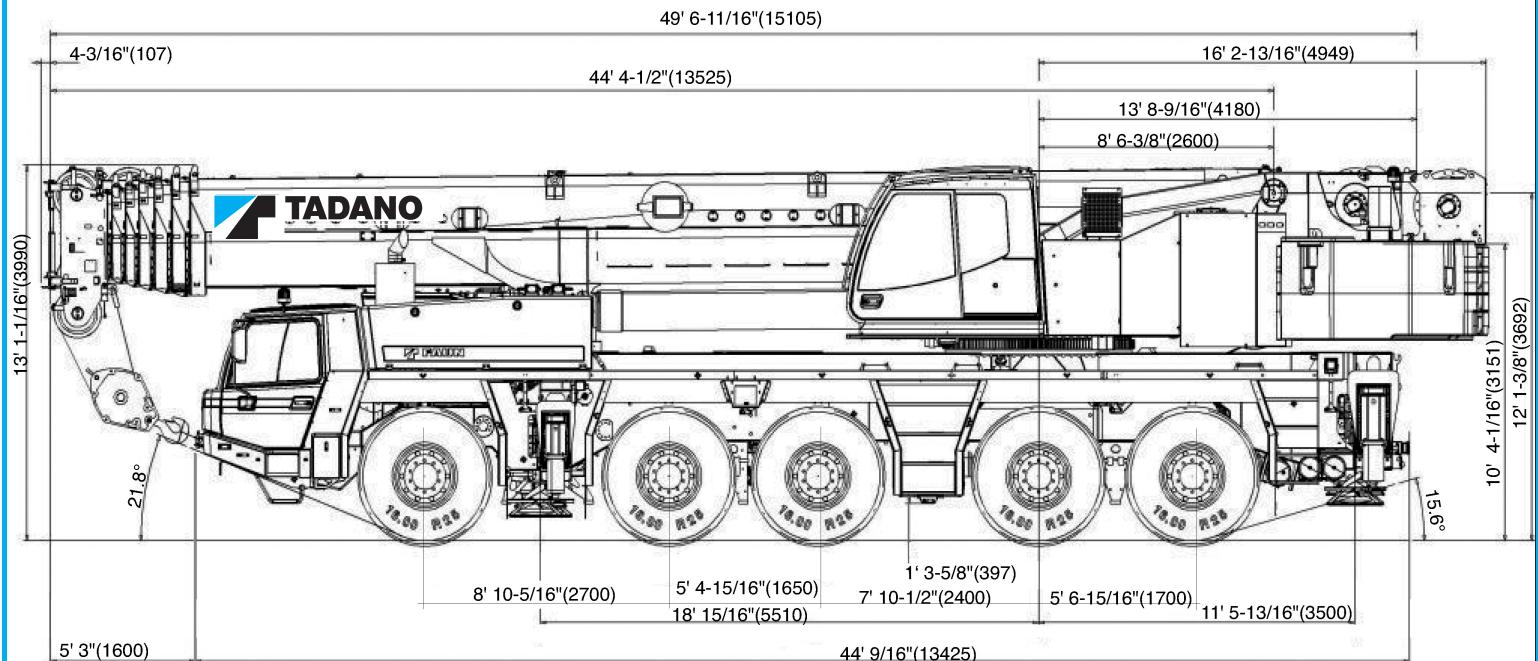
TADANO

ATF220G-5

250 Ton Capacity (223.2 Metric Tons)

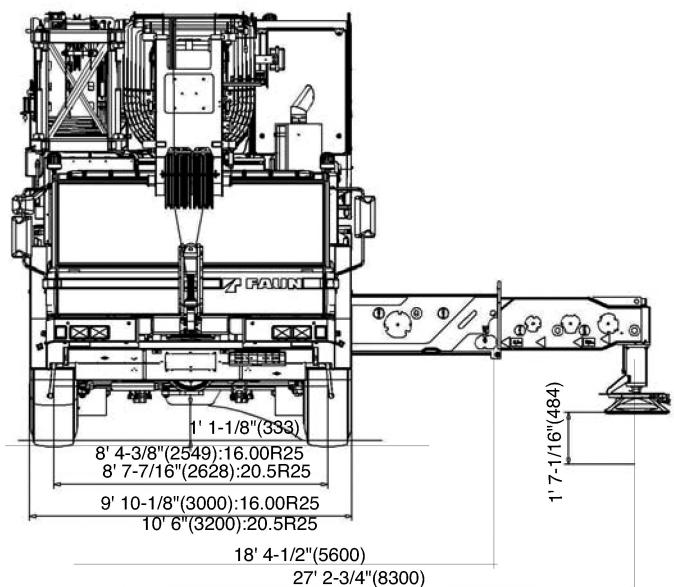
ALL TERRAIN CRANE

DIMENSIONS



TURNING RADIUS

Steering	All wheel (10x8)
Carrier inside	17' 4-11/16" (5.30m)
Over carrier	35' 9-1/8" (10.90m)
Over boom	38' 11/16" (11.60m)
Over boom extension	40' 4-1/4" (12.30m)



Specifications are subject to change without notice.

1. CRANE CARRIER

1.1 FRAME

FAUN purpose built, 5 axle, box type, torsion resistant, welded construction made of high tensile steel with integrated outrigger housings. Equipped with front and rear fenders, front and rear towing and tie-down lugs and access ladders.

1.2 OUTRIGGERS

Four point, fully hydraulic, horizontal and vertical motions controlled by electro-magnetic valves. Push button controls with level gauges from both sides of the carrier and from superstructure cab. Vertical cylinders with integral holding valves. Large sized floats can be stored on vertical cylinders or on carrier for road travel.

Outrigger base: length 29' 6-3/4" (9.01m), width 27' 2-3/4" (8.30m)

Mid. extension 18' 4-1/4" (5.60m)

Outrigger floats : 1' 11-5/8" (600mm) x 1' 11-5/8" (600mm)

1.3 CARRIER ENGINE

Mercedes Benz 8 cylinder water cooled diesel engine, model OM 502 LA (Euromoto 3/ EPA 3), with hydrostatically driven fan and thermostatically controlled cooler.

Displacement 972 in³ (15,928 cc), Rating 517 HP (380 KW) at 1,800 rpm

Torque 1,770 ft-lbf (2,400 Nm) at 1,300 rpm.

1.4 TRANSMISSION

ZF AS-Tronic 16AS2602 mechanical transmission with integrated retarder. Fully automatic gear control. 16 forward gears and 2 reverse gears.

Gear ratios: Forward: 14.12 / 11.68 / 9.54 / 7.89 / 6.52 / 5.39 / 4.57

3.78 / 3.09 / 2.56 / 2.09 / 1.73 / 1.43 / 1.18 / 1.00 / 0.83

Reverse: 13.07 / 10.81

1.5 TRANSFER CASE

Two stage transfer case, type VG3750, is flange mounted to 4th axle.

Reduction ratios: on road 0.8/ off road 1.836

1.6 DRIVE

10x8: for on road: 1st, 2nd, 4th and 5th axles are driven

for off road: Inter-axle and inter-wheel differentials locked.

10x6 (OPTIONAL) : 2nd, 4th and 5th axles are driven

1.7 AXLES

1st axle :steered, driven with Inter-wheel lock
reduction : 8.47

steered, non driven (OPTION)

2nd axle steered, driven with inter-wheel lock
reduction : 8.47

3rd axle :Non driven, non steered, can be lifted for diagonal steering

4th axle :steered, driven with inter-wheel lock
reduction : 8.47

with lockable inter-axle differential

5th axle :steered, driven with inter-wheel lock
reduction : 8.47

All steering knuckle bearings designed for minimum maintenance (yearly inspection).

1.8 SUSPENSION

Hydro-pneumatic, lockable with level adjustment. All axles have longitudinal and transverse trailing arms. With leveling adjustment and locked cylinders, the chassis can be tilted laterally and longitudinally from the control panel in the carrier cab or from the outrigger control boxes, which adjust the stroke of each individual suspension cylinder.

Cylinder stroke:+6-1/4" (+158mm) , -4-1/2" (-118mm)

1.9 BRAKE SYSTEM

Service : Dual circuit compressed air system with air-dryer

Parking : Spring loaded type, acting on 2nd, 4th and 5th axles.

Auxiliary : Intarder,engine exhaust brake and constant throttle engine brake system.

1.10 WHEELS

(10) 11.00-25 steel disc wheels with 16.00R25 (445/95R25) on / off-road profile tires and mud flaps.

1.11 STEERING SYSTEM

ZF Servocom dual circuit hydraulic steering. Mechanical steering of front two axles with hydraulic booster.

An emergency steering pump is flange mounted to the transfer case.

In on road mode at speeds up to 15.5 mph (25 km/h), 4th and 5th axles are steered electronically along with the front two axles. When exceeding 15.5 mph (25 km/h), 4th axle is locked in centered position. When exceeding 31.1 mph (50 km/h), 5th axle is locked in centered position.

In off road mode, four steering modes are available in 1st, 2nd and 3rd gear with 3rd axle lifted; 8 wheel coordinated, 8 wheel crab, manual steering of the rear two axles and automatic steering of the rear two axles.

1.12 POWER TRAIN

Drive shafts with cross geared flanges designed for minimum maintenance. Centralized lubrication system.

1.13 FUEL TANK CAPACITY

140 gal (530 l) capacity with One-Key System, lockable fuel cap.

1.14 CARRIER CAB

Two man full width cab of composite structure (steel sheet metal and fiber glass), windshield of laminated safety glass with windshield wiper and washer, sliding side windows of hardened glass. Driver and co-driver seats adjustable and air-suspended with integrated 3 point safety belts and headrests. 2 rear-view mirrors (electrically adjustable), 1 wide angle mirror and additional curb mirror, all mirrors heated. Radio with CD player and connections for wireless. Engine dependent warm-water heater with defroster nozzles for windshield and cab floor.

Instrumentation includes speedometer, odometer, tachograph, rpm counter with hour meter, fuel level gauge, warning light for engine temperature, CMV color display for further warning signals and operating functions, malfunction and diagnosis via the transmission display.

Control panel for electronic rear axle steering.

Air conditioning (OPTIONAL)

1.15 ELECTRICAL SYSTEM

24 volt DC system with 100 ampere 3-phase generator, and two 12 volt 170 Ah batteries.

Front lighting includes 2 low beam head lights, 2 high beam head lights, 2 directional indicators, 2 fog lights.

Rear lighting includes 2 rear combination panels each with directional indicator, brake light, fog light, reversing light and license plate light.

Side lighting includes 2 front directional indicators and reflectors on carrier.

Other equipment includes hazard warning lights, cab light, instrument panel light, signal horn and amber rotating beacon on cab roof and 4 working lights for outrigger extension area.

Lighting according to EEC regulations.

1.16 TOOLS AND ACCESSORIES

Special tool set, hazard warning light, hazard warning triangle, fire extinguisher and first aid kit.

1.17 PAINTING

Standard TADANO colors

2. SUPERSTRUCTURE

1.18 DIMENSIONS

Overall width :	9' 10-1/8" (3.00m) with 16.00R25 tires 10' 6" (3.20m) with 20.5R25 tires (OPTIONAL)
Overall height :	13' 1-1/16" (3.99m) with 16.00/20.5R25 tires in travel condition. The overall height can be adjusted by +6-1/4" (+158mm), -4-1/2" (-118mm).
Overall length :	49' 6-11/16" (15.105m)
Carrier length :	44' 9/16" (13.425m)
Wheel base :	8'10-1/4" + 5'4-15/16" + 8'1/16" + 5'6-15/16" (2.7m + 1.65m + 2.44m + 1.7m)
Track:	8' 4-3/8" (2.549m) with 16.00R25 tires 8' 7-7/16" (2.628m) with 20.5R25 tires (OPTIONAL)

1.19 TRAVEL PERFORMANCE (according to DIN 70020)

Max. travel speed : 52.8 mph(85 km/h)
Min. travel speed at 800 rpm : 0.6 mph with the clutch closed
Max. gradeability : 61 %

Tires 16.00/20.5R25, Total GVW 132,275 lbs				
Gear	Travel speeds (mph) * max. engine revs		Gradeability (%)	
	off-road	on-road	off-road	on-road
1st	1.9	3.7	61	47
2nd	1.9	4.3	47	39
3rd	2.5	5.0	37	31
4th	2.5	6.2	30	25
5th	3.1	7.5	24	20
6th	4.3	9.3	19	16
7th	5.0	11.2	16	14
8th	5.6	13.0	13	11
9th	6.8	16.2	11	9
10th	8.7	19.3	8	7
11th	10.6	23.6	7	6
12th	12.4	28.6	5	4
13th	14.9	34.8	4	3
14th	18.6	42.3	3	3
15th	21.7	49.7	3	2
16th	26.0	52.8	2	1
1st reverse	1.9	3.7	55	45
2nd reverse	1.9	4.3	43	36

The gradeability is based on theoretical values and depends on ground conditions and the coefficient of friction.

