

GTC-900

90 TON MAX. CRANE CAPACITY



GENERAL DATA

CRANE CAPACITY	80t at 3.0m
BOOM	5-section, 11.5 m – 43.0 m
DIMENSION	
Overall Length	14.00 m
Overall Width (tracks extended)	5.32 m
Overall Width (tracks retracted)	3.49 m
Overall Width (tracks removed)	2.95 m
Overall Height (working)	3.80 m
MASS	
Gross Vehicle Mass (Standard Equipment Package)	79,135 kg
Maximum Counterweight	Upper = 20,411 kg Carbody = 9,070 kg
PERFORMANCE	
Travel Speed	1.1 km/hr / 3.4 km/hr
Gradeability	78%

CRANE SPECIFICATION

MAX. LOAD MOMENT

316.2 t-m

BOOM

5-section full power telescoping boom with 2 extension modes. System consists of three double acting hydraulic cylinders with load holding valves and extension and retraction cables.

- Retracted Length: 11.5m
- Extended Length: 43.0 m
- Elevating Angles: -1.5° to 81.5°
- Max Lifting Height: 42.1m
- Boom Head: Six, 495 mm diameter cast nylon main sheaves on heavy-duty roller bearings. Two, 445 mm diameter lead in sheaves on heavy-duty roller bearings. Designed for quick reeving of head and load block.

AUXILIARY BOOM HEAD

Quick reeve, single 445 mm diameter high-strength, sheave mounted on a heavy-duty roller bearing. Allows single part reeving.

COUNTERWEIGHT

6 piece counterweight design. Three upper counterweight configurations

- “A” Configuration = 6,804 kg
- “B” Configuration = 13,608 kg
- “C” Configuration = 20,411 kg
- Two carbody counterweights, 4535 kg each

WINCHES

Planetary geared two-speed winch includes a hydraulic motor, multi-disc internal brake and counterbalance valve. Drum rotation indicator is included (complete winch performance specs on Page 4)

- Main Winch
 - o Rope Diameter and Length: 19mm x 212m
 - o Single line pull: 88.2 kN (first layer)
 - o Single line speed: 112.2 m/min (4th layer)
- Auxiliary Winch
 - o Rope Diameter and Length: 19mm X 146m
 - o Single line pull: 88.2 kN (first layer)
 - o Single line speed: 112.2 m/min (4th layer)

TRAVEL

Each side frame contains a pilot controlled, two-speed track drive with hydraulic axial piston motor and parking brake. Travel system provides skid steering and counter rotation.

- Travel speed - Low: 1.1 km/h High: 3.4 km/h
- Gradeability (unladen): 78%
- Unladen Ground Pressure: 0.90 kg/cm²

SWING

Gear motor driving a planetary gear reducer with a shaft mounted pinion, external gear shear ball slew bearing bolted to the superstructure and the carbody allows the superstructure to rotate 360°

- Swing Speed: 0 - 2.2 rpm
- Swing Parking Brake: Spring applied failsafe brake with hydraulic release that is controlled from the operators cab
- Swing Service Brake: Hydraulically applied, controlled through foot actuated pedal
- House Lock System:
 - o 4-position house lock (boom over front, rear or either side). Actuated from the operator's cab.

LOAD MOMENT INDICATOR

TADANO AML-C Rated Capacity Limiter and Anti-Two Block system

- OPTI-WIDTH™ - OPTIMAL lifting performance at any track WIDTH
- Control function shutdown. Audible and visual warnings
- LCD screen provides a continuous display of working boom length, boom angle, working load radius, tip height, swing position, parts-of-line (operator set), machine track configuration, relative load moment, maximum permissible load and actual load.
- Anti-two block weight allows quick reeving of hook block
- Operator configurable working range limits with automatic soft stop.



FRAME

The frame is an all-steel, welded structure, precision machined to accept attachment of the boom and swing components.

OPERATORS CAB

Fully-enclosed, air conditioned all-steel modular cab with lockable sliding door, acoustical lining, anti-slip floor and tinted safety glass.

- Cab tilts 20°.
- Rear view, winch view and right side view video cameras
- Three remote control work lights.
- Emergency Stop Button
- Vent window in the rear of the cab.
- Grab bars and steps are located for easy access to the cab.
- Defroster, heater, circulating fan
- 2-speed windshield wiper, top glass wiper
- Six-way adjustable fabric seat with headrest, seat belt
- Dome light
- Dry-chemical fire extinguisher
- Four-way electronic armrest mounted joysticks control swing, main winch, auxiliary winch, boom hoist and boom extend. Foot pedals control the travel and swing service brake functions. Swing brake pedal is hydraulic.
- Selectable modes for Fine Control and Travel. Travel function can be operated by foot pedals or joystick.
- Seat termination switch immediately disable all hydraulic functions as the operator rises from the seat. Functions can also be disabled by switch on console.
- Dash instrumentation: tachometer, hour meter, fuel gauge, and DEF level gauge. Indicators are provided for crane level, swing position, load moment, drum rotation, air filter restriction, engine oil temperature and pressure, hydraulic oil temperature and level, and hydraulic and air filter restriction, and low voltage.

ENGINE

- Make/ Model: Cummins B6.7
- Type: 6 Cylinder, Water cooled, 4 Cycle
- Aspiration: Turbocharged and Aftercooled
- Max.Output: 231 kW @ 2200 RPM
- Max Torque: 1,288 Nm @ 1500 RPM
- Piston Disp: 6.7 L
- Emission Cert: U.S. EPA Tier 4f, Euromot Stage V
- Alternator: 70 amp

Optional Emissions Certification:

- Make/ Model: Cummins QSB 6.7
- Type: 6 Cylinder, Water cooled, 4 Cycle
- Aspiration: Turbocharged and Aftercooled
- Max.Output: 194 kW @ 2200 RPM
- Max Torque: 987 Nm @ 1500 RPM
- Piston Disp: 6.7 L
- Emission Cert: U.S. EPA Tier 3, Euromot Stage IIIA
- Alternator: 70 amp

ELECTRICAL SYSTEM

24 VDC

FUEL SYSTEM

- Capacity: 321 liter
- Filtration: Inline fuel/water separator and engine mounted fuel filter

SIDE FRAMES

Two welded steel side frames are paired with a track group.

