



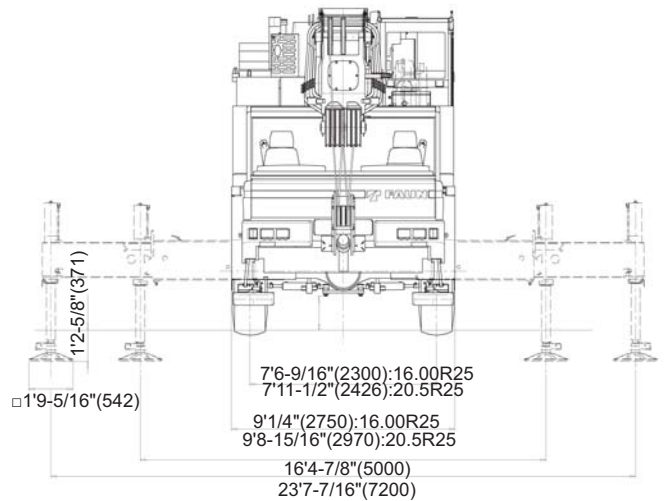
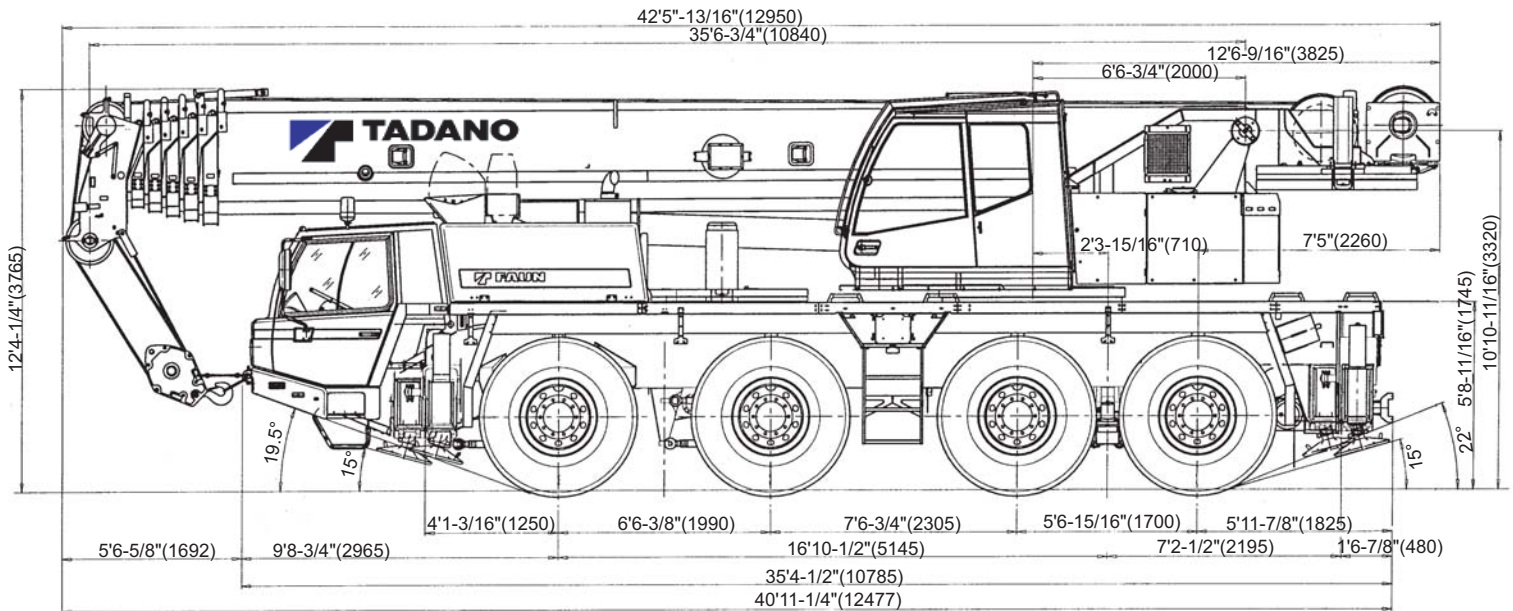
# TADANO

## ATF80-4

### 100 Ton Capacity (90.7 Metric Tons)

### ALL TERRAIN CRANE

#### DIMENSIONS



#### TURNING RADIUS

Steering	Front wheel (8x4)	All wheel (8x8)
Carrier inside	22' 3-11/16" (6.8m)	14' 5-1/4" (4.4m)
Over carrier	40' 8-3/16" (12.4m)	30' 8-1/8" (9.35m)
Over boom	42' 7-13/16" (13.0m)	34' 5-3/8" (10.5m)
Over boom extension	44' 3-1/2" (13.5m)	36' 1-1/16" (11.0m)
Wheel truck radius	34' 9-5/16" (10.6m)	26' 6-7/8" (8.1m)

Specification effects with S/No.43101 after.  
Specifications are subject to change without notice.

# 1. CRANE CARRIER

## 1.1 FRAME

FAUN purpose built, 4 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 towing connections and access ladders.

## 1.2 OUTRIGGERS

Four point, fully hydraulic, double telescopic outriggers with horizontal and vertical motions are independently controlled by electro-magnetic valves. Push button controls with level gauges on both sides of carrier and in super-structure 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 28'2-1/4" (8.59m), width 23' 7-7/16"(7.2m) Mid. extension 16' 4-7/8" (5.0m).

## 1.3 CARRIER ENGINE

Mercedes Benz 6 cylinder water-cooled diesel engine, model OM 501 LA (EUROMOT2,EPA), with hydrostatically driven fan and thermostatically controlled cooler. Displacement 728.99 in<sup>3</sup>, Rating 428 hp at 1,800 rpm: Torque 1,475 ft-lbs at 1,080 rpm.

### 1.4.1 TRANSMISSION

ZF AS-Tronic, type 12AS2302, with electro-pneumatically controlled dry clutch and fully automatic control system, 12 forward speeds and 2 reverse gears.

Gear ratios Forward: 12.33 / 9.59 / 7.44 / 5.78 / 4.57 / 3.55  
2.70 / 2.10 / 1.63 / 1.27 / 1.00 / 0.78  
Reverse: 11.41 / 8.88

### 1.4.2 TRANSFER CASE

Two stage Kessler transfer case is flange-mounted to 3rd axle. Reduction ratio: on-road 0.89 / off-road 1.536

## 1.5 DRIVE

8x6 for on-road and off-road: 1st, 3rd and 4th axle are driven  
8x8 for off-road(OPTIONAL)

## 1.6 AXLES

1st axle : steered, driven with transverse differential lock, reduction : 7.95  
2nd axle steered, non-driven(8x6)  
steered, driven with transverse differential lock (8x8), reduction : 7.95  
3rd axle : steered, driven with transverse differential lock, reduction : 7.95  
4th axle : steered, driven with transverse differential lock, reduction : 7.95

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

## 1.7 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 by push buttons in the carrier cab which adjust the stroke of each individual suspension cylinder.

Cylinder stroke: - 4-3/4" (- 120mm)  
+5-7/8" (+ 150mm)

## 1.8 BRAKE SYSTEM

Service brake : Dual circuit compressed air system with ABS and air-dryer.  
Parking brake : Spring loaded type, acting on 2nd,3rd and 4th axles.  
Auxiliary brake : Engine exhaust brake and constant throttle engine brake system.  
Eddy-current brake(OPTIONAL)

## 1.9 WHEELS

(8)11.00-25 steel disc wheels with (8) 16.00R25 on / off-road profile tires and mud flaps.  
Carrier width: 9'1/4" (2.75m) with 16.00R25 tires  
9' 8-15/16" (2.97m) with 20.5R25 tires (OPTIONAL)

## 1.10 STEERING SYSTEM

ZF semi block dual circuit hydraulic steering, Mechanical steering of two front axles with hydraulic booster and a emergency steering pump is flange-mounted to the gear box.  
Rear axle steering mechanically locked in "centered" position. At slow speeds, rear axles can also be hydraulically steered independently from the front axles. All bearings are designed for minimum maintenance.

## 1.11 POWER TRAIN

Axles, suspension cylinders and drive-shafts with cross-geared flanges virtually maintenance-free.

## 1.12 FUEL TANK CAPACITY

105.67 gal (400 l) filler cap lockable.