1.20 CARRIER OPTIONAL EQUIPMENT

1. 10 x6 drive (10x8 drive Std.)
2. Eddy-current retarder brake
3. ABS
4. 14.00R25 on/off road profile tires-overall width 9' 10-1/8" (3.00m)
5. 20.5R25 on/off road profile tires-overall width 10' 6" (3.20m)
6. Spare wheel
7. Towing coupling (D value 190 kN) with light and brake connection
8. Air and electrical lines to rear bumper with quick connectors for boom dolly
9. Free swing and boom elevation circuits for boom dolly
10. Rear tool box
11. Spark arrester
12. Charging plug box for remote engine starting
13. Additional hot water heater with engine pre-heat and window defroster (Webasto Thermo 90S)
14. Additional hot air cab heater (Webasto Airtop 3500)
15. Air conditioning
16. Reversing video camera (image in CMV display)

2.1 SUPERSTRUCTURE FRAME

Torsion resistant, all welded structure of high tensile steel. Connected to carrier by single race ball bearing slewing ring with external gearing providing 360° continuous rotation. Central lubrication system for ball bearing slewing ring, boom elevation cylinder, boom pivot and winch.

2.2 CRANE ENGINE

Mercedes Benz 6 cylinder water cooled diesel engine, model OM 906 LA(EUROMOT 3A/EPA 3) with stepless control of engine rpm by foot pedal.
Displacement 389 in³(6,370cc) , Rating 188 hp at 1,800 rpm
Torque 553 ft-lbf(750 Nm) at 1,200-1,600 rpm
Fuel tank capacity : 66.0 gal(250 l)

2.3 HYDRAULIC SYSTEM

Three circuit diesel hydraulic system with 1 double axial piston variable displacement pump(hydraulically controlled) with cumulative control for telescoping, derricking and hoisting. 1 axial piston pump for slewing and 1 gear pump for pilot control.

2.4 HYDRAULIC CONTROLS

Two joy stick levers with 4 three-way electrically operated valves for independent simultaneous operation of all crane motions with infinite speed control.

2.5 TELESCOPIC BOOM

Seven section box type construction of high tensile steel, consisting of 1 base section and 6 telescopic sections. The boom is extended by means of 1 double acting single stage hydraulic cylinder. All boom telescope sections can be extended and retracted fully automatically and locked in the selected working position. All telescope sections are extendable under partial load.
Total retracted length : 43' 7-5/8" (13.30m)
Total extended length : 223' 1-3/16" (68.0m)
Max. sheave height : 229' 7-7/8" (70.0m)
Telescoping speed out : 430 sec.

2.6 BOOM EXTENSION

17.7 ft (5.4m) - 43.3 ft (13.2m) double folding swing around lattice type boom extension offsettable at 0°/20°/40°.
4 intermediate section (19.7ft each), increase the boom extension length to 122.0ft (37.2m). Equipped with anti-two block system.

2.7 AUXILIARY LIFTING SHEAVE (SINGLE TOP) - OPTIONAL

Single sheave mounted to main boom head for single line operation (stowable). Equipped with anti-two block system .

2.8 BOOM HOIST

1 double acting hydraulic cylinder with integral holding valve.
Boom elevation : -1.5° to +84°
Boom elevation speed : 95 sec. normal speed
50 sec. high speed (only derricking up)

2.9 MAIN WINCH

Axial piston constant displacement motor, grooved hoist drum with integral planetary gear, automatic hydraulically controlled spring loaded multiple disc brake and integral free wheeling (no sagging of load by hoisting). Winch drive assembly connected to open hydraulic system.

Wire rope with "Superstop" easy reeving.

Lower limit switch and drum turn indicator.

Drum diameter : 17.87" (450 mm)

Rope diameter : 0.83' (21 mm)

Rope length : 1,148.5' (350 m)

Max. line pull : 24,504 lbf (109 kN)

Max. line speed 4th layer : 420 ft/min (128m/min)

2.10 AUXILIARY WINCH - OPTIONAL

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Max. line speed 4th layer : 420 ft/min (128m/min)

2.11 SLEWING GEAR

Constant displacement motor with three stage planetary gear, foot actuated service brake and a parking brake.

Slewing speed infinitely variable: 0 - 1.8 rpm

2.12 COUNTERWEIGHT

Total 156,525 lb divisible counterweight, assembled and disassembled by hydraulic cylinders controlled from crane cab.

Tail swing : 16.34' (4.98m)

2.13 SUPERSTRUCTURE CAB

Spacious and ergonomic panoramic cab with sliding door and extra large tinted glass windows, electrically controlled fold out front window with windshield washer and wiper, fixed cab roof window with armoured glass and fold out rear cab window, sun visor, cab light, 20° tiltable cockpit, adjustable hydraulically cushioned seat with headrest, signal horn, radio with CD player, and connection for wireless (12 volt).

Engine independent hot water heater with defroster nozzles for windshield and cab floor (Webasto Thermo 90S).

Ergonomically positioned control elements and instrumentation for crane operation including fuel level gauge, engine cooling temperature, hour meter and combined engine warning lamp.

Outrigger and chassis engine functions control from superstructure cab.

One-key system for the both carrier and crane cabs.

Air conditioning (OPTIONAL)

2.14 ELECTRICAL SYSTEM

24 volt system with 30 A 3-phase alternator, 2 batteries each 12 V and 110 Ah, 1 rotating beacon on left hand side of main winch, 2 working lights on cab front flap, 1 working light on base boom section and 2 side lights on boom head.

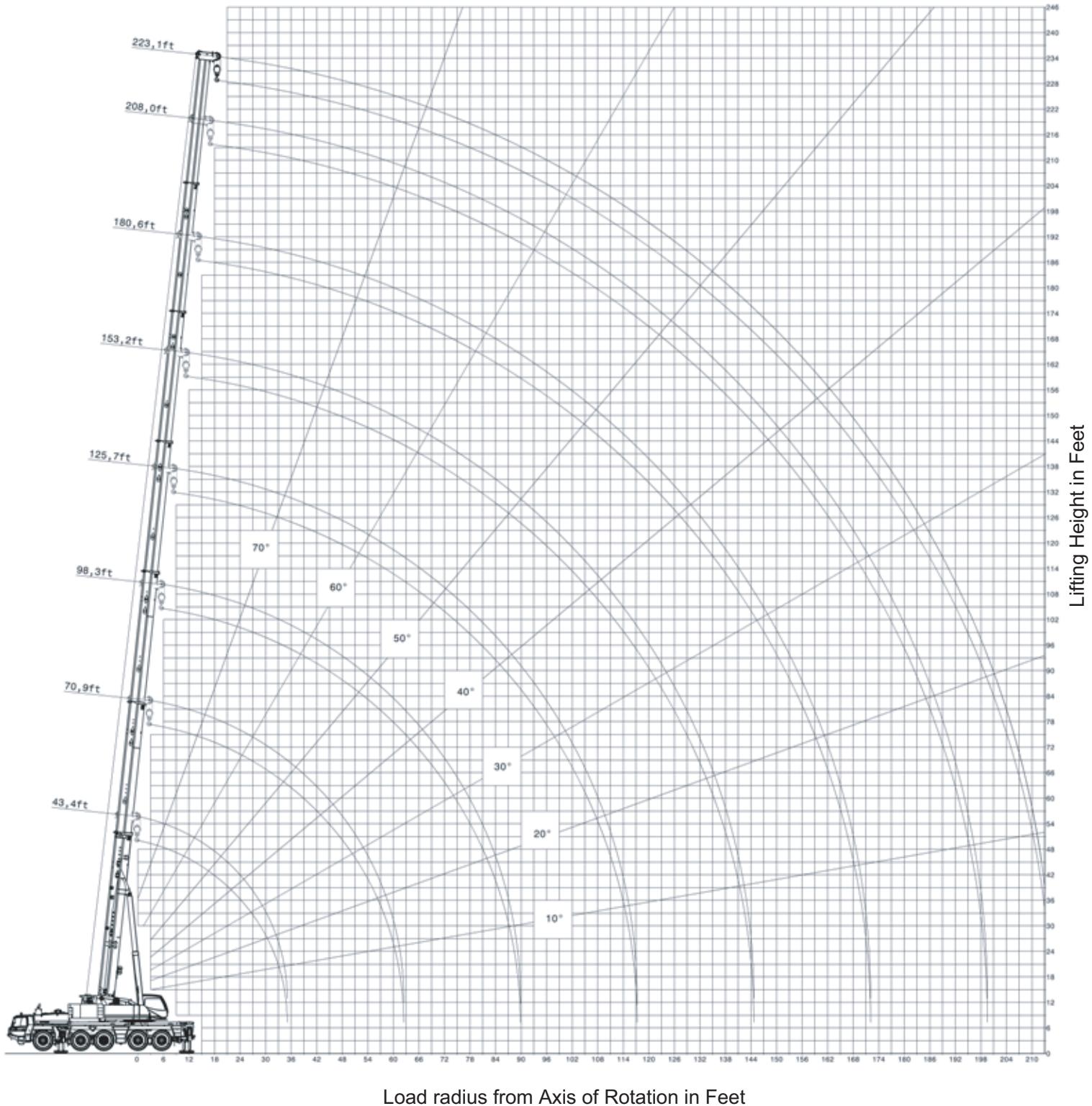
2.15 SAFETY DEVICES

Electronic load moment device (AML) with interpolation and automatic overload shut off, hoist limit switch with shut off, overload warning and load moment indicator. Digital display of boom angle, boom length, sheave height, working radius, hook load and further information. Working area limitation for boom angle, sheave height and working radius with automatic shut off. Lift Adjuster function, Anti-two block system, anemometer on the main boom head or on the jib head. Safety valves against pipe and hose rupture, holding valves on hydraulic cylinders.