The side frames extend and retract hydraulically and are controlled from the cab.

- Track Rollers: Two top and thirteen bottom sealed rollers on each track frame Idler: Oil filled, self lubricating with nitrogen type tensioner
- Track Shoes: 800 mm, 3-bar semi grouser

HYDRAULIC SYSTEM

- Hydraulic Pumps: Two high pressure, variable axial piston pumps with load sense and power limiting control for crane functions. One axial piston pump for swing function. One gear pump for cooling loop.
- Directional Valves: Multiple pressure and flow compensated valves with integrated relief valves controlled by electrical signals.
- Pump output: 582 l/min @ 2200 RPM engine speed. 345 bar maximum pressure
- Reservoir: 861 liter capacity, spin-on filler/ breather, sight gauge, cleanout, and sump drain.
- Filtration: Three 5 micron, full flow tank mounted return filters with electrical clogging indicator. 3 micron pilot oil in-line pressure filter
- Diagnostic Ports: Provided for system, load sense, and pilot pressure

BI-FOLD JIB

- Main jib
 - Total Length: 10.1m
 - Offset Angles: 3.5°, 25° & 45°
 - Max. Lifting Height: 52.9 m
- Fly jib
 - Total Length: 17.7m
 - Offset Angles: 3.5°, 25° & 45°
 - Max. Lifting Height: 60.4 m

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OPTIONAL EQUIPMENT

- Jibs
 - o Heavy lift jib
 - Total Length: 2.5 m
 - Max. Lifting Height: 45.3 m
- Hook blocks
 - 80t quick reeve hook block – Six, 495mm steel sheaves, swivel hook and safety latch
 - 54t quick reeve hook block – three, 495mm steel sheaves, swivel hook and safety latch
 - 25t quick reeve hook block – one, 460mm steel sheave, swivel hook and safety latch
- Overhaul ball – 8t with swivel hook & safety latch
- 360 degree house lock. Actuated from the operator's cab.
- Track Shoes: 800mm and 900mm flat steel shoes, and 900 mm semi grousers
- Auger: Hydraulic auger boom package includes auger motor, hoses, fasteners, and stowage bracket assembly mounted to the 2nd stage section of boom for variable radius drilling.
- Tool Circuit: Provides 23 l/min and 45 l/min at 176 bar through a 15.2m twin hose reel with quick disconnect fittings to operate open center tools.
- High Flow Tool Circuit: Provides 170 l/min at 330 bar
- Carbody Jack System: Includes carbody mounted jacks, valves, electric control pendant, and auto-level raise system.
- Free Fall Hoists: Winches are available in controlled free fall configurations.
- Cold Weather Packages: Cold weather options are available for operation to -40°C (Consult factory for application support)
- Full function Radio remote control package
- Boom mounted anemometer with cab display
- Automatic central lubrication system

MAIN WINCH AND AUXILIARY WINCH PERFORMANCE

Wire Rope: 19 mm diameter rotation resistant. Line pulls are not based on wire rope strength.

Rope Layer	Max Line Pull (kN)	High Line Speed (m/min)	Normal Line Speed (m/min)	Pitch Dia (mm)	Layer (m)	Total (m)
1	88	88.5	52.6	381.9	34.2	34.2
2	80	96.4	57.3	421.7	37.3	71.5
3	73	104.3	62.1	461.5	40.3	111.8
4	67	112.2	66.8	501.3	43.4	155.2
5	62	120.2	71.5	541.1	46.4	201.6
6	58	128.1	76.2	580.9	49.5	251.1

MACHINE WEIGHTS

KG

Standard Crane with 5 section - 43m boom, full counterweight, 2 winches with wire rope, auxiliary nose sheave and 800mm 3-bar semi grouser track shoes,	79,135
Standard Crane with 5 section - 43m boom, auxiliary winch with wire rope and 800mm 3-bar semi grouser track shoes (Counterweights removed)	49,651
Standard Crane with auxiliary winch with wire rope (Counterweight and track frames removed)	34,573