## 1.13 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 safety 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/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, air pressure gauge and engine warning lamp. Tempomat cruise control function. One-key system. Air conditioner(OPTIONAL)

## 1.14 ELECTRICAL SYSTEM

24 volt DC system with 80 ampere 3-phase generator, and two 12 volt, 170 Ah batteries.  
Front lighting includes 2 main head lights, 2 high beam lights, 2 directional indicators and 2 parking lights.  
Rear lighting includes 2 rear combi panels each with directional indicator, parking light, 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 light system, cab light, instrument panel light, signal horn and amber rotating beacon on cab roof.  
Lighting according to EEC regulations.

### 1.15 TOOLS AND ACCESSORIES

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

### 1.16 PAINTING

Standard TADANO colors

### 1.17 DIMENSIONS

Overall width : 9'1/4" (2.75m) with 16.00R25 tires  
 9' 8-15/16" (2.97m) with 20.5R25 tires  
 Overall height : 12' 4-1/4" (3.765m)  
 In travel condition, the overall height can be adjusted - 4-3/4" / + 5-7/8"  
 Overall length : 42' 5-13/16" (12.95m) with Aux. winch  
 41' 7-11/16" (12.692m) without Aux. winch  
 Carrier length : 35' 4-1/2" (10.785m)  
 Wheel base : 6' 6-3/8" + 7' 2-13/16" + 5' 6-15/16"  
 (1.99m + 2.305m + 1.7m)  
 Tail swing : 12' 7-3/8" (3.845m) with Aux. winch  
 11' 9-3/4" (3.6m) without Aux. winch

### 1.18 CARRIER OPTIONAL EQUIPMENT

1. Air conditioning
2. 8x8 drive
3. 20.5R25 on/off road profile tires
4. Spare wheel & tire
5. Eddy current brake (retarder)
6. Spark arrester
7. Back up alarm
8. Raer Toolbox
9. Towing attachment
10. Pneumatic and electrical quick disconnect connectors mounted on rear bumper for boom dolly
11. Central lubricating system

## 2. TRAVEL PERFORMANCE (according to DIN 70020)

Max. travel speed : 52.8 mph

Max. gradeability : 62 %

Gear	16.00R25 / 20.5R25 tires, GVW 105,821 lb			
	off-road		on-road	
	Travelling speed (mph)	Gradabilities (%)	Travelling speed (mph)	Gradabilities (%)
1st	0 - 2.2	62	0-3.7	35
2nd	2.8	44	5.0	35
3rd	3.7	33	6.2	26
4th	4.7	25	8.1	20
5th	5.9	19	9.9	15
6th	7.5	14	13.0	12
7th	9.9	11	17.4	8
8th	13.0	8	22.4	6
9th	16.8	6	28.6	5
10th	21.1	4	36.7	3
11th	26.7	3	46.6	2
12th	34.8	2	52.8	1
1st Rev.	2.5	56	4.3	32
2nd Rev.	3.1	41	5.0	32

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

## 3. SUPERSTRUCTURE

### 3.1 SUPERSTRUCTURE FRAME

Connected to carrier by a single-race ball bearing slewing ring with external gearing providing 360° continuous rotation.

### 3.2 CRANE ENGINE

Mercedes Benz 4 cylinder water-cooled diesel engine, model OM 904 LA(EURO 2,EPA), with 177 hp at 2,300 rpm, 486.79 ft-lbs torque at 1,200 rpm. Stepless control of engine rpm by foot pedal. Engine pre-heat system.  
Fuel tank capacity : 58.12 gal (220 l)

### 3.3 HYDRAULIC SYSTEM

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

### 3.4 HYDRAULIC CONTROLS

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

### 3.5 TELESCOPIC BOOM

Six section box type construction of high tensile, fine grained steel, consisting of 1 base section and 5 telescopic sections. The boom is extended by means of 1 double acting single stage cylinders with integrated holding valves.

All telescope sections can be extended and retracted fully automatic and locked in the selected working position.

All telescope sections are extendable under partial load.

Total retracted length : 35' 5-3/16" (10.8m)  
Total extended length : 159' 1-7/16" (48.5m)  
Max. sheave height : 168' 11-9/16" (51.5m)  
Telescoping speed out : 380 sec. normal speed /  
275 sec. high speed

### 3.6 TELESCOPIC BOOM EXTENSION

Swing around lattice type boom extension 29.53'(9.0m) / 52.49'(16.0m), offsets 5°/ 20°/ 40° with anti-two block system.

### 3.7 AUXILIARY LIFTING SHEAVE (SINGLE TOP) (OPTIONAL)

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

### 3.8 BOOM HOIST

1 double acting hydraulic cylinder with integral holding valve.  
Boom elevation : -2° to +80°  
Boom elevation speed : 55 sec. normal speed /  
35 sec. high speed (only derricking up)

### 3.9 MAIN WINCH

Axial piston constant displacement motor, grooved hoist drum, 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 system. Lower limit switch and drum turn indicator.

Drum diameter : 17.00" (423mm)  
Rope diameter : 0.70" (18mm)  
Rope length : 755' (230m)  
Max. line pull 1st layer : 15,287 lbs. (68 kN)  
Max. line speed 4th layer : 230 ft/min (70m/min) normal/  
367.5 ft/min (112m/min) high

### 3.10 AUXILIARY WINCH (OPTIONAL)

Axial piston constant displacement motor, grooved hoist drum, 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 system. Lower limit switch and drum turn indicator.

Drum diameter : 17.00" (423mm)  
Rope diameter : 0.70" (18mm)  
Rope length : 755' (230m)  
Max. line pull 1st layer : 15,287 lbs. (68 kN)  
Max. line speed 4th layer : 230 ft/min (70m/min)

### 3.11 SLEWING GEAR

Constant displacement motor with two stage planetary gear, a foot actuated service brake and a parking brake. Slewing speed infinitely variable: 0 - 2.0 rpm

### 3.12 COUNTERWEIGHT

Total 39,683 lbs, divisible, assembled and disassembled by hydraulic cylinders controlled from crane cab.  
Tail swing : 12' 7-3/8" (3.845m) with Aux. winch  
11' 9-3/4" (3.6m) without Aux. winch

### 3.13 SUPERSTRUCTURE CAB

Spacious comfortable panoramic cab with sliding door, extra-large tinted glass windows, electrical fold-out front window with windshield washer and wiper, fixed cab roof window with armoured glass and washer/wiper, sun visor, cab light, adjustable hydraulically cushioned seat with headrest, signal horn, radio/CD player, and connection for wireless (24 volt and 12 volt).

Engine dependent warm-water heater with defroster nozzles for windshield and cab floor, plus additional deisel crane cab heater.

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

Travel controls for steering and driving in 1st forward and reverse gear only.

Outtrigger controls and level from superstructure cab. Air conditioner.(OPTIONAL)

### 3.14 ELECTRICAL SYSTEM

24 volt system with 80 A 3-phase alternator, two 12 V (110 Ah) batteries, 1 rotating beacon on right-hand side of main winch, 2 working lights on cab front flap, 1 working light on boom base section and 2 side lights on boom head.

### 3.15 SAFETY DEVICES

Electronic load moment device (PAT PDC350) with interpolation and automatic overload shut-off, hoist limit switch with shut-off, overload warning and load moment gauge.

Digital display of boom angle, boom length, sheave height, working radius, hook load and further information.

Working area limitation for lifting height, load radius and boom angle.