2.16 SUPERSTRUCTURE OPTIONAL EQUIPMENT

1. 11 ton headache ball
2. 27.6 ton single sheave hook block
3. 69.5 ton three sheave hook block
4. 88.2 ton five sheave hook block
5. 137.8 ton seven sheave hook block
6. 176.3 ton nine sheave hook block
7. Additional boom sheaves for more than 120 ton lift
8. Auxiliary winch with 0.83" (21mm) cable
9. Auxiliary lifting sleeve (Single Top)
10. Additional hydraulic oil cooler
11. Spark arrester
12. 33' (10m) cable for battery recharge and remote start connections
13. 360° positive swing lock for NYC
14. Lockable tool box behind crane cab
15. Aircraft warning light
16. Two electrically movable working lights on base boom (Not in combination with Boom Dolly)
17. Outrigger load display
18. Electric fan
19. Air conditioning
20. Boom dismounting device

ATF220G-5 WORKING RANGE CHART



Counterweight 156,527 lbs

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 27.23 ft											Working Radius (ft)	
	Boom length (ft)												
	139.4 °	139.4 °	139.4 °	139.4 °	153.2 °	153.2 °	153.2 °	167.0 °	167.0 °	167.0 °	167.0 °		
8												8	
9												9	
10												10	
12												12	
14												14	
16												16	
18												18	
20	82	95.9	82	82.9	82	69.4	82	56.2				20	
25	79	95.9	79	82.9	79	69.4	79	56.2	80	76.1	80	47.2	
30	78	95.0	78	82.9	78	69.3	78	55.1	79	76.1	79	45.6	
35	76	88.3	76	82.9	76	66.4	76	52.5	77	75.5	77	52.8	
40	74	82.4	74	82.5	74	62.3	74	49.1	76	71.3	76	50.0	
45	71	78.4	71	79.1	71	59.6	71	45.3	73	67.0	73	47.8	
50	69	73.0	69	74.1	69	56.2	69	41.9	72	64.1	72	45.2	
55	67	67.6	67	68.8	67	52.9	67	39.0	70	61.1	70	42.8	
60	65	62.7	65	63.8	65	50.0	65	36.4	68	57.6	68	40.6	
65	62	58.3	62	59.6	62	47.5	62	34.0	66	54.4	66	38.6	
70	60	54.5	60	55.8	60	45.1	60	32.0	64	51.7	64	36.9	
75	58	51.1	58	52.4	58	43.0	58	30.1	62	48.9	62	35.2	
80	55	47.8	55	49.3	55	41.2	55	28.5	59	46.1	59	33.6	
85	52	44.1	52	46.3	52	39.6	52	27.0	57	43.8	57	32.3	
90	49	40.2	49	42.4	49	38.0	49	25.6	55	41.4	55	30.9	
95	46	36.8	46	38.9	46	36.6	46	24.4	52	38.5	52	29.7	
100	43	33.7	43	35.7	43	35.3	43	23.3	49	35.3	49	28.6	
110	36	28.2	36	30.3	36	33.0	36	21.4	44	29.9	44	26.7	
120	27	23.7	27	25.9	27	29.1	27	19.8	38	25.5	38	25.0	
130								29	21.6	29	23.5	29	
140								16	18.4	16	20.3	16	
150									16.5	32	18.6	32	
160										23	16.1	23	
170											18.7	23	
180												15.3	
190												160	
200												170	
210												180	
	Telescoping sequence %												
Tel. 1	92	92	46	0	92	46	0	92	92	92	0	Tel. 1	
Tel. 2	92	46	46	0	92	46	0	92	46	46	46	Tel. 2	
Tel. 3	46	46	46	46	46	46	92	92	92	46	92	Tel. 3	
Tel. 4	46	46	46	92	46	46	92	46	46	46	92	Tel. 4	
Tel. 5	46	46	46	92	46	92	92	46	46	92	92	Tel. 5	
Tel. 6	0	46	92	92	46	92	92	46	92	92	92	Tel. 6	

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 27.23 ft											Working Radius (ft)
	Boom length (ft)											
	180.4 °	180.4 °	180.4 °	194.2 °	194.2 °	208.0 °	223.1 °					
8												8
9												9
10												10
12												12
14												14
16												16
18												18
20												20
25												25
30	81	50.7	81	42.3	81	37.3	80	41.4	80	33.1		30
35	79	50.7	79	42.3	79	37.3	79	41.4	79	33.1	81	27.6
40	79	50.7	79	42.3	79	37.3	79	41.4	79	33.1	80	27.6
45	77	50.3	77	42.3	77	37.3	77	41.4	77	33.1	79	27.6
50	76	48.9	76	42.3	76	37.3	76	41.4	76	33.1	78	27.6
55	74	46.9	74	41.8	74	37.3	75	41.0	75	33.1	77	27.6
60	73	44.6	73	40.6	73	36.9	74	40.0	74	33.1	76	27.6
65	71	42.4	71	38.4	71	35.1	72	38.1	72	33.1	74	27.6
70	69	40.2	69	36.5	69	33.2	71	36.4	71	32.9	73	27.6
75	67	38.2	67	34.7	67	31.5	69	34.8	69	32.0	72	31.9
80	66	36.4	66	32.9	66	29.9	68	33.2	68	30.5	71	30.6
85	64	34.7	64	31.4	64	28.5	66	31.8	66	29.2	69	29.4
90	62	33.2	62	29.9	62	27.2	65	30.5	65	27.8	68	28.2
95	60	31.8	60	28.5	60	25.9	63	29.1	63	26.7	66	27.0
100	59	30.4	59	27.2	59	24.8	62	27.8	62	25.6	65	25.9
110	55	27.9	55	25.0	55	22.8	58	25.7	58	23.5	61	24.1
120	50	25.0	50	22.8	50	20.6	54	23.7	54	21.7	58	22.2
130	46	22.2	46	20.8	46	18.5	50	21.1	50	20.0	54	20.7
140	40	19.2	40	18.8	40	16.8	46	18.9	46	18.1	51	18.4
150	34	16.5	34	17.1	34	15.1	41	16.7	41	16.7	46	16.7
160	26	14.3	26	15.8	26	13.9	35	14.9	35	15.3	42	15.3
170		17	14.4	17	12.6	29	12.9	29	14.0	37	13.8	43
180						19	11.2	19	12.9	31	12.1	39
190									23	10.4	34	9.5
200										28	8.6	200
210										18	7.7	210
	Telescoping sequence %											
Tel. 1	92	46	0	92	46	92	100					Tel. 1
Tel. 2	92	92	92	92	92	92	100					Tel. 2
Tel. 3	92	92	92	92	92	92	92	100				Tel. 3
Tel. 4	92	92	92	92	92	92	92	100				Tel. 4
Tel. 5	46	92	92	92	92	92	92	100				Tel. 5
Tel. 6	46	46	92	92	46	92	92	100				Tel. 6

Counterweight 103,616 lbs

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 27.23 ft										Working Radius (ft)	
	Boom length (ft)											
	139.4 °	139.4 °	139.4 °	139.4 °	153.2 °	153.2 °	153.2 °	167.0 °	167.0 °	167.0 °		
8											8	
9											9	
10											10	
12											12	
14											14	
16											16	
18											18	
20	82	95.9	82	82.9	82	69.4	82	56.2			20	
25	79	95.9	79	82.9	79	69.4	79	56.2	80	76.1	25	
30	78	95.0	78	82.9	78	69.3	78	55.1	79	76.1	30	
35	76	88.3	76	82.9	76	66.4	76	52.5	77	75.5	35	
40	74	82.4	74	82.5	74	62.3	74	49.1	76	71.3	40	
45	71	78.4	71	79.1	71	59.6	71	45.3	73	67.0	45	
50	69	69.7	69	71.6	69	56.2	69	41.9	72	64.1	50	
55	67	60.4	67	62.9	67	52.9	67	39.0	70	59.9	55	
60	65	51.8	65	54.3	65	50.0	65	36.4	68	53.8	60	
65	62	44.9	62	47.4	62	47.5	62	34.0	66	46.9	65	
70	60	39.5	60	43.1	60	44.2	60	32.0	64	41.4	70	
75	58	35.6	58	39.5	58	40.3	58	30.1	62	37.2	75	
80	55	32.8	55	35.9	55	36.4	55	28.5	59	34.1	80	
85	52	29.9	52	32.4	52	33.9	52	27.0	57	31.0	85	
90	49	26.9	49	29.3	49	31.8	49	25.6	55	28.3	90	
95	46	24.0	46	26.4	46	29.5	46	24.4	52	25.8	95	
100	43	21.3	43	23.7	43	27.0	43	23.3	49	23.3	100	
110	36	17.1	36	19.4	36	22.7	36	21.4	44	18.9	110	
120	27	13.5	27	15.9	27	19.0	27	19.8	38	15.3	120	
130									29	12.5	130	
140									16	10.0	140	
150									16	14.6	150	
160									16	16.5	160	
170									16	22.0	170	
180									16	22.0	180	
190									16	22.0	190	
200									16	22.0	200	
210									16	22.0	210	
Telescoping sequence %												
Tel. 1	92	92	46	0	92	46	0	92	92	0	Tel. 1	
Tel. 2	92	46	46	0	92	46	0	92	46	46	Tel. 2	
Tel. 3	46	46	46	46	46	46	92	92	46	92	Tel. 3	
Tel. 4	46	46	46	92	46	46	92	46	46	92	Tel. 4	
Tel. 5	46	46	46	92	46	92	92	46	92	92	Tel. 5	
Tel. 6	0	46	92	92	46	92	92	46	92	92	Tel. 6	

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 27.23 ft										Working Radius (ft)	
	Boom length (ft)											
	180.4 °	180.4 °	180.4 °	194.2 °	194.2 °	208.0 °	223.1 °					
8											8	
9											9	
10											10	
12											12	
14											14	
16											16	
18											18	
20											20	
25											25	
30	81	50.7	81	42.3	81	37.3					30	
35	79	50.7	79	42.3	79	37.3	79	41.4	80	33.1	35	
40	79	50.7	79	42.3	79	37.3	79	41.4	79	33.1	40	
45	77	50.3	77	42.3	77	37.3	77	41.4	77	33.1	45	
50	76	48.9	76	42.3	76	37.3	76	41.4	76	33.1	50	
55	74	46.9	74	41.8	74	37.3	75	41.0	75	33.1	55	
60	73	44.6	73	40.6	73	36.9	74	40.0	74	33.1	60	
65	71	42.4	71	38.4	71	35.1	72	38.1	72	33.1	65	
70	69	40.2	69	36.5	69	33.2	71	36.4	71	32.9	70	
75	67	37.9	67	34.7	67	31.5	69	34.8	69	32.0	75	
80	66	35.5	66	32.9	66	29.9	68	33.0	68	30.5	80	
85	64	33.0	64	31.4	64	28.5	66	31.0	66	29.2	85	
90	62	29.8	62	29.7	62	27.2	65	29.0	65	27.8	90	
95	60	27.0	60	28.0	60	25.9	63	27.0	63	26.6	95	
100	59	24.4	59	26.3	59	24.8	62	24.9	62	25.3	100	
110	55	20.0	55	22.2	55	22.5	58	20.7	58	22.3	110	
120	50	16.3	50	18.5	50	20.1	54	17.1	54	19.3	120	
130	46	13.2	46	15.4	46	17.5	50	14.3	50	16.4	130	
140	40	10.9	40	13.1	40	15.0	46	11.6	46	14.0	140	
150	34	8.8	34	10.8	34	12.8	41	9.4	41	11.8	150	
160	26	6.9	26	9.0	26	11.0	35	7.6	35	9.9	160	
170		17	7.6	17	9.6	29	6.3	29	8.3	37	170	
180						19	4.8	19	7.0	31	180	
190									23	4.4	190	
200										28	200	
210										18	210	
Telescoping sequence %												
Tel. 1	92	46	0	92	46	92	100	Tel. 1				
Tel. 2	92	92	92	92	92	92	100	Tel. 2				
Tel. 3	92	92	92	92	92	92	100	Tel. 3				
Tel. 4	92	92	92	92	92	92	100	Tel. 4				
Tel. 5	46	92	92	92	92	92	100	Tel. 5				
Tel. 6	46	46	92	46	92	92	100	Tel. 6				