OPTIONAL EQUIPMENT - added weights

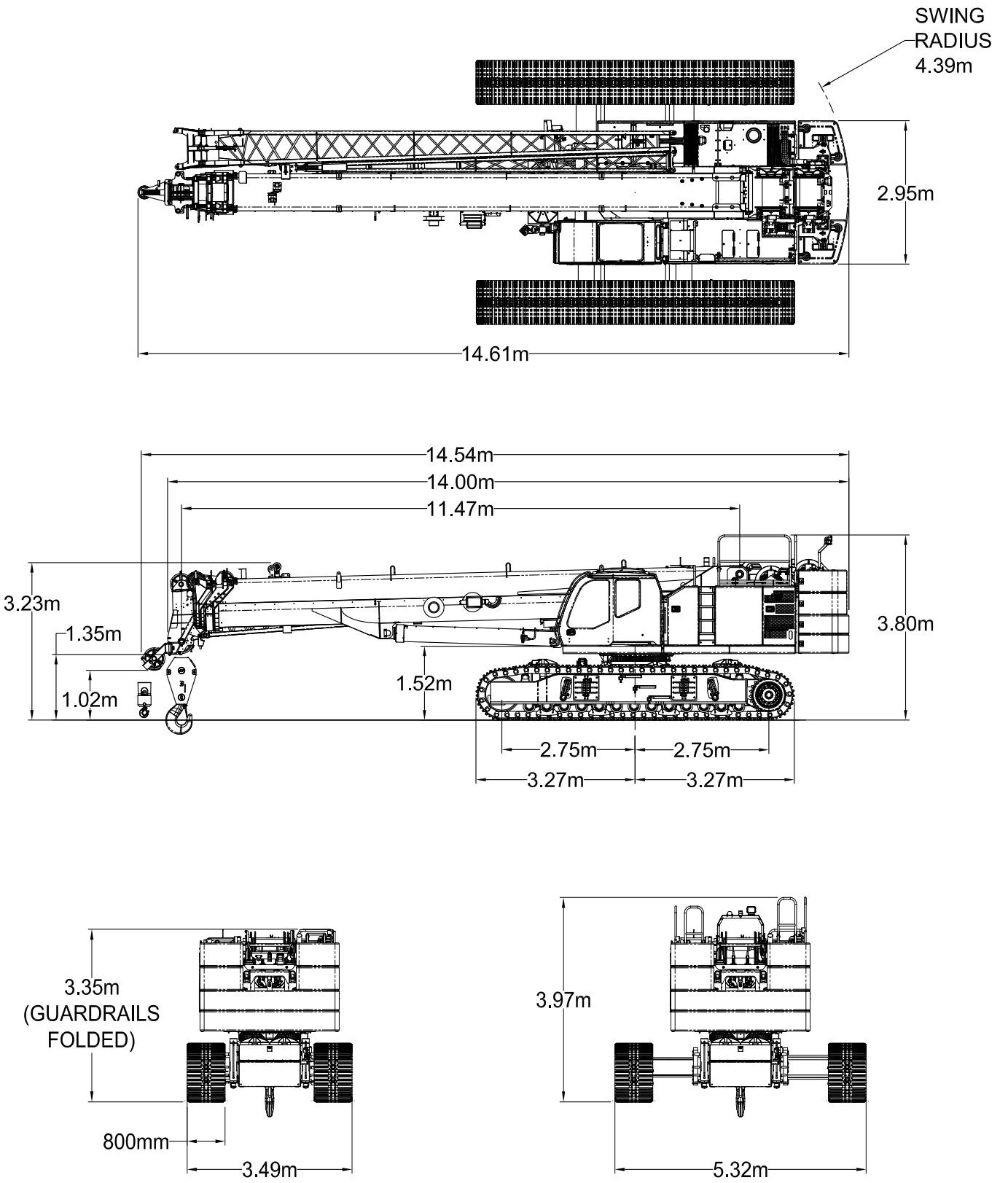
KG

Heavy Lift Jib - 8.2 ft (2.5m)	441
Jib Base - 33.1 ft (10.1 m)	921
Jib Tip - 24.7 ft (7.5m)	340
Auxiliary Nose Sheave	48
90 ton (81.6t) hook block - six sheave	654
55 ton (50t) hook block - three sheave	633
22 ton (20t) hook block - one sheave	297
8.8 ton (8t) Overhaul Ball	134
Carbody Jacks	1,712
800mm flat steel track shoes	658
900mm 3-bar semi-grouser track shoes	274
900mm flat steel track shoes	698

WIDTHS, WEIGHTS AND GROUND PRESSURES

Track Shoe Width (mm)	Shoe Type	Overall Retracted (m)	Width Extended (m)	Area (m ²)	Working Weight (kg)	Average Ground Bearing Pressure (kg/cm ²)
800	3-bar grouser	3.49	5.32	8.8	79,135	0.90
900	3-bar grouser	3.59	5.42	9.9	79,739	0.81
800	Flat	3.49	5.32	8.8	80,586	0.92
900	Flat	3.59	5.42	9.9	80,673	0.81

DIMENSIONS



TRANSPORT PLANS

Transport Plan (no carbody jacks)

Item	Weight Kg	Dims (L x W x H)	Trailer		
			1	2	3
Crane (with 2 winches, Boom, wire rope, aux nose sheave)	49,925	13.69m x 3.50m x 3.35m	X		
Counterweight A - 1 piece	6,804	2.95m x 1.04m x 1.11m		X	
Counterweight B - 1 piece	6,804	2.95m x 1.04m x 0.47m		X	
Counterweight C - 1 piece	1,701	0.91m x 1.0m x 0.47m			X
Counterweight C - 1 piece	1,701	0.91m x 1.0m x 0.47m			X
Counterweight C - 1 piece	1,701	0.91m x 1.0m x 0.47m			X
Counterweight C - 1 piece	1,701	0.91m x 1.0m x 0.47m		X	
Counterweight - Carbody - 1 piece	4,536	0.97m x 1.30m x 0.81m		X	
Counterweight - Carbody - 1 piece	4,536	0.97m x 1.30m x 0.81m			X
Jib base section	921	10.55m x 1.47m x 0.91m			X
Jib point	340	7.84m x 0.73m x 0.73m			X
Hook Block - 80t	628	1.57m x 0.60m x 0.45m			X
Headache Ball - 8t	200	0.72m x 0.27m x 0.27m			X
Miscellaneous Items (Crate)	227	1.22m x 0.91m x 0.91m			X
Total Net Weight on Trailer (kg)			49925	19845	11954

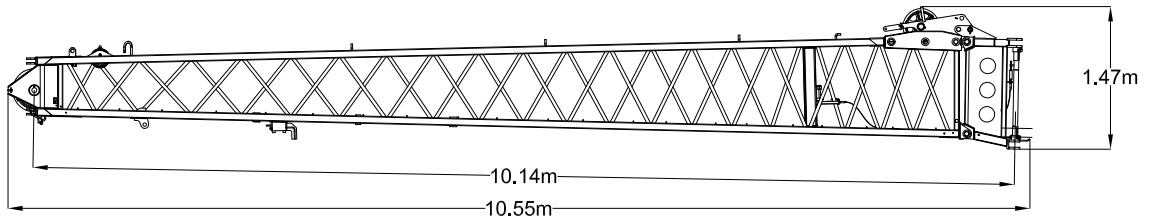
Transport Plan (with carbody jacks - tracks removed - 3 trailers)