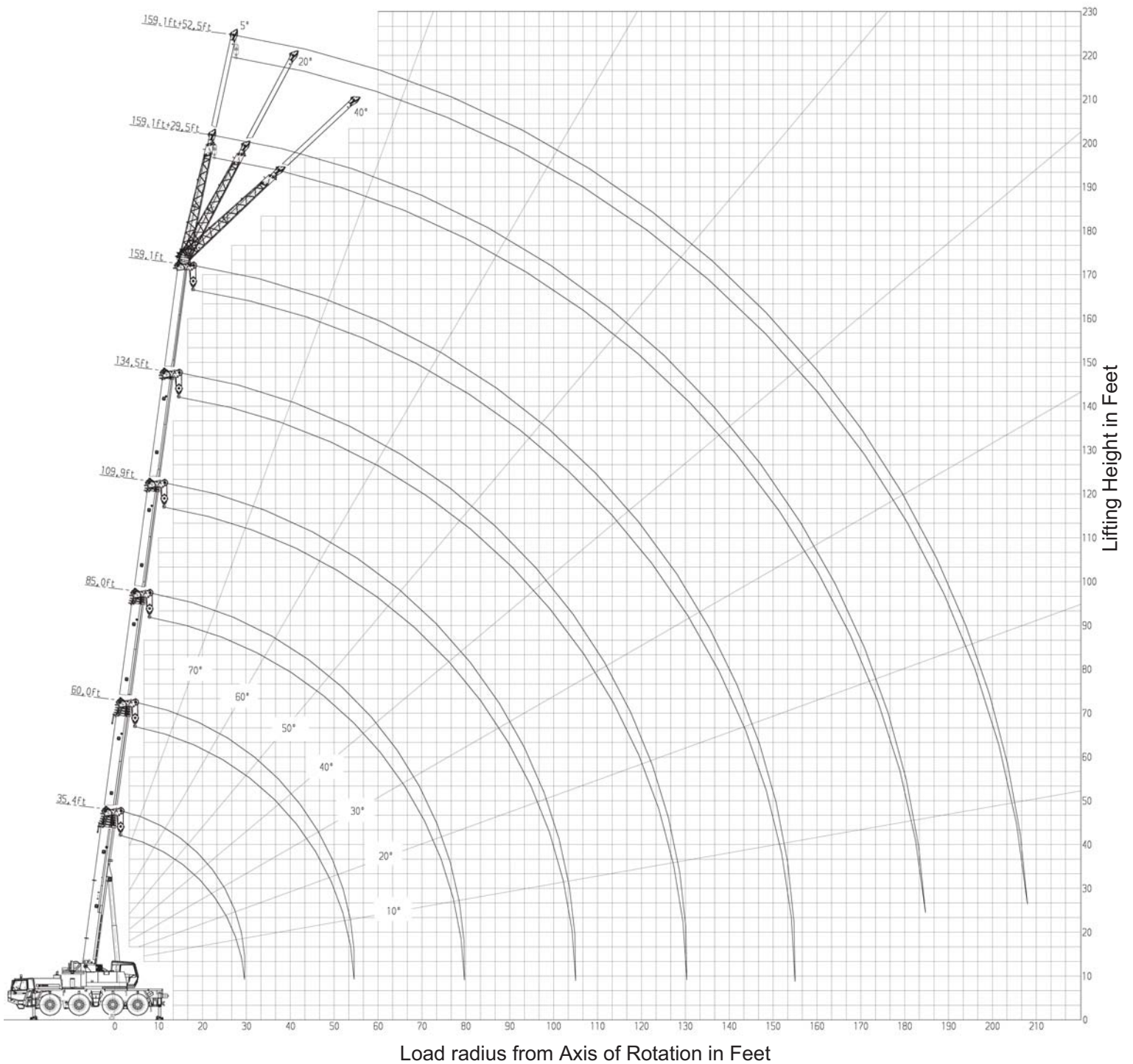
Safety valves against pipe and hose rupture, holding valves on hydraulic cylinders.

Automatic speed reduction when approaching overload condition.

### 3.16 SUPERSTRUCTURE OPTIONAL EQUIPMENT

1. Air conditioning
2. 6.6 ton headache ball
3. 69.4 ton 5 sheave ram's horn hook block
4. Auxiliary winch
5. Auxiliary lifting sheave
6. Short jib(6.6 ft)
7. Central lubrication system
8. Spark arrester
9. Free slewing and free boom elevation circuits for boom dolly.
10. 360° positive swing lock (NYC requirement).
11. Anemometer
12. Additional oil cooler

# ATF80-4 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.











**Counterweight 12,346 lbs**

Work. Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area <b>Outrigger base 23.62 ft</b>																		Work. Radius (ft)				
	Boom length (ft)																						
	35.4	47.9	47.9	60.0	60.0	60.0	60.0	72.5	72.5	72.5	85.0	85.0	85.0	97.4	97.4	97.4							
9	70	200.0*																	9				
10	68	157.0	74	155.0	74	89.3	78	140.5	78	89.5	78	139.5	78	59.9	80	113.5	80	66.9	80	50.9	10		
12	64	132.5	71	132.0	71	84.3	76	131.5	76	86.0	76	128.0	76	56.8	79	107.5	79	63.3	79	50.9	12		
14	60	113.0	69	113.0	69	79.4	74	112.5	74	82.5	74	111.0	74	53.7	77	101.5	77	59.8	77	50.2	14		
16	56	98.8	66	98.8	66	74.4	71	98.0	71	79.0	71	96.5	71	50.6	75	95.6	75	56.3	75	48.6	16		
18	52	88.1	64	87.6	64	69.6	70	86.9	70	75.7	70	85.7	70	47.6	74	86.2	74	52.8	74	47.0	18		
20	47	78.4	61	77.6	61	64.9	68	76.9	68	72.2	68	75.9	68	44.5	72	76.4	72	49.3	72	45.4	20		
25	33	59.7	53	59.8	53	56.0	62	57.9	62	60.9	62	56.2	62	37.7	68	56.8	68	41.2	68	41.3	25		
30		44	43.6	44	46.7	56	41.9	56	48.1	56	40.0	56	32.5	64	40.6	64	35.5	64	36.3	64	41.1	30	
35		34	33.2	34	36.1	50	31.8	50	37.5	50	30.0	50	28.7	58	30.7	58	31.0	58	31.9	58	31.2	35	
40		19	26.0	19	28.9	43	25.0	43	30.4	43	23.4	43	25.7	53	23.8	53	27.4	53	28.3	60	24.3	40	
45						35	20.1	35	25.0	35	18.4	35	23.2	48	18.8	48	24.6	48	25.4	56	25.0	45	
50						22	16.0	22	21.0	22	14.3	22	20.7	42	14.7	42	21.3	42	22.2	51	15.4	50	
55														35	11.4	35	18.2	35	19.1	47	12.0	55	
60														26	8.6	26	15.5	26	16.3	42	9.3	60	
65														12	6.9	12	13.3	12	14.2	36	7.1	65	
70																				28	5.4	70	
75																				21	3.7	75	
80																						31	80
85																						23	85
90																							90
95																							95
100																							100
110																							110
120																							120
130																							130
Telescoping sequence %																							
Tel. 1	0	0	0	50	0	100	0	100	0	0	100	0	0	100	0	0	100	0	0	Tel. 1			
Tel. 2	0	50	0	50	0	0	0	50	0	0	100	0	0	100	0	0	100	0	0	Tel. 2			
Tel. 3	0	0	0	0	0	0	0	0	0	0	0	100	0	100	0	50	100	50	100	Tel. 3			
Tel. 4	0	0	0	0	50	0	0	0	100	50	0	50	100	0	100	0	100	100	100	Tel. 4			
Tel. 5	0	0	50	0	50	0	100	0	50	100	0	50	100	0	50	100	0	50	100	Tel. 5			

\* Over rear with superstructure pin engaged and additional equipment.

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.