Counterweight 77,161 lbs

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 27.23 ft										Working Radius (ft)	
	Boom length (ft)											
	139.4 °	139.4 °	139.4 °	139.4 °	153.2 °	153.2 °	153.2 °	167.0 °	167.0 °	167.0 °		
8											8	
9											9	
10											10	
12											12	
14											14	
16											16	
18											18	
20	82	95.9	82	82.9	82	69.4	82	56.2			20	
25	79	95.9	79	82.9	79	69.4	79	56.2	80	76.1	25	
30	78	95.0	78	82.9	78	69.3	78	55.1	79	76.1	30	
35	76	88.3	76	82.9	76	66.4	76	52.5	77	75.5	35	
40	74	77.1	74	79.7	74	62.3	74	49.1	76	71.1	40	
45	71	66.0	71	68.6	71	59.6	71	45.3	73	65.2	45	
50	69	56.8	69	59.3	69	56.2	69	41.9	72	57.7	50	
55	67	48.6	67	51.0	67	52.1	67	39.0	70	50.2	55	
60	65	41.5	65	43.9	65	47.6	65	36.4	68	43.5	60	
65	62	37.3	62	39.6	62	43.9	62	34.0	66	39.1	65	
70	60	33.4	60	35.6	60	39.2	60	32.0	64	35.2	70	
75	58	29.5	58	31.9	58	35.0	58	30.1	62	31.3	75	
80	55	25.7	55	28.3	55	31.4	55	28.5	59	27.6	80	
85	52	22.5	52	24.9	52	28.2	52	27.0	57	24.2	85	
90	49	19.7	49	22.2	49	25.5	49	25.6	55	21.7	90	
95	46	17.2	46	19.6	46	23.0	46	24.3	52	19.1	95	
100	43	14.8	43	17.2	43	20.7	43	23.0	49	16.8	100	
110	36	11.1	36	13.4	36	16.9	36	20.5	44	12.9	110	
120	27	8.3	27	10.5	27	13.8	27	17.8	38	9.9	120	
130								29	7.4	29	12.2	
140								16	5.4	16	10.0	
150								16	12.3	32	5.4	
160								23	3.9	23	6.5	
170											170	
180											180	
190											190	
200											200	
210											210	
Telescoping sequence %												
Tel. 1	92	92	46	0	92	46	0	92	92	0	Tel. 1	
Tel. 2	92	46	46	0	92	46	0	92	46	46	Tel. 2	
Tel. 3	46	46	46	46	46	46	92	92	46	92	Tel. 3	
Tel. 4	46	46	46	92	46	46	92	46	46	92	Tel. 4	
Tel. 5	46	46	46	92	46	92	92	46	92	92	Tel. 5	
Tel. 6	0	46	92	92	46	92	92	46	92	92	Tel. 6	

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 27.23 ft										Working Radius (ft)	
	Boom length (ft)											
	180.4 °	180.4 °	180.4 °	194.2 °	194.2 °	208.0 °	223.1 °					
8											8	
9											9	
10											10	
12											12	
14											14	
16											16	
18											18	
20											20	
25											25	
30	81	50.7	81	42.3	81	37.3					30	
35	79	50.7	79	42.3	79	37.3	79	41.4	80	33.1	35	
40	79	50.7	79	42.3	79	37.3	79	41.4	79	33.1	40	
45	77	50.3	77	42.3	77	37.3	77	41.4	77	33.1	45	
50	76	48.9	76	42.3	76	37.3	76	41.4	76	33.1	50	
55	74	46.7	74	41.8	74	37.3	75	41.0	75	33.1	55	
60	73	43.6	73	40.6	73	36.9	74	40.0	74	33.1	60	
65	71	38.5	71	38.4	71	35.1	72	38.1	72	33.1	65	
70	69	35.0	69	35.5	69	33.2	71	36.4	71	32.9	70	
75	67	31.9	67	32.7	67	31.5	69	33.5	69	31.7	75	
80	66	29.0	66	30.2	66	29.6	68	29.8	68	29.7	80	
85	64	25.8	64	27.7	64	27.3	66	26.4	66	27.7	85	
90	62	22.9	62	25.0	62	25.2	65	23.6	65	25.7	90	
95	60	20.4	60	22.6	60	23.4	63	21.0	63	23.4	95	
100	59	18.1	59	20.3	59	21.8	62	18.8	62	21.2	100	
110	55	14.2	55	16.4	55	18.4	58	14.9	58	17.3	110	
120	50	11.0	50	13.3	50	15.4	54	11.8	54	14.2	120	
130	46	8.3	46	10.5	46	12.7	50	9.3	50	11.5	130	
140	40	6.2	40	8.4	40	10.6	46	7.1	46	9.3	140	
150	34	4.3	34	6.5	34	8.8	41	5.2	41	7.5	150	
160	26	2.7	26	5.0	26	7.2	35	3.5	35	6.0	160	
170		17		3.8	17	5.6		29	4.5	37	3.2	
180								19	3.5			
190											190	
200											200	
210											210	
Telescoping sequence %												
Tel. 1	92	46	0	92	46	92	100	67	18.1	100	Tel. 1	
Tel. 2	92	92	92	92	92	92	100	100	Tel. 2			
Tel. 3	92	92	92	92	92	92	100	100	Tel. 3			
Tel. 4	92	92	92	92	92	92	100	100	Tel. 4			
Tel. 5	46	92	92	92	92	92	92	100	Tel. 5			
Tel. 6	46	46	92	46	92	92	100	100	Tel. 6			

Counterweight 51,808 lbs

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 27.23 ft												Working Radius (ft)									
	Boom length (ft)																					
	43.3	57.1	57.1	70.9	70.9	70.9	84.6	84.6	84.6	84.6	84.6	84.6										
°	1)	°	°	°	°	°	°	°	°	°	°	°										
8													8									
9													9									
10	70	392.2*	359.1*	75	308.6*	75	134.7	79	308.6*	79	140.3	79	100.4	81	251.3*	81	227.1	81	142.7	81	103.5	10
12	67	334.8*	315.5*	73	303.8*	73	126.1	77	303.1*	77	132.6	77	93.1	80	247.5*	80	227.1	80	135.9	80	96.8	12
14	64	287.1*	280.2*	71	279.7*	71	118.9	75	276.9*	75	125.8	75	86.7	78	233.3	78	227.1	78	129.6	78	91.0	14
16	61	249.6*	248.8*	68	248.8*	68	112.2	73	246.3*	73	119.6	73	81.1	77	221.0	77	227.1	77	123.9	77	85.7	16
18	58	221.6	221.6	67	221.3	67	106.5	72	218.6	72	114.3	72	76.4	76	198.5	76	205.7	76	118.9	76	81.2	18
20	54	196.5	196.5	65	195.8	65	101.1	70	191.8	70	109.3	70	71.9	74	173.7	74	179.6	74	114.2	74	77.0	20
25	45	156.0	156.0	59	149.2	59	90.4	65	136.5	65	98.8	65	63.0	71	124.9	71	130.2	71	104.1	71	68.4	25
30	33	120.1	120.1	52	118.1	52	82.0	61	102.9	61	90.4	61	55.9	67	94.7	67	99.3	67	95.9	67	61.4	30
35				45	89.0	45	75.2	56	83.8	56	83.0	56	50.5	63	74.9	63	79.2	63	88.9	63	55.5	35
40				36	69.8	36	69.6	50	67.2	50	75.4	50	45.8	59	61.0	59	64.9	59	79.8	59	50.4	40
45				24	56.7	24	62.0	44	54.2	44	64.8	44	42.1	55	51.6	55	55.0	55	65.9	55	46.2	45
50							37	44.6	37	55.2	37	39.1	50	42.6	50	45.9	50	55.8	50	42.7	50	
55							29	36.8	29	47.2	29	36.6	45	34.6	45	38.0	45	47.8	45	39.7	55	
60							19	30.0	19	40.6	19	34.4	40	27.9	40	31.5	40	41.3	40	37.0	60	
65												34	22.7	34	26.4	34	36.1	34	34.7	65		
70												25	18.5	25	22.1	25	32.0	25	32.6	70		
75																				75		
80																				80		
85																				85		
90																				90		
95																				95		
100																				100		
110																				110		
120																				120		
130																				130		
140																				140		
150																				150		
160																				160		
170																				170		
180																				180		
190																				190		
200																				200		
210																				210		

1) Over rear with superstructure pin engaged.

* With additional equipment.

Tel. 1	0	0	0	46	0	0	92	46	0	0	0	0	Tel. 1
Tel. 2	0	46	0	46	0	0	46	46	0	0	0	0	Tel. 2
Tel. 3	0	0	0	0	0	0	0	46	0	0	0	0	Tel. 3
Tel. 4	0	0	0	0	0	0	0	0	0	0	46	0	Tel. 4
Tel. 5	0	0	0	0	46	0	0	0	0	0	46	46	Tel. 5
Tel. 6	0	0	46	0	46	92	0	0	46	92	0	46	Tel. 6

Counterweight 51,808 lbs

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom											Working Radius (ft)	
	On outriggers, 360° working area												
	Outrigger base 27.23 ft												
Boom length (ft)													
	139.4 ° ↙	139.4 ° ↙	139.4 ° ↙	139.4 ° ↙	153.2 ° ↙	153.2 ° ↙	153.2 ° ↙	167.0 ° ↙	167.0 ° ↙	167.0 ° ↙			
8												8	
9												9	
10												10	
12												12	
14												14	
16												16	
18												18	
20	82	95.9	82	82.9	82	69.4	82	56.2				20	
25	79	95.9	79	82.9	79	69.4	79	56.2	80	76.1	80	47.2	
30	78	84.8	78	82.2	78	69.3	78	55.1	79	75.9	79	47.2	
35	76	69.3	76	72.2	76	66.4	76	52.5	77	69.0	77	52.8	
40	74	57.7	74	60.6	74	61.8	74	49.1	76	58.0	76	47.0	
45	71	48.6	71	51.5	71	55.0	71	45.3	73	49.4	73	47.8	
50	69	41.4	69	44.2	69	48.2	69	41.9	72	42.4	72	45.2	
55	67	35.6	67	38.5	67	42.6	67	39.0	70	36.4	70	41.5	
60	65	31.2	65	34.1	65	38.4	65	36.4	68	31.6	68	37.1	
65	62	27.4	62	30.4	62	34.0	62	34.0	66	28.2	66	34.1	
70	60	23.7	60	26.6	60	30.1	60	31.5	64	25.0	64	30.9	
75	58	20.2	58	22.9	58	26.5	58	29.1	62	22.0	62	27.6	
80	55	17.0	55	19.6	55	23.3	55	26.7	59	19.2	59	24.2	
85	52	14.3	52	16.9	52	20.2	52	24.4	57	16.5	57	21.5	
90	49	12.1	49	14.5	49	17.9	49	21.9	55	13.9	55	19.2	
95	46	10.0	46	12.4	46	15.8	46	19.8	52	11.7	52	16.9	
100	43	8.1	43	10.5	43	14.0	43	18.0	49	9.8	49	15.0	
110	36	5.1	36	7.5	36	10.8	36	14.8	44	6.8	44	11.9	
120	27	2.4	27	4.9	27	8.4	27	12.2	38	4.4	38	9.2	
130									29	7.0	29	9.5	
140									16	5.4	16	7.6	
150									16	5.4	16	7.6	
160													
170													
180													
190													
200													
210													
Telescoping sequence %													
Tel. 1	92	92	46	0	92	46	0	92	92	92	0	Tel. 1	
Tel. 2	92	46	46	0	92	46	0	92	92	46	46	Tel. 2	
Tel. 3	46	46	46	46	46	46	46	92	92	46	92	Tel. 3	
Tel. 4	46	46	46	92	46	46	92	46	46	46	92	Tel. 4	
Tel. 5	46	46	46	92	46	92	92	46	46	92	92	Tel. 5	
Tel. 6	0	46	92	92	46	92	92	46	92	92	92	Tel. 6	