Item	Weight Kg	Dims (L x W x H)	Trailer		
			1	2	3
Crane (with 2 winches, Boom, wire rope, aux nose sheave, Tracks removed)	34,182	13.69m x 2.95m x 3.07m	X		
Left Track Frame	8,766	6.53m x 0.90m x 1.13m		X	
Right Track Frame	8,834	6.53m x 0.90m x 1.13m			X
Counterweight A	6,804	2.95m x 1.04m x 1.11m		X	
Counterweight B - 1 piece	6,804	2.95m x 1.04m x 0.47m			X
Counterweight C - 1 piece	1,701	0.91m x 1.0m x 0.47m			X
Counterweight C - 1 piece	1,701	0.91m x 1.0m x 0.47m		X	
Counterweight C - 1 piece	1,701	0.91m x 1.0m x 0.47m		X	
Counterweight C - 1 piece	1,701	0.91m x 1.0m x 0.47m		X	
Counterweight - Carbody - 1 piece	4,536	0.97m x 1.30m x 0.81m	X		
Counterweight - Carbody - 1 piece	4,536	0.97m x 1.30m x 0.81m	X		
Jib base section	921	10.55m x 1.47m x 0.91m			X
Jib point	340	7.84m x 0.73m x 0.73m		X	
Hook Block - 80t	628	1.57m x 0.60m x 0.45m		X	
Headache Ball - 8t	200	0.72m x 0.27m x 0.27m			X
Miscellaneous Items (Crate)	227	1.22m x 0.91m x 0.91m			X
Total Net Weight on Trailer (kg)			43254	19940	20387

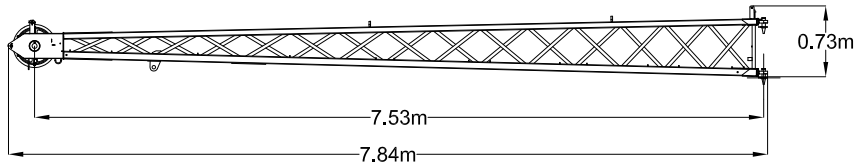
Transport Plan (with carbody jacks - tracks removed - 4 trailers)

Item	Weight Kg	Dims (L x W x H)	Trailer			
			1	2	3	4
Crane (with 2 winches, Boom, wire rope, aux nose sheave, Tracks removed)	34,182	13.69m x 2.95m x 3.07m	X			
Left Track Frame	8,766	6.53m x 0.90m x 1.13m		X		
Right Track Frame	8,834	6.53m x 0.90m x 1.13m			X	
Counterweight A	6,804	2.95m x 1.04m x 1.11m		X		
Counterweight B - 1 piece	6,804	2.95m x 1.04m x 0.47m			X	
Counterweight C - 1 piece	1,701	0.91m x 1.0m x 0.47m			X	
Counterweight C - 1 piece	1,701	0.91m x 1.0m x 0.47m		X		
Counterweight C - 1 piece	1,701	0.91m x 1.0m x 0.47m		X		
Counterweight C - 1 piece	1,701	0.91m x 1.0m x 0.47m		X		
Counterweight - Carbody - 1 piece	4,536	0.97m x 1.30m x 0.81m				X
Counterweight - Carbody - 1 piece	4,536	0.97m x 1.30m x 0.81m				X
Jib base section	921	10.55m x 1.47m x 0.91m			X	
Jib point	340	7.84m x 0.73m x 0.73m		X		
Hook Block - 80t	628	1.57m x 0.60m x 0.45m		X		
Headache Ball - 8t	200	0.72m x 0.27m x 0.27m			X	
Miscellaneous Items (Crate)	227	1.22m x 0.91m x 0.91m			X	
Total Net Weight on Trailer (kg)			34182	19940	20387	9072