99707789900

**Counterweight 12,346 lbs**

Work. Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area <b>Outrigger base 16.40 ft</b>																		Work. Radius (ft)				
	Boom length (ft)																						
	35.4	47.9	47.9	60.0	60.0	60.0	60.0	72.5	72.5	72.5	85.0	85.0	85.0	97.4	97.4	97.4							
9	70	167.0																		9			
10	68	157.0	74	157.5	74	89.3	78	140.5	78	89.5	78	139.5	78	59.9	80	113.5	80	66.9	80	50.9	10		
12	64	138.0	71	138.0	71	84.3	76	135.0	76	86.0	76	129.5	76	56.8	79	107.5	79	63.3	79	50.9	12		
14	60	110.5	69	110.0	69	79.4	74	108.0	74	82.5	74	105.5	74	53.7	77	98.0	77	59.8	77	50.2	14		
16	56	82.7	66	81.8	66	74.4	71	80.2	71	79.0	71	77.3	71	50.6	75	78.4	75	56.3	75	48.6	16		
18	52	65.9	64	65.0	64	65.3	70	63.6	70	68.6	70	61.1	70	47.6	74	61.9	74	52.8	74	47.0	18		
20	47	52.0	61	51.2	61	55.3	68	49.8	68	57.0	68	47.7	68	44.5	72	48.3	72	49.3	72	45.4	20		
25	33	34.0	53	33.3	53	36.7	62	32.1	62	38.4	62	30.2	62	36.8	68	30.8	68	38.6	68	38.9	25		
30		44	23.1	44	26.2	56	22.1	56	27.6	56	20.3	56	27.7	64	21.0	64	28.0	64	29.1	68	21.4	30	
35		34	16.8	34	19.8	50	15.9	50	21.1	50	14.3	50	21.2	58	14.8	58	21.5	58	22.4	64	15.2	35	
40		19	12.5	19	15.4	43	11.7	43	16.6	43	10.2	43	16.8	53	10.6	53	17.0	53	17.9	60	11.1	40	
45						35	8.5	35	13.4	35	7.2	35	13.4	48	7.6	48	13.6	48	14.5	56	7.9	45	
50						22	6.2	22	10.9	22	4.8	22	10.9	42	5.3	42	11.1	42	12.0	51	5.5	50	
55														35	3.3	35	9.1	35	9.9	47	3.6	55	
60														26	1.7	26	7.5	26	8.1	42	1.9	60	
65																				36	5.7	65	
70																				28	4.6	70	
75																				21	3.6	75	
80																						37	80
85																						23	85
90																							90
95																							95
100																							100
Telescoping sequence %																							
Tel. 1	0	0	0	50	0	100	0	100	0	0	100	0	0	100	0	0	100	0	0	Tel. 1			
Tel. 2	0	50	0	50	0	0	0	50	0	0	100	0	0	100	0	0	100	0	0	Tel. 2			
Tel. 3	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	50	100	50	100	Tel. 3			
Tel. 4	0	0	0	0	0	50	0	0	0	100	50	0	50	100	0	100	100	100	100	Tel. 4			
Tel. 5	0	0	50	0	50	0	100	0	50	100	0	50	100	0	50	100	0	50	100	Tel. 5			

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99707789901

**Counterweight 12,346 lbs**

Work. Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area <b>Outrigger base 23.62 ft</b>														Work. Radius (ft)													
	Boom length (ft)																											
	109.9	109.9	109.9	109.9	122.4	122.4	122.4	134.5	134.5	134.5	147.0	147.0	159.1															
9															9													
10															10													
12															12													
14															14													
16															16													
18															18													
20	79	49.4	79	48.5	79	43.9	79	36.0							20													
25	77	45.8	77	45.1	77	41.0	77	33.9	78	36.2	78	34.0	78	29.7	79	28.9	79	29.5	79	25.6						25		
30	74	41.9	74	41.0	74	38.1	74	31.8	76	34.0	76	32.0	76	28.5	78	28.8	78	29.4	78	25.4	79	23.1	79	21.4			30	
35	72	33.0	72	32.4	72	35.4	72	29.5	74	31.7	74	30.2	74	27.3	75	27.4	75	28.3	75	24.4	77	22.9	77	21.2	78	19.8	35	
40	69	26.3	69	25.8	69	29.5	69	27.3	72	26.9	72	28.2	72	26.3	74	25.8	74	26.7	74	23.5	75	22.2	75	20.9	77	19.8	40	
45	66	21.2	66	21.0	66	24.3	66	25.1	69	21.7	69	24.5	69	24.9	71	22.1	71	22.0	71	22.6	73	21.3	73	20.2	75	19.3	45	
50	63	17.3	63	16.9	63	20.4	63	22.1	67	17.9	67	20.8	67	22.0	69	18.7	69	18.4	69	20.7	71	18.7	71	19.4	73	18.4	50	
55	59	14.0	59	13.6	59	17.1	59	19.1	64	14.6	64	17.5	64	18.9	67	15.5	67	15.2	67	18.2	69	15.9	69	17.4	71	16.4	55	
60	56	11.3	56	10.9	56	14.4	56	16.3	61	11.7	61	14.8	61	16.1	65	12.6	65	12.4	65	15.5	68	13.5	68	14.6	70	13.8	60	
65	53	9.1	53	8.8	53	12.2	53	14.2	58	9.5	58	12.6	58	13.9	62	10.4	62	10.2	62	13.3	65	11.3	65	12.6	68	11.9	65	
70	50	7.3	50	7.0	50	10.4	50	12.3	55	7.8	55	10.9	55	12.0	59	8.7	59	8.4	59	11.5	63	9.6	63	10.9	66	10.1	70	
75	46	5.9	46	5.4	46	8.9	46	10.7	52	6.3	52	9.4	52	10.5	57	7.3	57	7.0	57	10.0	61	8.0	61	9.3	64	8.5	75	
80	42	4.5	42	4.1	42	7.6	42	9.4	49	5.0	49	8.1	49	9.2	54	6.1	54	5.7	54	8.7	58	6.5	58	7.9	61	7.2	80	
85	37	3.2	37	2.7	37	6.5	37	8.2	45	3.8	45	6.9	45	8.0	51	4.9	51	4.5	51	7.6	56	5.4	56	6.9	59	6.0	85	
90	32	2.3	32	1.9	32	5.6	32	7.4	41	2.8	41	6.0	41	7.1	48	3.7	48	3.5	48	6.5	53	4.3	53	5.9	57	5.0	90	
95	26	1.6			26	4.8	26	6.5	38	1.9	38	5.2	38	6.2	45	2.8	45	2.6	45	5.6	50	3.3	50	4.9	55	4.0	95	
100					19	3.9	19	5.7				33	4.4	33	5.3	42	2.0	42	1.7	42	4.9	47	2.4	47	3.9	52	3.1	100
110												21	2.9	21	4.1						33	3.5		41	2.6	47	1.9	110
120																					23	2.5		34	1.6			120
130																												130
Telescoping sequence %																												
Tel. 1	100	100	0	0	100	0	0	100	100	0	100	50	100	Tel. 1														
Tel. 2	100	100	100	0	100	100	50	100	100	100	100	100	100	Tel. 2														
Tel. 3	50	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 3														
Tel. 4	50	100	50	100	50	100	100	50	100	100	100	100	100	Tel. 4														
Tel. 5	0	0	50	100	0	50	100	50	0	100	50	100	100	Tel. 5														

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine. 99707788866

**Counterweight 12,346 lbs**

Work. Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area <b>Outrigger base 16.40 ft</b>														Work. Radius (ft)													
	Boom length (ft)																											
	109.9	109.9	109.9	109.9	122.4	122.4	122.4	134.5	134.5	134.5	147.0	147.0	159.1															
9														9														
10														10														
12														12														
14														14														
16														16														
18														18														
20	79	48.6	79	47.8	79	43.9	79	36.0						20														
25	77	33.8	77	33.2	77	36.9	77	33.9	78	33.2	78	34.0	78	29.7	79	28.9	79	29.5	79	25.6						25		
30	74	23.4	74	23.0	74	26.7	74	29.1	76	24.0	76	27.3	76	28.1	78	25.1	78	24.9	78	25.4	79	23.0	79	21.4			30	
35	72	17.3	72	16.8	72	20.2	72	22.6	74	17.7	74	20.9	74	22.2	75	18.8	75	18.4	75	21.5	77	19.3	77	20.4	78	19.3	35	
40	69	13.0	69	12.6	69	15.9	69	18.1	72	13.5	72	16.4	72	17.7	74	14.4	74	14.1	74	17.2	75	15.0	75	16.6	77	15.7	40	
45	66	9.9	66	9.4	66	12.5	66	14.7	69	10.3	69	13.2	69	14.3	71	11.2	71	11.0	71	13.9	73	11.8	73	13.2	75	12.5	45	
50	63	7.3	63	7.0	63	10.0	63	12.1	67	7.8	67	10.7	67	11.8	69	8.7	69	8.4	69	11.3	71	9.3	71	10.7	73	10.0	50	
55	59	5.3	59	5.1	59	8.0	59	10.0	64	5.8	64	8.6	64	9.7	67	6.7	67	6.4	67	9.2	69	7.2	69	8.6	71	7.9	55	
60	56	3.7	56	3.5	56	6.4	56	8.3	61	4.2	61	6.8	61	8.1	65	5.0	65	4.8	65	7.5	68	5.5	68	7.0	70	6.1	60	
65	53	2.4	53	2.1	53	5.0	53	6.8	58	2.8	58	5.5	58	6.6	62	3.7	62	3.5	62	6.1	65	4.3	65	5.7	68	4.8	65	
70					50	4.0	50	5.7	55	1.8	55	4.4	55	5.5	59	2.6	59	2.4	59	5.1	63	3.2	63	4.5	66	3.7	70	
75					46	3.0	46	4.8			52	3.5	52	4.6	57	1.7				57	4.1	61	2.2	61	3.5	64	2.8	75
80					42	2.0	42	4.0			49	2.7	49	3.8						54	3.1		58	2.7	61	2.0	80	
85					37	3.1			45	1.8	45	2.9								51	2.5		56	2.0			85	
90					32	2.6					41	2.4								48	1.8						90	
95					26	2.0					38	1.8															95	
100																											100	
Telescoping sequence %																												
Tel. 1	100	100	0	0	100	0	0	100	100	0	100	50	100	Tel. 1														
Tel. 2	100	100	100	0	100	100	50	100	100	100	100	100	100	Tel. 2														
Tel. 3	50	100	100	100	100	100	100	100	100	100	100	100	100	Tel. 3														
Tel. 4	50	100	50	100	50	100	100	50	100	100	100	100	100	Tel. 4														
Tel. 5	0	0	50	100	0	50	100	50	0	100	50	100	100	Tel. 5														