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom											Working Radius (ft)	
	On outriggers, 360° working area												
	Outrigger base 27.23 ft												
Boom length (ft)													
	180.4 ° ↙	180.4 ° ↙	180.4 ° ↙	194.2 ° ↙	194.2 ° ↙	208.0 ° ↙	223.1 ° ↙						
8												8	
9												9	
10												10	
12												12	
14												14	
16												16	
18												18	
20												20	
25												25	
30	81	50.7	81	42.3	81	37.3						30	
35	79	50.7	79	42.3	79	37.3	80	41.4	80	33.1		35	
40	79	50.3	79	42.3	79	37.3	79	41.4	79	33.1	80	27.6	
45	77	46.7	77	42.3	77	37.3	77	41.4	77	33.1	79	27.6	
50	76	41.0	76	41.2	76	37.3	76	39.3	76	33.1	78	27.6	
55	74	35.5	74	38.1	74	37.0	75	35.6	75	33.1	77	27.7	
60	73	30.8	73	33.4	73	35.9	74	31.0	74	32.6	76	27.4	
65	71	26.9	71	29.6	71	32.0	72	27.2	72	29.9	74	26.6	
70	69	23.7	69	26.3	69	28.6	71	24.0	71	26.7	73	24.0	
75	67	21.0	67	23.6	67	25.9	69	21.6	69	24.2	72	21.9	
80	66	18.9	66	21.4	66	23.7	68	19.6	68	22.2	71	19.6	
85	64	16.7	64	19.5	64	21.7	66	17.5	66	20.2	69	18.0	
90	62	14.8	62	17.5	62	19.7	65	15.7	65	18.3	68	16.1	
95	60	13.0	60	15.5	60	17.7	63	13.8	63	16.4	66	14.5	
100	59	11.2	59	13.6	59	15.8	62	12.0	62	14.5	65	13.0	
110	55	8.0	55	10.4	55	12.4	58	9.0	58	11.4	61	9.9	
120	50	5.4	50	7.6	50	9.8	54	6.4	54	8.8	58	7.3	
130	46	3.3	46	5.5	46	7.6	50	4.2	50	6.6	54	5.1	
140		40		3.8	40	5.9	46	2.2	46	4.8	51	3.4	
150				34	4.3			41	3.2			150	
160				26	3.0							160	
170												170	
180												180	
190												190	
200												200	
210												210	
Telescoping sequence %													
Tel. 1	92	46	0	92	46	92	100					Tel. 1	
Tel. 2	92	92	92	92	92	92	100					Tel. 2	
Tel. 3	92	92	92	92	92	92	100					Tel. 3	
Tel. 4	92	92	92	92	92	92	92	100				Tel. 4	
Tel. 5	46	46	46	92	92	92	92	100				Tel. 5	
Tel. 6	46	46	92	92	46	92	92	100				Tel. 6	

Counterweight 26,455 lbs

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 27.23 ft											Working Radius (ft)	
	Boom length (ft)												
	139.4 ° 8	139.4 ° 9	139.4 ° 10	139.4 ° 12	139.4 ° 14	153.2 ° 16	153.2 ° 18	153.2 ° 20	167.0 ° 25	167.0 ° 30	167.0 ° 35		
8	82	95.9	82	82.9	82	69.4	82	56.2				8	
9	79	87.4	79	82.9	79	69.4	79	56.2	80	76.1	80	55.8	
10	78	68.9	78	72.0	78	69.3	78	55.1	79	68.5	79	55.6	
12	76	55.0	76	58.1	76	62.7	76	52.5	77	55.1	77	52.8	
14	74	44.6	74	47.5	74	52.1	74	49.1	76	45.1	76	49.5	
16	71	36.7	71	39.6	71	43.9	71	45.3	73	37.8	73	43.3	
18	69	31.2	69	33.8	69	38.5	69	41.3	72	32.5	72	37.9	
20	65	21.5	65	24.3	65	28.1	65	32.0	68	23.7	68	29.2	
25	62	17.3	62	19.9	62	23.9	62	27.7	66	19.5	66	25.0	
30	60	13.8	60	16.5	60	20.3	60	24.3	64	15.9	64	21.4	
35	58	10.8	58	13.5	58	17.1	58	21.3	62	12.9	62	18.3	
40	55	8.3	55	10.9	55	14.4	55	18.6	59	10.4	59	15.7	
45	52	6.3	52	8.7	52	12.3	52	16.4	57	8.1	57	13.2	
50	49	4.4	49	6.9	49	10.4	49	14.6	55	6.2	55	11.3	
55	46	2.7	46	4.7	46	8.6	46	12.8	52	4.7	52	9.7	
60	43	3.7	43	7.1	43	11.3	43	14.9	3.3	49	8.3	14.9	
65	40		40		40		40			44	5.7	44	
70	36		36	4.7	36	8.6	36			44	8.1		
75	32		32		32		32			44			
80	27		27	2.7	27	6.8	27			38	3.8	38	
85										38	6.0		
90										38			
95										38			
100										38			
110										38			
120										38			
130										38			
140										38			
150										38			
160										38			
170										38			
180										38			
190										38			
200										38			
210										38			
	Telescoping sequence %												
Tel. 1	92	92	46	0	92	46	0	92	92	92	0	Tel. 1	
Tel. 2	92	46	46	0	92	46	0	92	46	46	46	Tel. 2	
Tel. 3	46	46	46	46	46	46	92	92	92	46	92	Tel. 3	
Tel. 4	46	46	46	92	46	46	92	46	46	46	92	Tel. 4	
Tel. 5	46	46	46	92	46	92	92	92	46	92	92	Tel. 5	
Tel. 6	0	46	92	92	46	92	92	46	92	92	92	Tel. 6	

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 27.23 ft											Working Radius (ft)
	Boom length (ft)											
	180.4 ° 8	180.4 ° 9	180.4 ° 10	194.2 ° 12	194.2 ° 14	208.0 ° 16	223.1 ° 18					
8	81	50.7	81	42.3	81	37.3						8
9	79	50.3	79	42.3	79	37.3	80	41.4	80	33.1		9
10	77	36.3	77	38.5	77	37.3	79	40.8	79	33.1	80	33.1
12	74	26.6	74	29.4	74	32.3	75	27.0	75	30.2	77	27.4
14	73	23.5	73	26.1	73	29.7	74	24.1	74	27.8	76	24.7
16	71	20.6	71	23.1	71	25.6	72	21.1	72	24.4	74	22.1
18	69	17.3	69	19.8	69	22.2	71	18.1	71	20.9	73	19.2
20	67	14.3	67	16.8	67	19.1	69	15.1	69	17.9	72	16.3
25	64	11.6	66	14.2	66	16.4	68	12.5	68	15.3	71	13.8
30	62	7.5	62	9.9	62	12.2	65	8.4	65	11.1	68	9.7
35	60	5.9	60	8.3	60	10.5	63	6.8	63	9.3	66	8.0
40	59	4.4	59	6.8	59	9.0	62	5.3	62	7.8	65	6.4
45	55	4.3	55	6.5	58	2.8	58	5.3	61	3.7	64	3.7
50				50	4.2		54	3.4				
55				46	2.6							
60												
65												
70												
75												
80												
85												
90												
95												
100												
110												
120												
130												
140												
150												
160												
170												
180												
190												
200												
210												
	Telescoping sequence %											
Tel. 1	92	46	0	92	46	92	100					Tel. 1
Tel. 2	92	92	92	92	92	92	100					Tel. 2
Tel. 3	92	92	92	92	92	92	100					Tel. 3
Tel. 4	92	92	92	92	92	92	92	100				Tel. 4
Tel. 5	46	92	92	92	92	92	92	100				Tel. 5
Tel. 6	46	46	92	46	92	92	100					Tel. 6

Counterweight 0 lbs

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 27.23 ft											Working Radius (ft)	
	Boom length (ft)												
	139.4 °	139.4 °	139.4 °	139.4 °	153.2 °	153.2 °	153.2 °	167.0 °	167.0 °	167.0 °	167.0 °		
8												8	
9												9	
10												10	
12												12	
14												14	
16												16	
18												18	
20	82	83.0	82	81.8	82	69.4	82	56.2				20	
25	79	59.4	79	63.1	79	65.8	79	56.2	80	58.8	80	47.2	
30	78	44.1	78	47.4	78	52.2	78	54.8	79	44.4	79	51.4	
35	76	33.7	76	37.0	76	41.5	76	46.9	77	34.7	77	41.1	
40	74	26.6	74	29.5	74	33.9	74	39.1	76	27.7	76	33.9	
45	71	22.4	71	25.4	71	29.9	71	34.8	73	23.9	73	30.0	
50	69	17.8	69	20.9	69	25.1	69	30.1	72	19.5	72	25.6	
55	67	13.7	67	16.8	67	21.0	67	25.9	70	15.4	70	21.6	
60	65	10.5	65	13.3	65	17.7	65	22.4	68	12.1	68	18.2	
65	62	7.6	62	10.3	62	14.7	62	19.3	66	9.4	66	15.1	
70		60	8.0	60	12.1	60	16.3	64	7.1	64	12.9	64	
75			58	9.7	58	13.8			62	10.8	62	13.3	
80				55	7.5	55	11.7		59	8.8	59	11.2	
85				52	5.6	52	10.0		57	6.9	57	9.4	
90				49	4.4	49	8.5		55	5.4	55	7.8	
95					46	7.2			52	4.0	52	6.4	
100					43	6.0			49	2.7	49	5.2	
110					36	4.0			44	3.2			
120													
130													
140													
150													
160													
170													
180													
190													
200													
210													
Telescoping sequence %													
Tel. 1	92	92	46	0	92	46	0	92	92	92	0	Tel. 1	
Tel. 2	92	46	46	0	92	46	0	92	46	46	46	Tel. 2	
Tel. 3	46	46	46	46	46	46	92	92	46	92	92	Tel. 3	
Tel. 4	46	46	46	92	46	46	92	46	46	46	92	Tel. 4	
Tel. 5	46	46	46	92	46	92	92	46	46	92	92	Tel. 5	
Tel. 6	0	46	92	92	46	92	92	46	92	92	92	Tel. 6	

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 27.23 ft											Working Radius (ft)	
	Boom length (ft)												
	180.4 °	180.4 °	180.4 °	194.2 °	194.2 °	°	°	°	°	°	°		
8												8	
9												9	
10												10	
12												12	
14												14	
16												16	
18												18	
20												20	
25												25	
30	81	41.7	81	41.9	81	37.3						30	
35	79	33.0	79	35.9	79	37.1	80	32.7	80	33.1		35	
40	79	26.3	79	29.3	79	32.0	79	26.5	79	29.6		40	
45	77	21.2	77	24.1	77	26.8	77	21.6	77	24.5		45	
50	76	17.7	76	20.7	76	23.2	76	18.3	76	21.1		50	
55	74	14.7	74	17.7	74	20.3	75	15.5	75	18.4		55	
60	73	12.1	73	15.0	73	17.8	74	12.9	74	15.8		60	
65	71	9.6	71	12.4	71	15.1	72	10.3	72	13.1		65	
70	69	7.5	69	10.2	69	12.9	71	8.2	71	11.0		70	
75		67	8.2	67	10.9			69	9.1			75	
80		66	6.5	66	9.1			68	7.3			80	
85		64	4.9	64	7.6			66	5.8			85	
90			62	6.1								90	
95				60	4.8							95	
100				59	3.6							100	
110												110	
120												120	
130												130	
140												140	
150												150	
160												160	
170												170	
180												180	
190												190	
200												200	
210												210	
Telescoping sequence %													
Tel. 1	92	46	0	92	46							Tel. 1	
Tel. 2	92	92	92	92	92	92	92	92	92	92	92	Tel. 2	
Tel. 3	92	92	92	92	92	92	92	92	92	92	92	Tel. 3	
Tel. 4	92	92	92	92	92	92	92	92	92	92	92	Tel. 4	
Tel. 5	46	92	92	92	92	92	92	92	92	92	92	Tel. 5	
Tel. 6	46	46	92	46	92	92	92	92	92	92	92	Tel. 6	