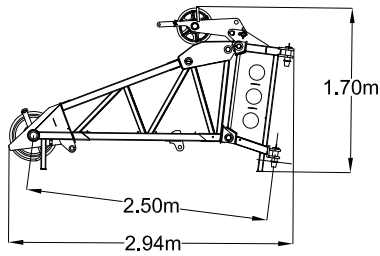
TRANSPORT DIMENSIONS



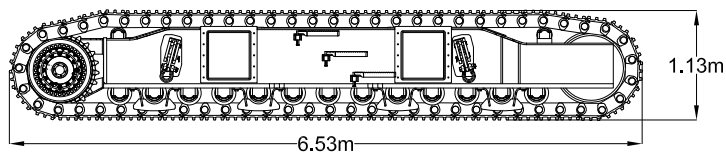
10.1m JIB
WEIGHT: 921 kg



7.5m JIB POINT
WEIGHT: 340 kg

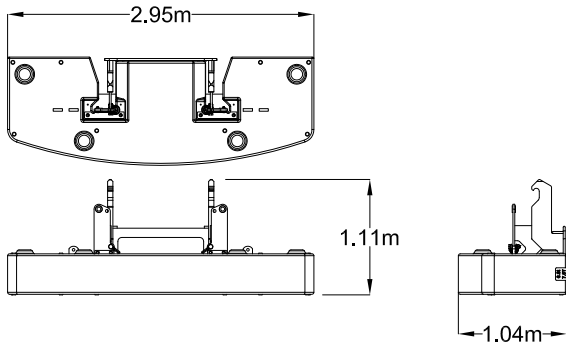


2.5m HEAVY LIFT JIB
WEIGHT: 441 kg

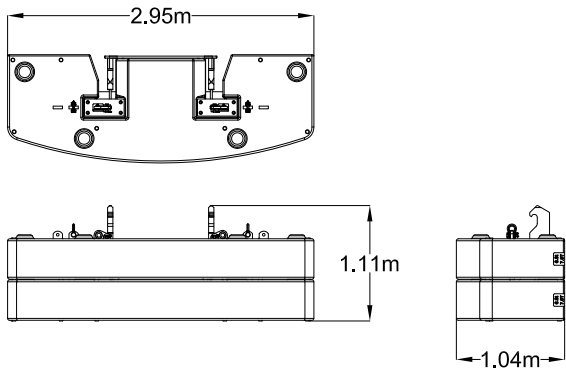


TRACK FRAME ASSEMBLY
WEIGHT: 8494 kg

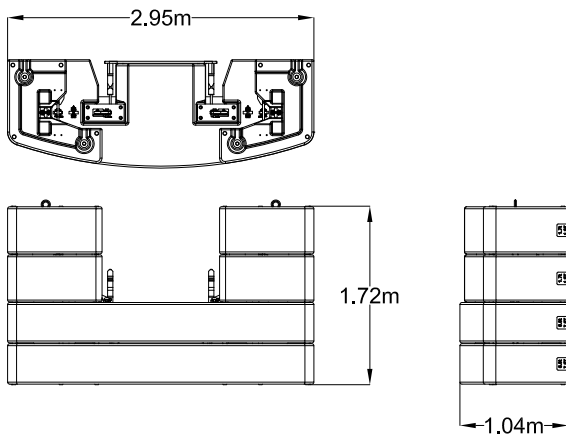
TRANSPORT DIMENSIONS



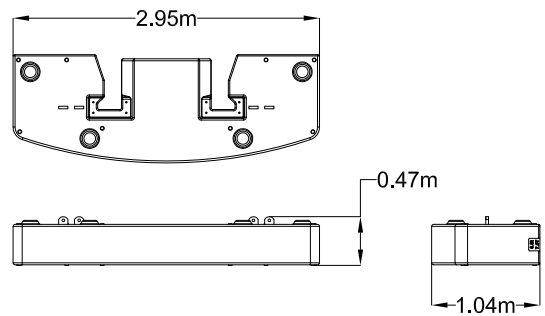
CONFIGURATION "A"
WEIGHT: 6,804 kg



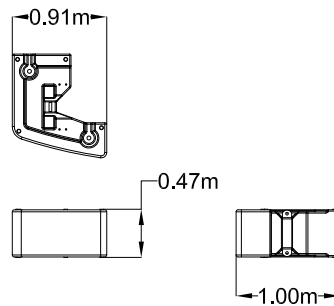
CONFIGURATION "B"
WEIGHT: 13,607 kg



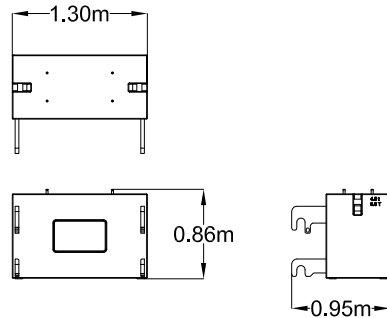
CONFIGURATION "C"
WEIGHT: 20,411 kg



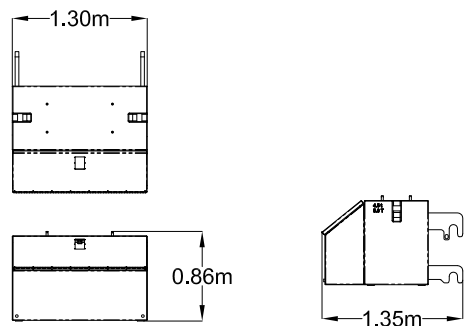
CWT "B" SECTION
WEIGHT: 6,804 kg



CWT "C" SECTION
4 PIECES
WEIGHT: 1,700 kg

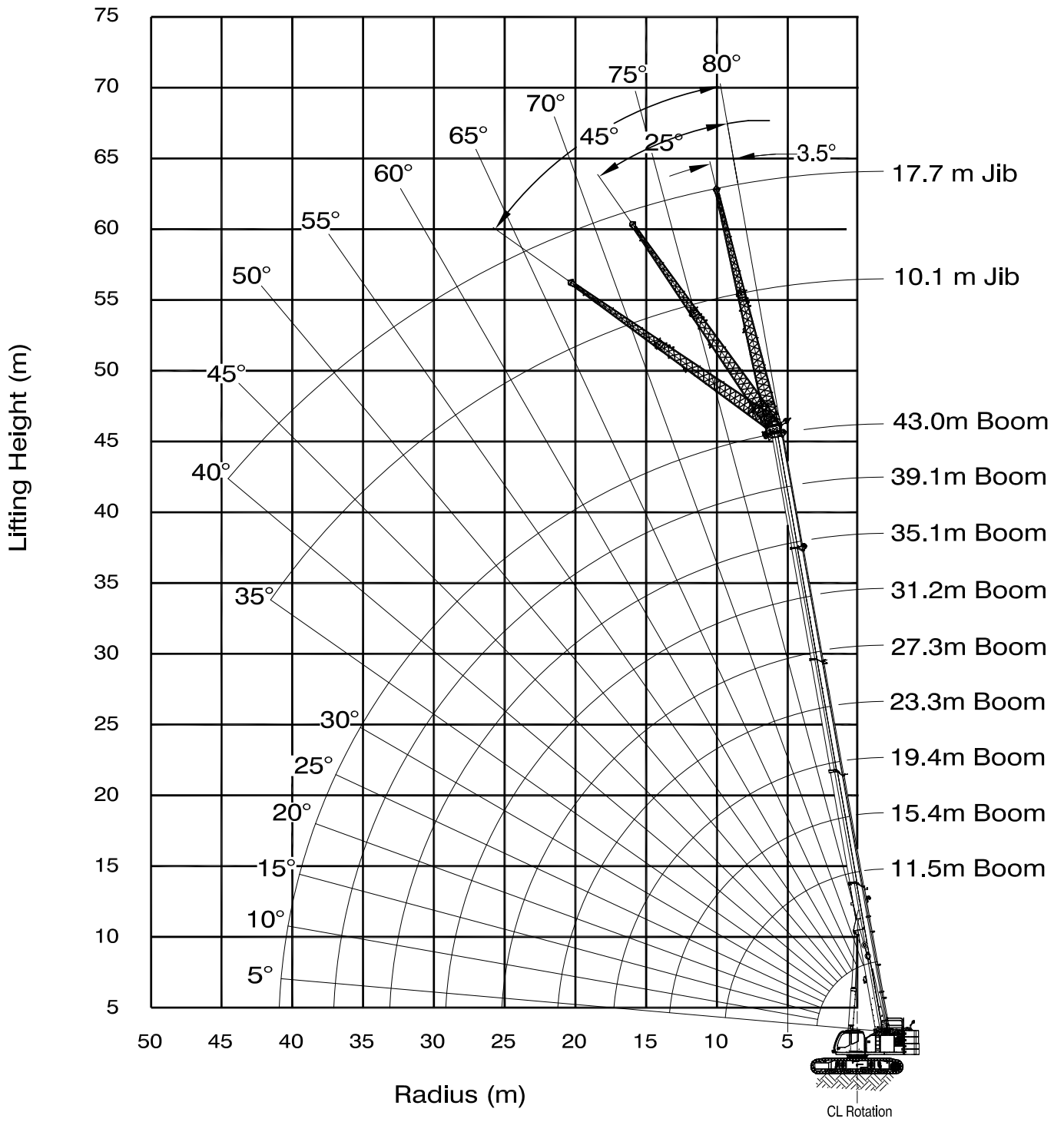


CARBODY COUNTERWEIGHT
WEIGHT: 4,535 kg



REAR CARBODY COUNTERWEIGHT with TOOLBOX
WEIGHT: 4,615 kg

WORKING RANGE DIAGRAM



LOAD CHARTS

360 DEGREE RATING - LOADS IN kg x 1000

MAIN BOOM with TRACKS FULLY EXTENDED - 360° UP TO 0.5° SLOPE - NO TRAVEL 20.5t MAIN COUNTERWEIGHT AND 9.1t CARBODY COUNTERWEIGHT										
RADIUS (m)	MAIN BOOM LENGTH (m)									RADIUS (m)
	11.5	15.4	19.4	23.3	27.3	31.2	35.1	39.1	43.0	
2.5	90.0**									2.5
3	80.0	50.6	50.6							3
4	69.1	50.6	43.8	34.9	34.6					4
5	60.0	50.6	42.6	34.9	30.8	21.7				5
6	52.7	50.0	37.5	31.9	28.3	16.9	16.9			6
7	43.4	40.9	33.4	28.4	25.2	16.9	16.5	16.2		7
8	35.0	33.7	30.1	25.5	22.6	16.9	16.4	15.7	13.1	8
9	29.2	28.0	27.1	23.0	20.4	16.9	16.4	15.6	13.1	9
10		23.7	22.9	21.0	18.5	16.9	16.1	15.3	12.8	10
12		17.8	17.1	17.2	15.6	14.4	13.6	13.0	11.4	12