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine. 99707789901



**Counterweight 0 lbs**

Work. Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on telescopic boom On outriggers, 360° working area <b>Outrigger base 23.62 ft</b>														Work. Radius (ft)													
	Boom length (ft)																											
	109.9		109.9		109.9		109.9		122.4		122.4		122.4			134.5		134.5		134.5		147.0		147.0		159.1		
9																										9		
10																											10	
12																											12	
14																											14	
16																											16	
18																											18	
20	79	49.4	79	48.5	79	43.9	79	36.0																			20	
25	77	44.6	77	44.0	77	41.0	77	33.9	78	36.2	78	34.0	78	29.7	79	28.9	79	29.5	79	25.6							25	
30	74	34.0	74	33.3	74	37.2	74	31.8	76	33.4	76	32.0	76	28.5	78	28.8	78	29.4	78	25.4	79	23.1	79	21.4	78	19.8	30	
35	72	25.1	72	24.6	72	28.4	72	29.5	74	25.6	74	28.6	74	27.3	75	25.6	75	25.6	75	24.4	77	22.9	77	21.2	78	19.5	35	
40	69	19.3	69	18.8	69	22.2	69	24.6	72	19.7	72	22.8	72	24.3	74	20.4	74	20.2	74	23.1	75	20.9	75	20.6	77	19.5	40	
45	66	14.7	66	14.3	66	17.8	66	20.0	69	15.2	69	18.3	69	19.8	71	16.2	71	16.0	71	18.9	73	16.7	73	17.7	75	17.0	45	
50	63	11.3	63	10.9	63	14.4	63	16.6	67	11.7	67	15.1	67	16.4	69	13.0	69	12.6	69	15.6	71	13.4	71	14.7	73	14.1	50	
55	59	8.6	59	8.2	59	11.6	59	13.9	64	9.0	64	12.4	64	13.6	67	10.2	67	9.8	67	13.0	69	10.8	69	12.1	71	11.5	55	
60	56	6.5	56	6.1	56	9.4	56	11.8	61	6.9	61	10.0	61	11.3	65	7.9	65	7.6	65	10.9	68	8.7	68	10.0	70	9.4	60	
65	53	4.6	53	4.4	53	7.7	53	9.9	58	5.1	58	8.2	58	9.5	62	6.4	62	5.7	62	9.0	65	6.8	65	8.2	68	7.5	65	
70	50	3.2	50	2.9	50	6.2	50	8.4	55	3.7	55	6.8	55	8.1	59	4.8	59	4.5	59	7.5	63	5.3	63	6.9	66	5.9	70	
75	46	2.1	46	1.4	46	4.9	46	7.1	52	2.5	52	5.5	52	6.7	57	3.5	57	3.3	57	6.2	61	4.0	61	5.7	64	4.7	75	
80	42	1.1			42	3.9	42	6.1	49	1.5	49	4.4	49	5.5	54	2.4	54	2.2	54	5.1	58	2.9	58	4.6	61	3.7	80	
85					37	2.9	37	4.9			45	3.4	45	4.7	51	1.6	51	1.4	51	4.2	56	2.2	56	3.8	59	2.7	85	
90					32	2.2	32	4.2			41	2.7	41	4.0					48	3.4	53	1.4	53	2.8	57	2.0	90	
95					26	1.6	26	3.4			38	2.0	38	3.2					45	2.7			50	2.1	55	1.3	95	
100							19	2.6			33	1.3	33	2.5					42	2.0			47	1.6			100	
110												21	1.6						33	1.0							110	
Telescoping sequence %																												
Tel. 1	100				0				100					0				100					0			100		Tel. 1
Tel. 2	100				100				100					50				100					100			100		Tel. 2
Tel. 3	50				100				100					100				100					100			100		Tel. 3
Tel. 4	50				100				50					100				100					100			100		Tel. 4
Tel. 5	0				0				50					100				50					100			100		Tel. 5

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine. 99707788725

**Counterweight 12,346 lbs.**

Work. Radius (ft)	Lifting capacities in 1,000 lbs. according per SAE J765 on telescopic boom for rigging counterweight On outriggers, 360° working area <b>On tire, over rear</b>										Work. Radius (ft)		
	Boom length (ft)												
	35.4		47.9		60.0		35.4		47.9			60.0	
10	68	42.5			74	43.0			78	43.0			10
12	64	38.2			71	38.6			76	38.9			12
14	60	33.9			69	35.0			74	35.2			14
16	56	28.7			66	30.9			71	32.0			16
18	52	24.1			64	26.4			70	27.8			18
20	47	20.1			61	22.2			68	23.6			20
25	33	13.7			53	15.7			62	17.0			25
30					44	11.4			56	12.5			30
35					34	8.3			50	9.4			35
40					19	6.1			43	7.3			40
45									35	5.6			45
50									22	4.2			50
Telescoping sequence %													
Tel. 1					0								Tel. 1
Tel. 2					0								Tel. 2
Tel. 3					0								Tel. 3
Tel. 4					0								Tel. 4
Tel. 5					0				50				Tel.5

\*\* Over rear with superstructure pin engaged.

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.

99707789905

**Counterweight 0 lbs.**

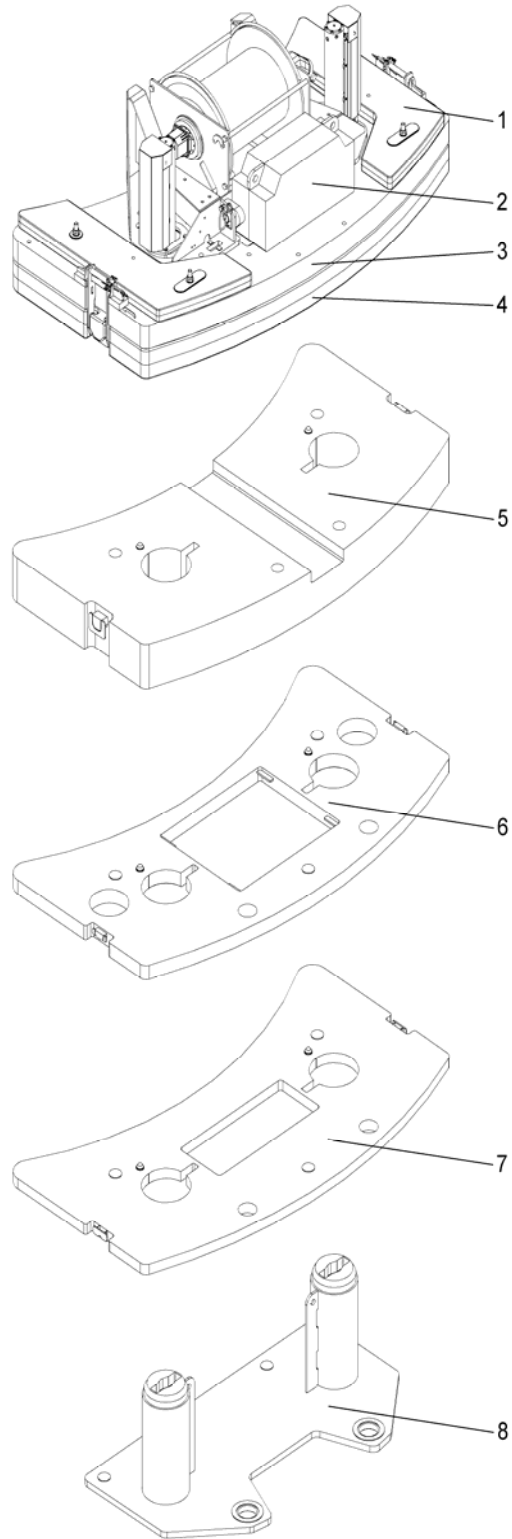
Work. Radius (ft)	Lifting capacities in 1,000 lbs. according per SAE J765 on telescopic boom for rigging counterweight On outriggers, 360° working area <b>On tire, over rear</b>										Work. Radius (ft)		
	Boom length (ft)												
	35.4		47.9		60.0		35.4		47.9			60.0	
10	68	42.0			74	42.5			78	43.0			10
12	64	33.3			71	36.1			76	37.5			12
14	60	26.0			69	28.4			74	29.9			14
16	56	20.8			66	23.0			71	24.5			16
18	52	17.2			64	19.3			70	20.7			18
20	47	13.9			61	16.0			68	17.3			20
25	33	8.7			53	10.8			62	11.9			25
30					44	7.2			56	8.3			30
35					34	4.8			50	6.0			35
40					19	3.1			43	4.2			40
45									35	2.9			45
50									22	1.7			50
Telescoping sequence %													
Tel. 1					0								Tel. 1
Tel. 2					0								Tel. 2
Tel. 3					0								Tel. 3
Tel. 4					0								Tel. 4
Tel. 5					0				50				Tel.5