Counterweight 77,161 lbs

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 18.37 ft											Working Radius (ft)	
	Boom length (ft)												
	139.4 °	139.4 °	139.4 °	139.4 °	153.2 °	153.2 °	153.2 °	167.0 °	167.0 °	167.0 °	167.0 °		
8												8	
9												9	
10												10	
12												12	
14												14	
16												16	
18												18	
20	82	95.9	82	82.9	82	69.4	82	56.2				20	
25	79	88.8	79	82.9	79	69.4	79	56.2	80	76.1	80	47.2	
30	78	71.9	78	74.7	78	69.3	78	55.1	79	71.3	79	45.6	
35	76	59.1	76	61.8	76	65.0	76	52.5	77	59.1	77	47.2	
40	74	49.3	74	52.0	74	55.9	74	49.1	76	49.8	76	47.0	
45	71	41.8	71	44.4	71	48.2	71	45.3	73	42.4	73	47.0	
50	69	35.3	69	37.8	69	41.3	69	41.9	72	36.5	72	41.9	
55	67	29.6	67	31.9	67	35.2	67	38.2	70	31.2	70	36.3	
60	65	24.6	65	26.8	65	30.1	65	34.0	68	26.4	68	31.2	
65	62	20.6	62	22.8	62	26.1	62	29.8	66	22.3	66	27.0	
70	60	17.3	60	19.5	60	22.6	60	26.4	64	19.0	64	23.7	
75	58	14.4	58	16.6	58	19.6	58	23.4	62	16.1	62	20.7	
80	55	11.8	55	14.0	55	17.1	55	20.8	59	13.6	59	18.2	
85	52	9.8	52	12.0	52	14.9	52	18.7	57	11.6	57	16.0	
90	49	8.0	49	10.2	49	13.2	49	16.8	55	9.7	55	14.1	
95	46	6.3	46	8.5	46	11.5	46	15.0	52	8.1	52	12.4	
100	43	4.9	43	7.1	43	9.9	43	13.5	49	6.6	49	10.8	
110		3.6	4.6	3.6	7.6	3.6	10.9	44	4.1	4.4	8.3	10.5	
120		2.7	2.5	2.7	5.6	27	8.9			38	6.3	38	
130									29	4.6	29	6.6	
140									16	3.3	16	5.3	
150												32	
160												4.6	
170												140	
180												150	
190												160	
200												170	
210												180	
Telescoping sequence %													
Tel. 1	92	92	46	0	92	46	0	92	92	0	Tel. 1		
Tel. 2	92	46	46	0	92	46	0	92	46	46	Tel. 2		
Tel. 3	46	46	46	46	46	46	46	92	92	46	Tel. 3		
Tel. 4	46	46	46	92	46	46	92	46	46	46	Tel. 4		
Tel. 5	46	46	46	92	46	92	92	46	92	92	Tel. 5		
Tel. 6	0	46	92	92	46	92	92	46	92	92	Tel. 6		

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 18.37 ft											Working Radius (ft)	
	Boom length (ft)												
	180.4 °	180.4 °	180.4 °	194.2 °	194.2 °	208.0 °	223.1 °						
8												8	
9												9	
10												10	
12												12	
14												14	
16												16	
18												18	
20												20	
25												25	
30	81	50.7	81	42.3	81	37.3						30	
35	79	50.7	79	42.3	79	37.3	80	41.4	80	33.1	80	33.1	
40	79	47.9	79	42.3	79	37.3	79	41.3	79	33.1	81	27.6	
45	77	41.2	77	42.3	77	37.3	77	39.9	77	33.1	79	33.1	
50	76	35.7	76	38.1	76	37.3	76	35.6	76	33.1	78	33.1	
55	74	31.0	74	33.4	74	35.4	75	31.0	75	32.1	77	31.2	
60	73	26.9	73	29.3	73	31.7	74	27.2	74	29.8	76	27.6	
65	71	23.6	71	25.6	71	27.8	72	24.0	72	26.4	74	24.4	
70	69	20.2	69	22.3	69	24.4	71	20.9	71	23.2	73	21.7	
75	67	17.3	67	19.4	67	21.4	69	18.1	69	20.3	72	19.1	
80	66	14.9	66	16.9	66	18.9	68	15.5	68	17.7	71	16.6	
85	64	12.7	64	14.7	64	16.7	66	13.4	66	15.6	69	14.5	
90	62	10.8	62	12.8	62	14.8	65	11.5	65	13.7	68	12.6	
95	60	9.1	60	11.2	60	13.1	63	9.9	63	12.1	66	10.9	
100	59	7.5	59	9.7	59	11.5	62	8.4	62	10.6	65	9.3	
110	55	5.0	55	7.2	55	9.0	58	5.9	58	8.1	61	6.8	
120	50	2.9	50	5.0	50	6.9	54	3.8	54	5.9	58	4.7	
130		46	3.3	46	5.1			50	4.2	54	3.0	58	
140				40	3.7			46	2.8			140	
150				34	2.5							150	
160												160	
170												170	
180												180	
190												190	
200												200	
210												210	
Telescoping sequence %													
Tel. 1	92	46	0	92	46	92	100					Tel. 1	
Tel. 2	92	92	92	92	92	92	100					Tel. 2	
Tel. 3	92	92	92	92	92	92	92	100				Tel. 3	
Tel. 4	92	92	92	92	92	92	92	100				Tel. 4	
Tel. 5	46	92	92	92	92	92	92	100				Tel. 5	
Tel. 6	46	46	92	46	46	92	92	100				Tel. 6	

Counterweight 51,808 lbs

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 18.37 ft											Working Radius (ft)	
	Boom length (ft)												
	139.4 ° /	139.4 ° /	139.4 ° /	139.4 ° /	153.2 ° /	153.2 ° /	153.2 ° /	167.0 ° /	167.0 ° /	167.0 ° /	167.0 ° /		
8												8	
9												9	
10												10	
12												12	
14												14	
16												16	
18												18	
20	82	89.8	82	82.6	82	69.4	82	56.2				20	
25	79	69.0	79	72.1	79	69.4	79	56.2	80	68.1	80	47.2	
30	78	54.3	78	57.3	78	61.5	78	55.1	79	54.3	79	55.6	
35	76	43.9	76	46.8	76	50.8	76	52.5	77	44.5	77	50.1	
40	74	36.0	74	38.7	74	42.6	74	47.3	76	36.7	76	42.4	
45	71	29.8	71	32.5	71	36.2	71	40.9	73	30.9	73	36.2	
50	69	24.6	69	27.1	69	30.5	69	34.8	72	26.1	72	31.2	
55	67	19.9	67	22.3	67	25.6	67	29.5	70	21.7	70	26.7	
60	65	15.9	65	18.1	65	21.4	65	25.2	68	17.7	68	22.5	
65	62	12.5	62	14.9	62	18.1	62	21.8	66	14.3	66	19.2	
70	60	9.9	60	12.2	60	15.3	60	19.0	64	11.7	64	16.4	
75	58	7.7	58	9.9	58	13.0	58	16.6	62	9.3	62	14.0	
80	55	5.7	55	7.9	55	11.0	55	14.5	59	7.3	59	11.9	
85	52	3.9	52	6.1	52	9.2	52	12.7	57	5.6	57	10.0	
90		49	49	49	7.6	49	11.1	55	4.1	55	8.5	55	
95		46	3.3	46	6.3	46	9.8		52	7.2	52	9.3	
100			43	5.1	43	8.7		49	6.0	49	8.1		
110			36	3.1	36	6.7		44	4.0	44	6.0		
120				27	5.0		38	2.3	38	4.4			
130							29	3.0				39	
140												140	
150												150	
160												160	
170												170	
180												180	
190												190	
200												200	
210												210	
Telescoping sequence %													
Tel. 1	92	92	46	0	92	46	0	92	92	0	Tel. 1		
Tel. 2	92	46	46	0	92	46	0	92	46	46	Tel. 2		
Tel. 3	46	46	46	46	46	46	92	92	46	92	Tel. 3		
Tel. 4	46	46	46	92	46	46	92	46	46	92	Tel. 4		
Tel. 5	46	46	46	92	46	92	92	46	92	92	Tel. 5		
Tel. 6	0	46	92	92	46	92	92	46	92	92	Tel. 6		

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 18.37 ft											Working Radius (ft)	
	Boom length (ft)												
	180.4 ° /	180.4 ° /	180.4 ° /	194.2 ° /	194.2 ° /	208.0 ° /	208.0 ° /	208.0 ° /	208.0 ° /	208.0 ° /	208.0 ° /		
8												8	
9												9	
10												10	
12												12	
14												14	
16												16	
18												18	
20												20	
25												25	
30	81	50.0	81	42.3	81	37.3						30	
35	79	42.3	79	42.3	79	37.3	80	40.7	80	33.1		35	
40	79	35.5	79	38.1	79	36.9	79	35.3	79	32.9	80	32.7	
45	77	29.9	77	32.6	77	34.4	77	30.1	77	31.9	79	29.9	
50	76	25.5	76	28.0	76	30.4	76	25.7	76	28.3	78	26.0	
55	74	21.7	74	24.1	74	26.5	75	22.0	75	24.6	77	22.4	
60	73	18.4	73	20.8	73	23.0	74	18.9	74	21.3	76	19.4	
65	71	15.6	71	17.8	71	19.8	72	16.2	72	18.6	74	16.8	
70	69	12.9	69	15.1	69	17.0	71	13.7	71	15.9	73	14.6	
75	67	10.5	67	12.7	67	14.6	69	11.3	69	13.5	72	12.4	
80	66	8.6	66	10.6	66	12.5	68	9.3	68	11.5	71	10.3	
85	64	6.7	64	8.9	64	10.7	66	7.6	66	9.8	69	8.5	
90	62	5.2	62	7.4	62	9.2	65	6.1	65	8.3	68	7.0	
95	60	3.9	60	6.0	60	7.9	63	4.7	63	6.9	66	5.7	
100	59	2.7	59	4.8	59	6.7	62	3.4	62	5.6	65	4.5	
110		55	2.7	55	4.5		58	3.6				110	
120			50	2.8								120	
130												130	
140												140	
150												150	
160												160	
170												170	
180												180	
190												190	
200												200	
210												210	
Telescoping sequence %													
Tel. 1	92	46	0	92	46	92	Tel. 1						
Tel. 2	92	92	92	92	92	92	Tel. 2						
Tel. 3	92	92	92	92	92	92	Tel. 3						
Tel. 4	92	92	92	92	92	92	Tel. 4						
Tel. 5	46	92	92	92	92	92	Tel. 5						
Tel. 6	46	46	92	46	92	92	Tel. 6						

Counterweight 26,455 lbs

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 18.37 ft											Working Radius (ft)	
	Boom length (ft)												
	139.4 °	139.4 °	139.4 °	139.4 °	153.2 °	153.2 °	153.2 °	167.0 °	167.0 °	167.0 °	167.0 °		
8												8	
9												9	
10												10	
12												12	
14												14	
16												16	
18												18	
20	82	64.6	82	67.9	82	68.7	82	56.2				20	
25	79	48.4	79	51.4	79	55.9	79	56.2	80	48.2	80	47.2	
30	78	37.1	78	40.0	78	44.1	78	49.2	79	37.6	79	43.5	
35	76	28.9	76	31.8	76	35.8	76	40.5	77	29.9	77	35.5	
40	74	22.8	74	25.6	74	29.4	74	34.0	76	23.9	76	29.4	
45	71	18.1	71	20.7	71	24.5	71	28.7	73	19.4	73	24.7	
50	69	13.9	69	16.4	69	19.9	69	24.0	72	15.6	72	20.7	
55	67	10.3	67	12.6	67	16.0	67	19.8	70	12.2	70	17.1	
60	65	7.2	65	9.4	65	12.8	65	16.5	68	9.0	68	13.8	
65	62	4.7	62	6.9	62	10.2	62	14.0	66	6.5	66	11.1	
70		60	4.8	60	8.2	60	11.8		64	9.0	64	11.2	
75			58	6.3	58	9.9		62	7.2	62	9.4		
80			55	4.7	55	8.3		59	5.6	59	7.8		
85			52	3.4	52	6.9		57	4.3	57	6.5		
90				49	5.7		55	3.1	55	5.3		59	
95					46	4.7			52	4.2		57	
100						43	3.7		49	3.3		54	
110												110	
120												120	
130												130	
140												140	
150												150	
160												160	
170												170	
180												180	
190												190	
200												200	
210												210	
Telescoping sequence %													
Tel. 1	92	92	46	0	92	46	0	92	92	0	Tel. 1		
Tel. 2	92	46	46	0	92	46	0	92	46	46	Tel. 2		
Tel. 3	46	46	46	46	46	46	92	92	46	92	Tel. 3		
Tel. 4	46	46	46	92	46	46	92	46	46	92	Tel. 4		
Tel. 5	46	46	46	92	46	92	46	92	92	92	Tel. 5		
Tel. 6	0	46	92	92	46	92	92	46	92	92	Tel. 6		