14			16.0	13.3	13.3	12.3	11.7	11.2	10.1	14
16			13.2	10.8	10.6	10.7	10.1	9.7	8.8	16
18				9.8	8.6	9.1	8.9	8.5	7.8	18
20				9.1	7.0	7.5	7.8	7.5	6.9	20
22					5.8	6.3	6.6	6.7	6.2	22
24					4.8	5.2	5.6	6.1	5.5	24
26						4.6	5.2	5.6	5.0	26
28						4.3	4.8	4.9	4.5	28
30							4.5	4.3	3.9	30
32							4.2	3.7	3.3	32
34								3.3	2.9	34
36								2.9	2.5	36
38									2.1	38
40									1.8	40
42										42
44										44
PARTS OF LINE	12	8	8	6	6	4	4	4	2	PARTS OF LINE

** with special equipment

LOAD CHARTS

360 DEGREE RATING - LOADS IN kg x 1000

MAIN BOOM with TRACKS FULLY EXTENDED - 360° UP TO 4° SLOPE - NO TRAVEL 20.5t MAIN COUNTERWEIGHT AND 9.1t CARBODY COUNTERWEIGHT										
RADIUS (m)	MAIN BOOM LENGTH (m)								RADIUS (m)	
	11.5	15.4	19.4	23.3	27.3	31.2	35.1	39.1		43.0
3	66.0	50.1	35.0							3
4	58.9	50.1	35.0	27.0	21.3					4
5	45.9	41.8	35.0	27.0	21.3	16.7				5
6	37.2	33.2	33.1	27.0	21.3	16.7	14.1			6
7	31.0	27.0	29.3	24.5	21.1	16.7	14.1	11.8		7
8	26.4	22.4	25.3	22.3	19.2	16.7	14.1	11.8	8.2	8
9	22.8	18.8	21.7	20.4	17.6	15.7	14.1	11.8	8.2	9
10		16.9	18.7	18.1	16.2	14.5	13.4	11.8	8.2	10
12		13.3	16.4	14.0	13.5	12.5	11.6	10.8	8.2	12
14			14.2	11.3	10.8	10.9	10.1	9.5	8.2	14
16			11.9	10.3	8.7	9.0	8.9	8.4	7.5	16
18				9.5	7.2	7.5	7.6	7.5	6.7	18
20				9.0	6.0	6.2	6.4	6.6	6.0	20
22					5.0	5.3	5.7	6.1	5.4	22
24					4.5	4.8	5.3	5.4	4.9	24
26						4.5	4.9	4.7	4.2	26
28						4.2	4.6	4.2	3.7	28
30							4.2	3.7	3.2	30
32							3.9	3.2	2.7	32
34								2.9	2.4	34
36								2.6	2.0	36
38									1.8	38
40									1.5	40
42										42
44										44
PARTS OF LINE	12	8	8	6	6	4	4	4	2	PARTS OF LINE