\*\* Over rear with superstructure pin engaged.

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine.

99707788730

### Counterweight variant



05359

	1) 0.3t x2	2)* 0.8t	3) 3.5t	4) 3.7t	5) 5.5t	6) 1.8t	7) 1.4t	8) 0.7t
<b>0 lb</b>								
<b>12,346 lb</b>	x	x	x					x
<b>27,558 lb</b>	x	x	x	x		x	x	x
<b>39,683 lb</b>	x	x	x	x	x	x	x	x

\* Counterweight 2) is not in combination with Aux. winch.

**Counterweight 39,683 lbs**

Working Radius (ft)		Lifting capacities in 1,000 lbs according per SAE J765 on fly jib 29.5 ft / 52.5 ft															Working Radius (ft)				
		On outriggers, 360° working area																			
		Outrigger base 23.62 ft																			
		Boom length 35.4 ft to 147.0 ft					Boom length 147.0 ft to 159.1 ft					Boom length 35.4 ft to 159.1 ft									
Fly jib 29.5 ft offset			Fly jib 29.5 ft offset			Fly jib 29.5 ft offset			Fly jib 29.5 ft offset			Fly jib 52.5 ft offset									
5°			20°			40°			5°			20°			40°						
∠			∠			∠			∠			∠			∠						
35	79	13.9				79	13.0				79	13.0								35	
40	78	13.4	80	9.0		78	12.9	80	9.0		79	13.0								40	
45	76	12.7	78	8.6		76	12.4	78	8.6		78	12.5	80	8.7						45	
50	75	12.2	77	8.2	79	5.8	75	12.0	77	8.2	79	5.8	77	12.2	79	8.4		79	7.1	50	
55	73	11.7	75	7.8	77	5.7	73	11.5	75	7.8	77	5.7	75	11.8	77	8.1	78	5.8	77	6.8	55
60	72	11.1	74	7.4	76	5.6	72	11.0	74	7.4	76	5.6	74	11.5	76	7.8	77	5.7	76	6.5	60
65	70	10.4	72	7.2	74	5.3	70	10.4	72	7.2	74	5.3	72	11.1	74	7.4	75	5.5	75	6.2	65
70	69	9.9	71	6.9	73	5.2	69	9.9	71	6.9	73	5.2	71	10.5	73	7.2	74	5.4	74	5.8	70
75	67	9.4	69	6.7	71	5.1	67	9.4	69	6.7	71	5.1	69	9.9	71	6.9	72	5.2	72	5.4	75
80	65	8.8	67	6.5	69	5.0	65	8.8	67	6.5	69	5.0	68	9.4	69	6.7	71	5.2	71	5.1	80
85	63	8.4	65	6.3	67	5.0	63	8.4	65	6.3	67	5.0	66	8.8	67	6.5	69	5.1	69	4.9	85
90	62	8.0	64	6.0	65	4.9	62	8.0	64	6.0	65	4.9	65	8.6	66	6.3	68	5.0	68	4.7	90
95	60	7.6	62	5.8	63	4.8	60	7.6	62	5.8	63	4.8	63	8.3	64	6.2	66	4.9	66	4.5	95
100	58	7.3	60	5.7	61	4.7	58	7.3	60	5.7	61	4.7	61	8.0	63	6.1	64	4.8	65	4.3	100
110	54	6.2	56	5.4	57	4.7	54	6.9	56	5.4	57	4.7	57	6.7	59	5.8	60	4.7	61	3.9	110
120	49	4.7	51	5.0	52	4.5	49	5.8	51	5.2	52	4.5	53	5.1	55	5.3	56	4.6	58	3.6	120
130	44	3.5	46	3.7	47	3.8	44	4.6	46	4.7	47	4.5	49	3.8	51	4.1	52	4.4	55	3.3	130
140	38	2.4	40	2.5	41	2.5	38	3.4	40	3.6	41	3.7	44	2.7	46	3.0	47	3.2	52	3.0	140
150	32	1.4	33	1.5	33	1.4	32	2.5	33	2.6	33	2.6	39	1.7	40	2.1	41	2.1	48	2.8	150
160							23	1.7	24	1.7	22	1.6			33	1.1	33	1.1	44	2.1	160
170																			38	1.4	170
Telescoping sequence %																					
Tel. 1	100					50					100					Tel. 1					
Tel. 2	100					100					100					Tel. 2					
Tel. 3	100					100					100					Tel. 3					
Tel. 4	100					100					100					Tel. 4					
Tel. 5	50					100					100					Tel. 5					

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine. 99707788731

**Counterweight 39,683 lbs**

Working Radius (ft)		Lifting capacities in 1,000 lbs according per SAE J765 on fly jib 29.5 ft / 52.5 ft															Working Radius (ft)				
		On outriggers, 360° working area																			
		Outrigger base 16.40 ft																			
		Boom length 35.4 ft to 147.0 ft					Boom length 147.0 ft to 159.1 ft					Boom length 35.4 ft to 159.1 ft									
Fly jib 29.5 ft offset			Fly jib 29.5 ft offset			Fly jib 29.5 ft offset			Fly jib 29.5 ft offset			Fly jib 52.5 ft offset									
5°			20°			40°			5°			20°			40°						
∠			∠			∠			∠			∠			∠						
35	79	13.9				79	13.0				79	13.0								35	
40	78	13.4	80	9.0		78	12.9	80	9.0		79	13.0								40	
45	76	12.7	78	8.6		76	12.4	78	8.6		78	12.5	80	8.7						45	
50	75	12.2	77	8.2	79	5.8	75	12.0	77	8.2	79	5.8	77	12.2	79	8.4		79	7.1	50	
55	73	11.7	75	7.8	77	5.7	73	11.5	75	7.8	77	5.7	75	11.8	77	8.1	78	5.8	77	6.8	55
60	72	11.1	74	7.4	76	5.6	72	11.0	74	7.4	76	5.6	74	11.5	76	7.8	77	5.7	76	6.5	60
65	70	10.4	72	7.2	74	5.3	70	10.4	72	7.2	74	5.3	72	11.1	74	7.4	75	5.5	75	6.2	65
70	69	9.5	71	6.9	73	5.2	69	9.9	71	6.9	73	5.2	71	9.9	73	7.2	74	5.4	74	5.8	70
75	67	8.3	69	6.7	71	5.1	67	9.1	69	6.7	71	5.1	69	8.6	71	6.9	72	5.2	72	5.4	75
80	65	7.0	67	6.5	69	5.0	65	8.1	67	6.5	69	5.0	68	7.3	69	6.7	71	5.2	71	5.1	80
85	63	5.9	65	6.3	67	5.0	63	6.9	65	6.3	67	5.0	66	6.2	67	6.5	69	5.1	69	4.9	85
90	62	5.0	64	5.5	65	4.9	62	6.0	64	6.0	65	4.9	65	5.3	66	5.8	68	5.0	68	4.7	90
95	60	4.1	62	4.7	63	4.6	60	5.1	62	5.5	63	4.8	63	4.5	64	5.0	66	4.9	66	4.5	95
100	58	3.3	60	3.8	61	4.2	58	4.4	60	4.7	61	4.7	61	3.8	63	4.2	64	4.6	65	4.3	100
110	54	2.1	56	2.4	57	2.7	54	3.1	56	3.4	57	3.7	57	2.4	59	2.8	60	3.2	61	3.5	110
120			51	1.4	52	1.5	49	2.0	51	2.3	52	2.5	53	1.4	55	1.7	56	1.9	58	2.5	120
130							44	1.2	46	1.3	47	1.4							55	1.6	130
140																			54	1.2	140
Telescoping sequence %																					
Tel. 1	100					50					100					Tel. 1					
Tel. 2	100					100					100					Tel. 2					
Tel. 3	100					100					100					Tel. 3					
Tel. 4	100					100					100					Tel. 4					
Tel. 5	50					100					100					Tel. 5					