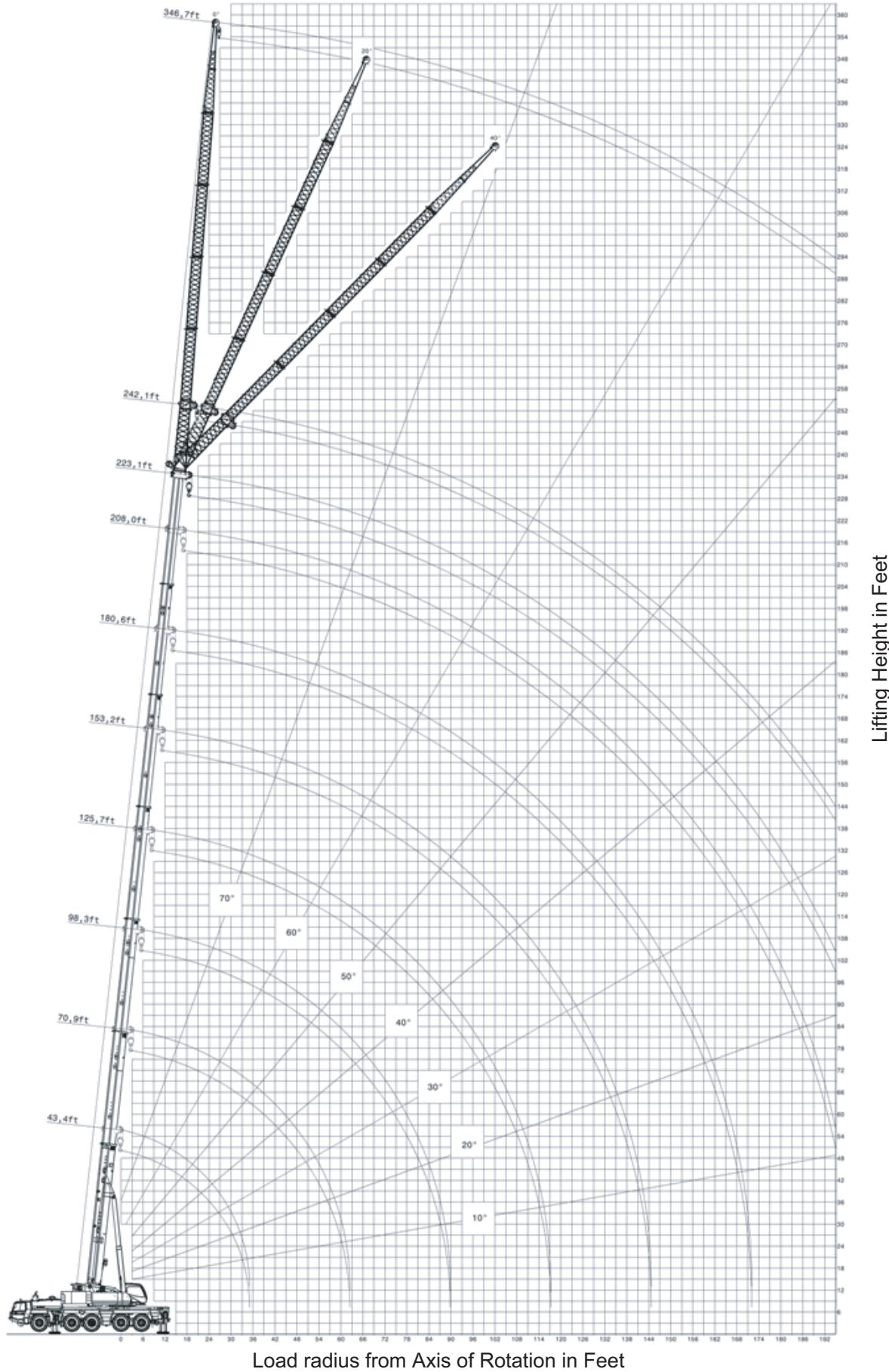
Counterweight 0 lbs

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 18.37 ft												Working Radius (ft)	
	Boom length (ft)													
	43.3	57.1	57.1	70.9	70.9	70.9	84.6	84.6	84.6	84.6	84.6	84.6		
8													8	
9													9	
10	70	266.8*	75	209.4	75	134.7	79	167.7	79	140.3	79	100.4	81	
12	67	179.7	73	148.6	73	126.1	77	123.1	77	131.8	77	93.1	80	
14	64	132.1	71	112.4	71	117.2	75	94.9	75	115.0	75	86.7	78	
16	61	102.5	68	88.6	68	99.5	73	75.6	73	93.9	73	81.1	77	
18	58	84.1	67	73.2	67	83.2	72	62.7	72	79.7	72	74.7	76	
20	54	68.5	65	59.9	65	69.2	70	51.4	70	67.2	70	67.6	74	
25	45	44.8	59	40.1	59	48.2	65	33.9	65	48.2	65	48.4	71	
30	33	29.2	52	27.5	52	34.9	61	22.8	61	35.8	61	36.2	67	
35				45	18.5	45	25.2	56	15.3	56	27.6	56	27.8	
40				36	12.0	36	18.3	50	9.4	50	20.8	50	21.0	
45				24	7.5	24	13.5			44	15.9	44	16.1	
50								37	12.1	37	12.3			
55								29	9.2	29	9.4			
60								19	6.8	19	7.1			
65												34	5.5	
70												25	4.0	
75													75	
80													80	
85													85	
90													90	
95													95	
100													100	
110													110	
120													120	
130													130	
140													140	
150													150	
160													160	
170													170	
180													180	
190													190	
200													200	
210													210	
Telescoping sequence %														
Tel. 1	0	0	0	46	0	92	46	0	0	92	46	0	Tel. 1	
Tel. 2	0	46	0	46	0	0	46	46	0	0	0	0	Tel. 2	
Tel. 3	0	0	0	0	0	0	0	46	0	0	0	0	Tel. 3	
Tel. 4	0	0	0	0	0	0	0	0	0	46	0	0	Tel. 4	
Tel. 5	0	0	0	0	46	0	0	0	0	46	46	46	Tel. 5	
Tel. 6	0	0	46	0	46	92	0	0	46	92	0	0	Tel. 6	

* With additional equipment.

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area Outrigger base 18.37 ft												Working Radius (ft)	
	Boom length (ft)													
	98.4	98.4	98.4	98.4	111.9	111.9	111.9	111.9	125.7	125.7	125.7	125.7		
8													8	
9													9	
10													10	
12	82	94.2	82	101.7	82	115.4	82	87.8					12	
14	80	75.0	80	81.9	80	94.3	80	83.1					14	
16	79	61.1	79	67.4	79	79.0	79	78.7	80	58.9	80	65.4	80	
18	78	51.2	78	57.2	78	68.1	78	71.0	80	50.0	80	56.1	80	
20	77	42.4	77	48.1	77	58.4	77	62.6	79	42.1	79	47.7	79	
25	74	28.3	74	33.3	74	42.9	74	46.5	76	28.8	76	33.9	76	
30	71	18.7	71	23.6	71	32.3	71	35.8	74	19.9	74	24.7	74	
35	68	12.3	68	16.7	68	25.2	68	28.5	71	13.6	71	18.2	71	
40	65	11.7	65	20.0	65	23.1	68	8.7	68	13.4	68	17.8	68	
45	61	8.0	61	15.8	61	18.9		65	9.5	65	13.9	65	18.8	
50				57	12.3	57	15.2		63	6.6	63	10.9	63	
55				53	9.2	53	12.1		59	8.3	59	12.8		
60				49	6.7	49	9.5		56	6.0	56	10.2		
65				45	4.9	45	7.5		52	4.2	52	8.2		
70					41	5.9				49	6.5		55	
75					36	4.6				45	5.1		52	
80					29	3.5				41	3.9		49	
85										37	2.9		45	
90													90	
95													95	
100													100	
110													110	
120													120	
130													130	
140													140	
150													150	
160													160	
170													170	
180													180	
190													190	
200													200	
210													210	
Telescoping sequence %														
Tel. 1	92	46	0	0	92	46	0	0	92	46	0	0	Tel. 1	
Tel. 2	46	46	0	0	46	46	46	46	0	46	46	0	Tel. 2	
Tel. 3	46	46	46	0	46	46	46	46	0	46	46	0	Tel. 3	
Tel. 4	0	46	46	0	46	46	46	46	46	46	46	46	Tel. 4	
Tel. 5	0	0	46	92	0	46	46	46	92	46	46	46	Tel. 5	
Tel. 6	0	0	46	92	0	0	46	92	0	46	46	92	Tel. 6	

ATF220G-5 WORKING RANGE CHART



NOTE: Boom and jib geometry shown are for unloaded condition and machine standing level on firm supporting surface. Boom deflection and subsequent radius and boom angle change must be accounted for when applying load to hook.

WARNING AND OPERATING INSTRUCTIONS FOR LIFTING CAPACITIES ATF220G-5

GENERAL

1. Total rated loads shown on the TADANO LOAD RATING CHART apply only to the machine as originally manufactured and normally equipped by TADANO. Modifications to the machine or use of optional equipment other than that specified can result in a reduction of capacity.
2. Hydraulic cranes can be hazardous if improperly operated or maintained. Operation and maintenance of this machine must be in compliance with the information in the ***Operation and Maintenance Manual*** supplied with the machine. If this manual is missing, order a replacement through the distributor.
3. The operator and other personnel associated with this machine shall fully acquaint themselves with the latest applicable American National Standards Institute (ANSI) safety standards for cranes.

SET UP

1. Total rated loads shown on the TADANO LOAD RATING CHART are the maximum allowable crane capacities. They are based on the machine standing level on firm supporting surface under ideal job conditions. Depending on the nature of the supporting surface, it may be necessary to have structural supports under the outrigger floats to spread the load to a larger surface.
2. For on outrigger operation, outriggers shall be extended to the dimension according to the TADANO LOAD RATING CHART and secured by pins with tires free of supporting surface, before operating crane.

OPERATION

1. Total rated loads with outriggers fully extended do not exceed 85% of the tipping loads. Total rated loads with outriggers half extended are determined by this formula:
total rated load = (tipping load - 0.1 tip reaction) / 1.25.
2. The crane's structural steelwork is in accordance with DIN 15018, part 3. Design and construction of the crane comply with DIN 15018, part 2 and with F.E.M. regulations.
3. Total rated loads include the weight of the main hook block, auxiliary hook ball, sling and other auxiliary lifting devices and all their weight shall be subtracted from the listed capacities to obtain the net load to be lifted.

Hookball / Hookblock (ton)	11.0	27.6	69.5			88.2			137.8					
No. of parts of line	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Max. lifting capacity (ton)	10.4	20.8	27.6	38.7	47.6	56.9	65.4	74.3	82.3	88.2	104.2	113.1	120.7	129.3
Weight (lbs)	661	992		1,874				2,535			2,976			

4. Total rated loads are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, operating speeds, side loads, etc. Side pull on the boom or jib is extremely dangerous.
5. Total rated loads do not account for wind on lifted load or boom. Total rated loads and boom length shall be appropriately reduced, when wind velocity is above 18 mph (26 ft/sec.) for boom operation, and above 11 mph (16ft/sec.) for jib operation.
6. Total rated loads at load radius shall not be exceeded. Do not tip the crane to determine allowable loads.
7. Do not operate at boom lengths beyond radius or boom angles where no capacities are shown. Crane may overturn without any load on the hook.
8. Slewing of the superstructure is admissible only when the crane is supported on half or fully extended outriggers.
9. The lifting capacity ratings specified in the TADANO load rating chart apply to the telescopic boom without fly jib fixed in transport position or working position.
If the fly jib is secured to the telescopic boom in transport position or working position, the lifting capacities of the telescopic boom are reduced by the values specified below.
The weight of the fly jib is deducted in terms of a load, and the load moment limiter will shut off earlier.