LOAD CHARTS

360 DEGREE RATING - LOADS IN kg x 1000

MAIN BOOM with TRACKS RETRACTED, OVER THE FRONT/REAR UP TO 0.5° SLOPE - NO TRAVEL										
20.5t MAIN COUNTERWEIGHT AND 9.1t CARBODY COUNTERWEIGHT										
RADIUS (m)	MAIN BOOM LENGTH (m)									RADIUS (m)
	11.5	15.4	19.4	23.3	27.3	31.2	35.1	39.1	43.0	
2.5	90.0**									2.5
3	80.0	50.6	50.6							3
4	69.1	50.6	43.8	34.9	34.6					4
5	60.0	50.6	42.6	34.9	30.8	21.7				5
6	52.7	50.6	37.5	31.9	28.3	16.9	16.9			6
7	45.0	44.3	33.4	28.4	25.2	16.9	16.5	16.2		7
8	38.9	38.2	30.1	25.5	22.6	16.9	16.4	15.7	13.1	8
9	31.6	33.2	27.3	23.0	20.4	16.9	16.4	15.6	13.1	9
10		28.0	24.9	21.0	18.5	16.9	16.1	15.3	12.8	10
12		20.9	20.2	17.7	15.6	14.4	13.6	13.0	11.4	12
14			16.4	15.2	13.3	12.3	11.7	11.2	10.1	14
16			15.3	12.6	11.5	10.7	10.1	9.7	8.8	16
18				10.3	10.0	9.3	8.9	8.5	7.8	18
20				9.1	8.5	8.2	7.9	7.5	6.9	20
22					7.1	7.3	7.0	6.7	6.2	22
24					5.9	6.4	6.2	6.1	5.5	24
26						5.4	5.6	5.7	5.0	26
28						4.6	4.9	5.3	4.5	28
30							4.5	4.9	4.0	30
32							4.2	4.6	3.6	32
34								4.0	3.3	34
36								3.6	3.0	36
38									2.7	38
40									2.4	40
42										42
44										44
PARTS OF LINE	12	8	8	6	6	4	4	4	2	PARTS OF LINE

** with special equipment

LOAD CHARTS

360 DEGREE RATING - LOADS IN kg x 1000

MAIN BOOM with TRACKS RETRACTED - OVER SIDE UP TO 1.5° SLOPE - NO TRAVEL 20.5t MAIN COUNTERWEIGHT AND 9.1t CARBODY COUNTERWEIGHT										
RADIUS (m)	MAIN BOOM LENGTH (m)									RADIUS (m)
	11.5	15.4	19.4	23.3	27.3	31.2	35.1	39.1	43.0	
3	*	*	*							3
4	*	*	*	*	*					4
5	38.6	*	*	*	*	*				5
6	30.6	27.6	*	*	*	*	*			6
7	24.6	23.1	20.8	*	*	*	*	*		7
8	20.5	19.1	17.7	16.8	*	*	15.2	14.8	13.1	8
9	17.4	16.9	16.4	15.2	13.8	13.7	13.4	13.1	12.8	9
10		15.4	15.6	14.9	12.1	12.0	11.9	11.8	11.5	10
12		12.0	12.2	12.3	9.4	9.5	9.9	10.1	9.3	12
14			9.8	9.9	7.6	8.1	8.8	8.4	7.7	14
16			8.1	8.2	6.7	7.3	7.7	7.1	6.4	16
18				6.9	6.0	6.5	6.4	5.9	5.3	18
20				5.9	5.4	5.7	5.4	4.9	4.5	20
22					5.0	4.8	4.6	4.1	3.7	22
24					4.5	4.1	3.9	3.4	3.0	24
26						3.6	3.3	2.8	2.4	26
28						3.1	2.8	2.4	2.0	28
30							2.4	1.9	1.5	30
32							2.1	1.6	1.2	32
34								1.3	0.9	34
36								1.0	*	36
38									*	38
40									*	40
42										42
44										44
PARTS OF LINE	12	8	8	6	6	4	4	4	2	PARTS OF LINE

LOAD CHARTS

360 DEGREE RATING - LOADS IN kg x 1000

MAIN BOOM with TRACKS FULLY EXTENDED - 360°										
UP TO 1.5° SLOPE - NO TRAVEL										
0t MAIN COUNTERWEIGHT AND 9.1t CARBODY COUNTERWEIGHT										
RADIUS (m)	MAIN BOOM LENGTH (m)									RADIUS (m)
	11.5	15.4	19.4	23.3	27.3	31.2	35.1	39.1	43.0	
3	74.2	50.6	48.3							3
4	47.8	39.7	33.8	30.3	27.3					4
5	34.7	29.3	25.4	23.2	21.2	20.2				5
6	26.9	22.8	20.0	18.5	17.1	16.5	15.8			6
7	20.7	18.4	16.4	15.3	14.0	13.7	14.3	13.7		7
8	16.5	16.9	16.4	15.3	12.1	12.6	13.1	11.9	10.7	8
9	13.6	14.2	14.4	13.9	11.1	11.6	11.5	10.4	9.4	9
10		11.9	12.2	12.2	10.2	10.7	10.1	9.1	8.2	10
12		8.8	9.1	9.3	8.7	8.7	8.0	7.1	6.4	12
14			7.1	7.2	7.3	7.0	6.5	5.7	5.0	14
16			5.6	5.8	5.9	5.6	5.3	4.6	3.9	16
18				4.7	4.8	4.5	4.2	3.7	3.1	18
20				3.8	3.9	3.7	3.4	2.9	2.4	20
22					3.3	3.0	2.7	2.2	1.8	22
24					2.7	2.4	2.2	1.7	0.0	24
26						2.0	1.7	1.2	*	26
28						1.6	1.3	0.0	*	28
30							1.0	*	*	30
32							0.7	*	*	32
34								*	*	34
36								*	*	36
38									*	38
40									*	40
42										42
44										44
PARTS OF LINE	12	8	8	6	6	4	4	4	2	PARTS OF LINE