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine. 99707788732

**Counterweight 27,558 lbs**

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on fly jib 29.5 ft / 52.5 f On outriggers, 360° working area															Working Radius (ft)
	Outrigger base 23.62 ft															
	Boom length 35.4 ft to 147.0 ft					Boom length 147.0 ft to 159.1 ft					Boom length 35.4 ft to 159.1 ft					
	Fly jib 29.5 ft offset			Fly jib 29.5 ft offset			Fly jib 29.5 ft offset			Fly jib 52.5 ft offset						
	5°	20°	40°	5°	20°	40°	5°	20°	40°	5°	20°	40°	5°	20°	40°	
35	79	13.9				79	13.0									35
40	78	13.4	80	9.0		78	12.9	80	9.0							40
45	76	12.7	78	8.6		76	12.4	78	8.6							45
50	75	12.2	77	8.2	79	5.8	75	12.0	77	8.2	79	5.8	77	12.2	79	50
55	73	11.7	75	7.8	77	5.7	73	11.5	75	7.8	77	5.7	75	11.8	77	55
60	72	11.1	74	7.4	76	5.6	72	11.0	74	7.4	76	5.6	74	11.5	76	60
65	70	10.4	72	7.2	74	5.3	70	10.4	72	7.2	74	5.3	72	11.1	74	65
70	69	9.9	71	6.9	73	5.2	69	9.9	71	6.9	73	5.2	71	10.5	73	70
75	67	9.4	69	6.7	71	5.1	67	9.4	69	6.7	71	5.1	69	9.9	71	75
80	65	8.8	67	6.5	69	5.0	65	8.8	67	6.5	69	5.0	68	9.4	69	80
85	63	8.4	65	6.3	67	5.0	63	8.4	65	6.3	67	5.0	66	8.8	67	85
90	62	7.8	64	6.0	65	4.9	62	8.0	64	6.0	65	4.9	65	8.3	66	90
95	60	7.0	62	5.8	63	4.8	60	7.6	62	5.8	63	4.8	63	7.4	64	95
100	58	6.0	60	5.7	61	4.7	58	7.1	60	5.7	61	4.7	61	6.5	63	100
110	54	4.3	56	4.8	57	4.7	54	5.5	56	5.4	57	4.7	57	4.8	59	110
120	49	3.1	51	3.4	52	3.6	49	4.2	51	4.4	52	4.4	53	3.4	55	120
130	44	1.8	46	2.1	47	2.2	44	3.0	46	3.2	47	3.4	49	2.3	51	130
140			40	1.1	41	1.1	38	2.0	40	2.2	41	2.3	44	1.2	46	140
150							32	1.2	33	1.3	33	1.3				150
160																160
Telescoping sequence %																
Tel. 1	100					50					100					Tel. 1
Tel. 2	100					100					100					Tel. 2
Tel. 3	100					100					100					Tel. 3
Tel. 4	100					100					100					Tel. 4
Tel. 5	50					100					100					Tel. 5

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine. 99707789906

**Counterweight 27,558 lbs**

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on fly jib 29.5 ft / 52.5 f On outriggers, 360° working area															Working Radius (ft)
	Outrigger base 16.40 ft															
	Boom length 35.4 ft to 147.0 ft					Boom length 147.0 ft to 159.1 ft					Boom length 35.4 ft to 159.1 ft					
	Fly jib 29.5 ft offset			Fly jib 29.5 ft offset			Fly jib 29.5 ft offset			Fly jib 52.5 ft offset						
	5°	20°	40°	5°	20°	40°	5°	20°	40°	5°	20°	40°	5°	20°	40°	
35	79	13.9				79	13.0									35
40	78	13.4	80	9.0		78	12.9	80	9.0							40
45	76	12.7	78	8.6		76	12.4	78	8.6							45
50	75	12.2	77	8.2	79	5.8	75	12.0	77	8.2	79	5.8	77	12.2	79	50
55	73	11.4	75	7.8	77	5.7	73	11.5	75	7.8	77	5.7	75	11.6	77	55
60	72	10.1	74	7.4	76	5.6	72	10.9	74	7.4	76	5.6	74	10.6	76	60
65	70	8.4	72	7.2	74	5.3	70	9.4	72	7.2	74	5.3	72	8.8	74	65
70	69	6.9	71	6.9	73	5.2	69	8.0	71	6.9	73	5.2	71	7.3	73	70
75	67	5.7	69	6.3	71	5.1	67	6.8	69	6.7	71	5.1	69	6.1	71	75
80	65	4.6	67	5.3	69	5.0	65	5.7	67	6.2	69	5.0	68	4.9	69	80
85	63	3.7	65	4.2	67	5.0	63	4.7	65	5.2	67	5.0	66	4.0	67	85
90	62	2.8	64	3.4	65	3.9	62	3.9	64	4.4	65	4.6	65	3.3	66	90
95	60	2.1	62	2.6	63	3.1	60	3.2	62	3.6	63	4.0	63	2.5	64	95
100	58	1.5	60	1.9	61	2.3	58	2.6	60	2.9	61	3.3	61	1.8	63	100
110																110
120																120
130																130
Telescoping sequence %																
Tel. 1	100					50					100					Tel. 1
Tel. 2	100					100					100					Tel. 2
Tel. 3	100					100					100					Tel. 3
Tel. 4	100					100					100					Tel. 4
Tel. 5	50					100					100					Tel. 5

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine. 99707789907



**Counterweight 12,346 lbs**

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on fly jib 29.5 ft / 52.5 ft On outriggers, 360° working area <b>Outrigger base 23.62 ft</b>															Working Radius (ft)			
	Boom length 35.4 ft to 147.0 ft					Boom length 147.0 ft to 159.1 ft					Boom length 35.4 ft to 159.1 ft								
	Fly jib 29.5 ft offset			Fly jib 29.5 ft offset			Fly jib 29.5 ft offset			Fly jib 52.5 ft offset									
	5°	20°	40°	5°	20°	40°	5°	20°	40°	5°	20°	40°							
35	79	13.9				79	13.0											35	
40	78	13.4	80	9.0		78	12.9	80	9.0		79	13.0						40	
45	76	12.7	78	8.6		76	12.4	78	8.6		78	12.5	80	8.7				45	
50	75	12.2	77	8.2	79	5.8	75	12.0	77	8.2	79	5.8	77	12.2	79	8.4		50	
55	73	11.7	75	7.8	77	5.7	73	11.5	75	7.8	77	5.7	75	11.8	77	8.1	78	5.8	55
60	72	11.1	74	7.4	76	5.6	72	11.0	74	7.4	76	5.6	74	11.5	76	7.8	77	5.7	60
65	70	10.4	72	7.2	74	5.3	70	10.4	72	7.2	74	5.3	72	11.1	74	7.4	75	5.5	65
70	69	9.6	71	6.9	73	5.2	69	9.9	71	6.9	73	5.2	71	10.0	73	7.2	74	5.4	70
75	67	8.3	69	6.7	71	5.1	67	9.1	69	6.7	71	5.1	69	8.7	71	6.9	72	5.2	75
80	65	6.9	67	6.4	69	5.0	65	8.1	67	6.5	69	5.0	68	7.4	69	6.7	71	5.2	80
85	63	5.7	65	6.1	67	5.0	63	6.9	65	6.3	67	5.0	66	6.2	67	6.5	69	5.1	85
90	62	4.7	64	5.3	65	4.9	62	6.0	64	6.0	65	4.9	65	5.2	66	5.6	68	5.0	90
95	60	3.8	62	4.4	63	4.6	60	5.0	62	5.5	63	4.8	63	4.3	64	4.7	66	4.8	95
100	58	3.0	60	3.5	61	4.0	58	4.2	60	4.7	61	4.6	61	3.5	63	3.9	64	4.4	100
110	54	1.6	56	2.1	57	2.4	54	2.8	56	3.1	57	3.5	57	2.1	59	2.5	60	2.9	110
120							49	1.7	51	2.0	52	2.2			55	1.3	56	1.7	120
130																			130
140																			140
Telescoping sequence %																			
Tel. 1	100					50					100					Tel. 1			
Tel. 2	100					100					100					Tel. 2			
Tel. 3	100					100					100					Tel. 3			
Tel. 4	100					100					100					Tel. 4			
Tel. 5	50					100					100					Tel. 5			