Jib status	Load rating reduction (tons)									
	Boom length (ft)									
17.7ft/43.3ft fly jib,mounted in transport position	43.3	57.1	79.9	98.4	126	153.2	180.4	194.2	223.1	
17.7ft fly jib,mounted to the boom head	0.50	0.32	0.23	0.15	0.11	0.10	0.09	0.08	0.07	
43.3ft fly jib,mounted to the boom head	3.00	2.49	2.19	1.84	1.35	1.10	1.04	1.01	1.00	
63.0ft fly jib,mounted to the boom head	6.31	5.10	4.38	3.52	2.32	1.75	1.58	1.54	1.49	
82.7ft fly jib,mounted to the boom head	11.27	8.98	7.57	5.94	3.64	2.57	2.24	2.16	2.05	
102.4ft fly jib,mounted to the boom head	18.09	14.26	11.92	9.19	5.34	3.54	2.99	2.86	2.69	
122.0ft fly jib,mounted to the boom head	26.78	20.97	17.39	13.26	7.41	4.69	3.84	3.64	3.37	
	37.30	29.06	24.01	18.14	9.84	5.99	4.78	4.50	4.13	

10. When making lifts at a load radius not shown, use the next longer radius to determine allowable capacity.
11. Load per part line should not exceed 20,950 lbf for the main winch and for the auxiliary winch.
12. Loaded boom angles are approximate. The boom angle before loading should be greater to account for deflection.
13. The 43.3 ft boom length capacities are based on the telescopic boom being fully retracted. If not fully retracted (less than 57.1 ft boom length), use the total rated loads for 57.1ft boom length according to the telescoping sequence.
14. Extension or retraction of the telescopic boom with loads may be attempted within the limits of the TADANO LOAD RATING CHART. The ability to telescope loads is limited by hydraulic pressure, boom angle, boom length, crane maintenance, etc.
15. When erecting or stowing the extendible fly jib, be sure to retain it by hand or by other means to prevent its free movement.
16. Use the Anti-Two Block (OVERWIND CUTOUT) disable switch When erecting or stowing the extendible fly jib and stowing the hook block. While the switch is pushed, the hoist will not stop, even when an overwind condition occurs.
17. The working radius specified in the TADANO LOAD RATING CHARTS for the extendible fly jib apply only if the telescopic boom is extended according to the TADANO LOAD RATING CHARTS. If one or more elements of the telescopic boom are retracted partially or completely, the specified boom angles will be decisive in determining total rated lifting capacities.
18. When lifting a load by using the extendible fly jib (auxiliary hoist) and telescopic boom (main hoist) simultaneously, do the following:
 - A. Select the correct program for the load moment device in accordance with jib length, jib offset angle, counterweight and outrigger base.
 - B. Before starting the operation, make sure that the weight of the load is within the total rated load for the fly jib.
19. Working with Single Top
Operation with the single top is allowed with the main winch and the auxiliary winch (2nd winch). The maximum allowed capacity is limited by the selected S.L.I. code for main boom operation according to existing counterweight and outrigger base at one side and by the single line pull which is limited by hydraulic pressure at the other side.
For operations with the single top mounted, use the TADANO LOAD RATING CHART for the telescopic boom in accordance with existing counterweight and outrigger base to find the total rated lifting capacity and also select the correct S.L.I. code for the telescopic boom in accordance with the existing counterweight and outrigger base. Find the total rated lifting capacity based on boom length and working radius. From that value, subtract 1,100 lbs and the weights of all lifting equipment used including hook block, sling and other auxiliary lifting devices. The result (<total rated lifting capacity> - <1,100 lbs> - <lifting equipment>) is the total rated lifting capacity for a single top lift.

Definitions

1. Load Radius:
Horizontal distance from a projection of the axis of rotation to supporting surface before loading to the center of the vertical hoist line or tackle with load applied. The deflection of the boom due to its deadweight and the rated load are taken into account.
2. Loaded Boom Angle:
The angle between the boom base section and the horizontal, after lifting the total rated load at the working radius.
3. Working Area:
Area measured in a circular arc about the centerline of rotation.
4. Freely Suspended Load:
Load hanging free with no direct external force applied except by the hoist line.
5. Side Load:
Horizontal side force applied to the lifted load either on the ground or in the air.

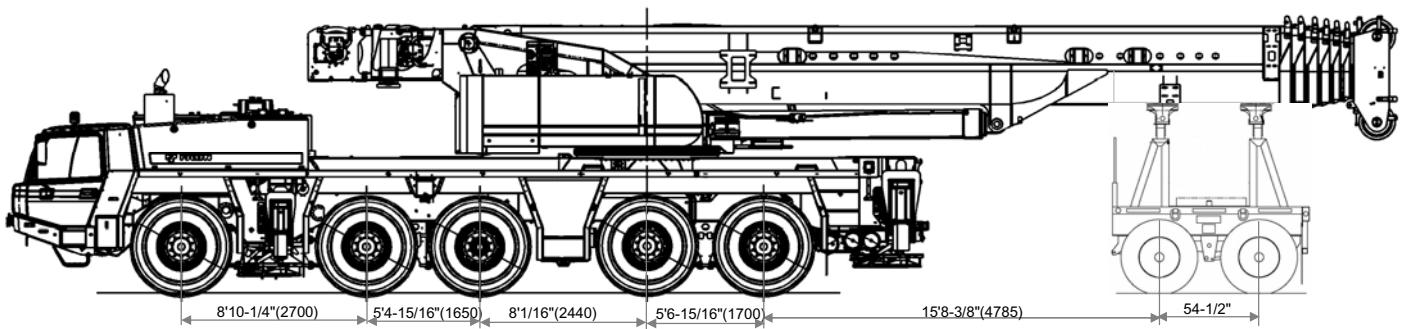
Safe Load Indicator

The Safe Load Indicator is intended as an aid to the operator. Under no condition should it be relied upon to replace use of Load Rating Charts and Operating Instructions. Sole reliance upon the Safe Load Indicator Aids in place of good operating practice can cause an accident. The operator must exercise caution to assure safety.

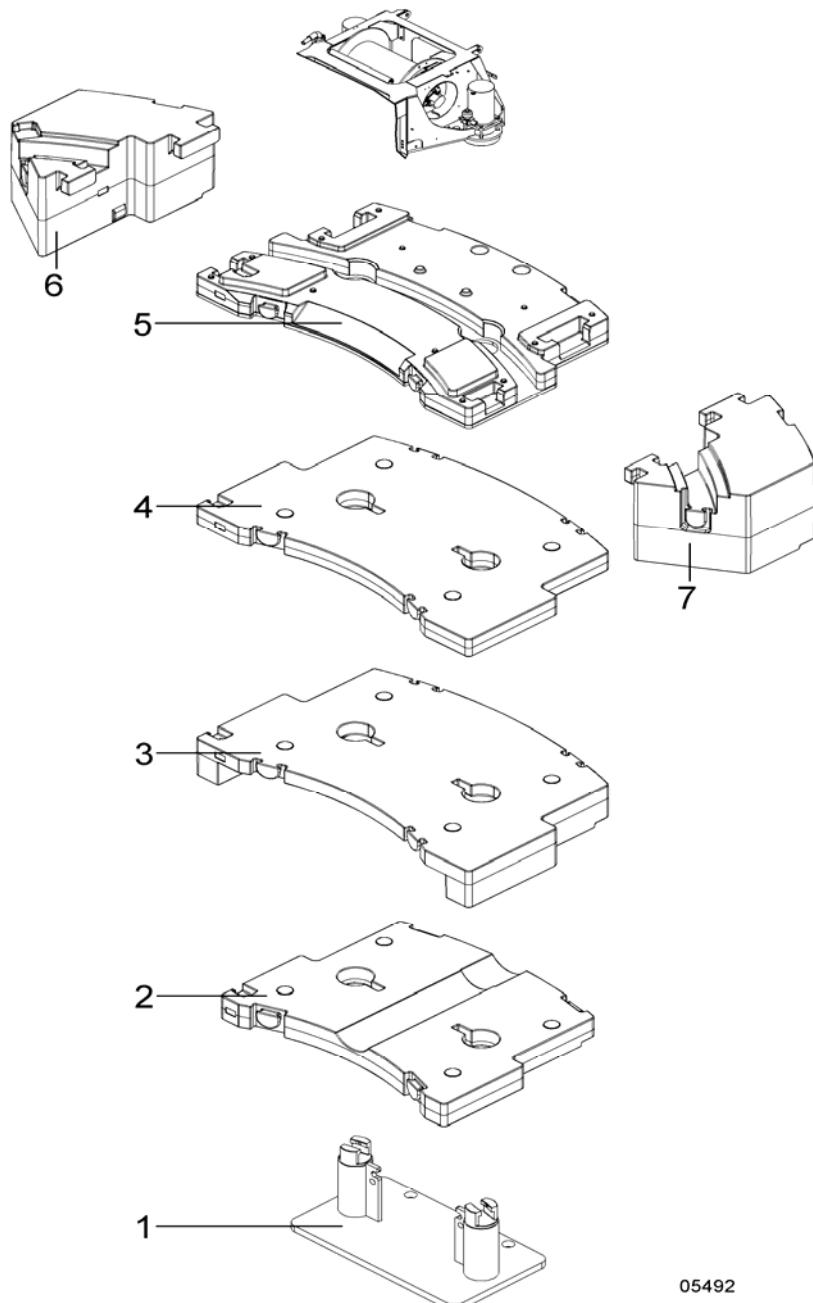
ATF220G-5 Axe weight distribution chart

1) Traveling with boom dolly

	GVW	Axle 1	Axle 2	Axle 3	Axle 4	Axle 5	Dolly
Base machine with 16.00R25 tires, 10x8 drive, no counterweight, 100% fuel	132,328	17,013	18,109	21,981	23,074	22,913	29,238
Add:							
1. 11 ton hook ball at boom head	661	-53	-53	-42	-42	-42	893
2. 27.6 ton hook block at boom head	992	-79	-80	-64	-63	-63	1,341
3. 69.5 ton hook ball at boom head	1,874	-150	-150	-120	-120	-120	2,534
4. 88.2 ton hook ball at boom head	2,535	-202	-203	-163	-162	-162	3,427
5. 17.7 ft/43.3 ft fly jib	3,375	100	100	81	81	81	2,932
6. Auxiliary winch with cable	3,646	1,505	1,505	212	212	212	0
7. Auxiliary boom point sheave (single top)	205	-17	-17	-13	-13	-13	278
8. Additional oil cooler	88	6	6	26	26	26	0
9. Air conditioning at crane cab	106	-1	-1	36	36	36	0
10. Boom dismounting device	661	106	106	149	150	150	0
11.20.5R25 tyres in lieu of 16.00R25	1,100	220	220	220	220	220	0
12. Air conditioning at carrier cab	101	74	74	-16	-16	-15	0
13. Towing attachment	176	-72	-72	107	107	107	0
14. Air and electric lines to rear bumper and free swing and boom elevation circuits	106	-5	-5	38	39	39	0
	4,409	1,146	1,146	473	473	473	0
1. Counterweight at carrier (2.0t)	22,046	7,479	7,479	2,363	2,363	2,363	0
2. Counterweight at carrier (10.0t)	25,353	8,600	8,600	2,718	2,718	2,718	0
3. Counterweight at carrier (11.5t)	25,353	8,600	8,600	2,718	2,718	2,718	0
4. Counterweight at carrier (11.5t)							



Mounting the 156,527 lbs (71 t) counterweight



05492

	1) 2.0t	2) 10.0t	3) 11.5t	4) 11.5t	5) 12.0t	6) 12.0t	7) 12.0t
0 lb							
26,455 lb	x	x					
51,808 lb	x	x	x				
77,161 lb	x	x	x	x			
103,616 lb	x	x	x	x	x		
156,527 lb	x	x	x	x	x	x	x

NOTES: _____

NOTES: _____

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