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine. 99707789908

**Counterweight 12,346 lbs**

Working Radius (ft)	Lifting capacities in 1,000 lbs according per SAE J765 on fly jib 29.5 ft / 52.5 ft On outriggers, 360° working area <b>Outrigger base 16.40 ft</b>															Working Radius (ft)			
	Boom length 35.4 ft to 147.0 ft					Boom length 147.0 ft to 159.1 ft					Boom length 35.4 ft to 159.1 ft								
	Fly jib 29.5 ft offset			Fly jib 29.5 ft offset			Fly jib 29.5 ft offset			Fly jib 52.5 ft offset									
	5°	20°	40°	5°	20°	40°	5°	20°	40°	5°	20°	40°							
35	79	13.9				79	13.0												35
40	78	13.3	80	9.0		78	12.9	80	9.0		79	13.0							40
45	76	12.3	78	8.6		76	12.4	78	8.6		78	12.5	80	8.7					45
50	75	10.1	77	8.2	79	5.8	75	10.9	77	8.2	79	5.8	77	10.5	79	8.4			50
55	73	8.0	75	7.8	77	5.7	73	9.1	75	7.8	77	5.7	75	8.3	77	8.1	78	5.8	55
60	72	6.2	74	7.2	76	5.6	72	7.3	74	7.4	76	5.6	74	6.6	76	7.5	77	5.7	60
65	70	4.8	72	5.7	74	5.3	70	5.9	72	6.6	74	5.3	72	5.1	74	6.0	75	5.5	65
70	69	3.7	71	4.5	73	4.9	69	4.7	71	5.5	73	5.2	71	4.0	73	4.8	74	5.2	70
75	67	2.7	69	3.4	71	4.1	67	3.7	69	4.4	71	4.8	69	3.0	71	3.7	72	4.5	75
80	65	1.8	67	2.4	69	3.1	65	2.8	67	3.4	69	4.0	68	2.1	69	2.8	71	3.4	80
85			65	1.6	67	2.2	63	2.0	65	2.6	67	3.1	66	1.4	67	2.0	69	2.6	85
90					65	1.5	62	1.4	64	1.9	65	2.4			66	1.3	68	1.8	90
95									62	1.2	63	1.7							95
100																			100
110																			110
Telescoping sequence %																			
Tel. 1	100					50					100					Tel. 1			
Tel. 2	100					100					100					Tel. 2			
Tel. 3	100					100					100					Tel. 3			
Tel. 4	100					100					100					Tel. 4			
Tel. 5	50					100					100					Tel. 5			

Operation and maintenance of this machine must be in compliance with the information provided in the "Operation and Maintenance Manual" supplied with this machine. 99707789909



11. When making lifts at a load radius not shown, use the next longer radius to determine allowable capacity.
12. Load per part line should not exceed 13,500 lbs. for the main winch and for the auxiliary winch.
13. Loaded boom angles are approximate. The boom angle before loading should be greater to account for deflection.
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 CUTOFF) 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 extendible fly jib.
19. Safe Load Indicator (S.L.I.)  
Before working with the telescopic boom or extendible fly jib, make sure that the S.L.I. code is set according to the desired telescoping sequence while the telescopic boom is completely retracted. A change of the telescoping sequence is not permissible when the boom has been partially or fully extended. In order to change the S.L.I. code number, the boom must be fully retracted.
20. 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. Working 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 (PAT PDC 350)

The Safe Load Indicator (PAT PDC 350) 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.

## ON TIRE OPERATION

1. Total rated lifting capacities on tires are in pounds and do not exceed 75% of tipping loads as determined by test in accordance with SAE J-765.
2. Total rated lifting capacities shown in TADANO LOAD RATING CHART are based on the condition that the crane is set on firm level supporting surfaces with suspension let down to block. Those above the bold lines are based on tire capacity and those below the bold lines on crane stability. They are based on actual load radius increased by tire deformation and boom deflection.
3. Total rated lifting capacities are based on proper tire inflation, capacity and condition. Damaged tires are hazardous to safe operation of the crane.
4. Tires shall be inflated to correct air pressure, acc. to tire size at center:
 

16.00R25	130 psi (9kgf/cm <sup>2</sup> )
20.5R25	100 psi (7kgf/cm <sup>2</sup> )
5. On tire lifting with "extendible fly jib" is not permitted.
6. When making a lift on the tires, set the parking brake.
7. Travelling with the load is permitted only if the following condition exist:  
Crane carrier is set on firm level supporting surface; tires inflated to specified pressure; boom must be centered over the rear of the carrier; superstructure swing lock pin engaged; slewing brake engaged; maximum boom length is not exceed 60.0 ft; lifted load kept as close to the ground as possible and fastened to the chassis to prevent the lifted load from swinging or oscillating; travel slowly with a creeping speed not to exceed 0.9 mph; and especially avoid any abrupt steering, accelerating or braking.
8. Do not operate the crane while carrying the load.

## ATF80-4 Axle weight distribution chart

	GVW	Axle 1	Axle 2	Axle 3	Axle 4
Base machine with 16.00R25 tires, 8x6 drive, no counterweight	87,979	25,720	25,413	18,748	18,098
Add:					
1. 6.6 ton hook ball in storage box	330	240	240	-75	-75
2. 69.4 ton hook block at the bumper	1,324	1,355	1,355	-693	-693
3. 29.5 ft/ 52.5 ft extendible fly jib	2,418	1,594	1,594	-385	-385
4. Auxiliary winch with cable	2,228	-729	-729	1,843	1,843
5. Auxiliary boom point sheave (single top)	220	248	248	-138	-138
6. Air conditioning at carrier cab	66	51	51	-18	-18
7. Air conditioning at crane cab	92	-11	-11	57	57
8. Additional oil cooler	92	-10	-10	56	56
9. 8x8 drive	617	0	617	0	0
10. 20.5R25 tires in lieu of 16.00R25	1,432	358	358	358	358
11. Eddy-current brake at 4th axle	485	0	0	0	485
12. Towing attachemnt	176	-60	-60	148	148
13. Tool box at rear	220	-77	-77	187	187
1. Counterweight at upper (0.3t x2 pics)	1,340	-356	-356	1,026	1,026
2. Counterweight at upper (0.8t) *Not in combination with Aux. winch	1,678	-518	-518	1,357	1,357
3. Counterweight at upper (3.5t)	7,652	-2,474	-2,474	6,300	6,300
4a. Counterweight at upper (3.7t)	8,184	-2,172	-2,172	6,264	6,264
4b. Counterweight at carrier (3.7t)	8,184	3,562	3,562	530	530
5. Counterweight at carrier (5.5t)	11,684	5,085	5,085	757	757
6a. Counterweight at upper (1.8t)	3,616	-959	-959	2,767	2,767
6b. Counterweight at carrier (1.8t)	3,616	1,573	1,573	235	235
7. Counterweight at carrier (1.4t)	3,088	1,344	1,344	200	200
8. Counterweight at carrier (0.7t)	1,550	675	675	100	100

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