LOAD CHARTS

360 DEGREE RATING - LOADS IN kg x 1000

AUXILIARY NOSE SHEAVE with TRACKS FULLY EXTENDED - 360° UP TO 1.5° SLOPE - NO TRAVEL										
20.5 t MAIN COUNTERWEIGHT AND 9.1 t CARBODY COUNTERWEIGHT										
RADIUS (m)	MAIN BOOM LENGTH (m)									RADIUS (m)
	11.5	15.4	19.4	23.3	27.3	31.2	35.1	39.1	43	
3	6.6	6.6	6.6							3
4	6.6	6.6	6.6	6.6						4
5	6.6	6.6	6.6	6.6	6.6	6.6				5
6	6.6	6.6	6.6	6.6	6.6	6.6	6.6			6
7	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6		7
8	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	8
9	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	9
10	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	10
12		6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	12
14		6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	14
16			6.6	6.6	6.6	6.6	6.6	6.6	6.6	16
18			6.6	6.6	6.6	6.6	6.6	6.6	6.6	18
20				6.6	6.6	6.6	6.6	6.4	6.2	20
22					6.6	6.2	5.9	5.9	5.5	22
24					5.9	5.5	5.2	5.4	5.0	24
26						5.0	4.7	5.0	4.5	26
28						4.5	4.3	4.7	4.1	28
30							4.0	4.4	3.7	30
32							3.8	4.2	3.3	32
34								3.9	3.0	34
36								3.6	2.8	36
38									2.5	38
40									2.3	40
42										42
44										44
PARTS OF LINE	1	1	1	1	1	1	1	1	1	PARTS OF LINE

LOAD CHARTS

360 DEGREE RATING - LOADS IN kg x 1000

2.5m JIB with TRACKS FULLY EXTENDED - 360°											
UP TO 0.5° SLOPE - NO TRAVEL											
20.5t MAIN COUNTERWEIGHT AND 9.1t CARBODY COUNTERWEIGHT											
RADIUS (m)	MAIN BOOM LENGTH (m)										RADIUS (m)
	11.5		31.2		35.1		39.1		43.0		
	3.5°	30°	3.5°	30°	3.5°	30°	3.5°	30°	3.5°	30°	
3	21.8	16.7									3
4	20.4	16.1									4
5	19.2	15.5									5
6	18.2	15.1	13.5	12.4							6
7	17.4	14.8	13.0	11.3	13.3	11.7					7
8	16.7	14.6	11.8	10.4	12.3	10.8	12.7	11.1			8
9	16.2	14.6	10.8	9.6	11.3	10.0	11.7	10.4	10.6	10.6	9
10	16.0	14.6	9.9	8.2	10.4	8.7	10.9	9.1	10.6	9.4	10
12			8.5	7.2	9.0	7.7	9.5	8.1	9.8	8.4	12
14			7.3	6.4	7.9	6.8	8.4	7.3	8.7	7.6	14
16			6.5	5.7	7.0	6.1	7.5	6.6	7.8	6.9	16
18			5.7	5.1	6.3	5.6	6.7	6.0	7.1	6.3	18
20			5.1	4.6	5.7	5.1	6.1	5.5	6.4	5.7	20
22			4.6	4.2	5.1	4.6	5.6	5.0	5.7	5.1	22
24			4.2	3.8	4.7	4.3	5.1	4.6	5.1	4.5	24
26			3.8	3.5	4.3	3.9	4.7	4.3	4.5	4.1	26
28			3.5		3.9	3.6	4.3	4.0	4.0	3.6	28
30			3.2		3.7		4.0	3.5	3.6	3.1	30
32					3.4		3.4	3.0	3.1	2.6	32
34					3.2		3.0		2.6	2.2	34
36							2.5		2.2	1.8	36
38							2.2		1.8		38
40									1.5		40
42									1.2		42
44											44
PARTS OF LINE	4	4	2	2	2	2	2	2	2	2	PARTS OF LINE

LOAD CHARTS

360 DEGREE RATING - LOADS IN kg x 1000

10.1m JIB with TRACKS FULLY EXTENDED - 360°																
UP TO 0.5° SLOPE - NO TRAVEL																
20.5t MAIN COUNTERWEIGHT AND 9.1t CARBODY COUNTERWEIGHT																
RADIUS (m)	MAIN BOOM LENGTH (m)															RADIUS (m)
	11.5			31.2			35.1			39.1			43.0			
	3.5°	25°	45°	3.5°	25°	45°	3.5°	25°	45°	3.5°	25°	45°	3.5°	25°	45°	
3	6.6															3
4	6.6															4
5	6.6															5
6	6.6															6
8	6.6	6.6		6.6												8
10	6.6	6.2	5.2	6.2			6.6			6.6						10
12	6.6	5.6	4.9	5.6	6.6		6.6	6.6		6.6			6.1			12
14	6.1	5.1	4.6	5.1	6.1	5.0	6.6	6.1		6.6	6.1		6.1	5.9		14
16	5.5	4.8	4.5	4.8	5.5	4.8	6.0	5.6	4.9	6.1	5.6	4.9	6.1	5.5		16
18	5.0	4.6		4.6	5.0	4.7	5.4	5.1	4.7	5.6	5.1	4.7	5.6	5.1	4.7	18
20					4.6	4.4	5.0	4.7	4.5	5.1	4.7	4.5	5.1	4.7	4.5	20
22					4.2	4.1	4.5	4.3	4.2	4.7	4.4	4.2	4.7	4.4	4.2	22
24					3.8	3.8	4.2	4.0	3.9	4.3	4.1	3.9	4.4	4.1	3.9	24
26					3.5	3.5	3.8	3.7	3.6	4.0	3.8	3.7	4.1	3.8	3.7	26
28					3.3	3.2	3.6	3.4	3.4	3.7	3.5	3.4	3.8	3.6	3.5	28
30					3.0	3.0	3.3	3.2	3.2	3.5	3.3	3.2	3.5	3.4	3.3	30
32					2.8		3.1	3.0	3.0	3.2	3.1	3.1	3.3	3.2	3.1	32
34					2.6		2.9	2.8	2.8	3.0	2.9	2.9	3.1	3.0	2.9	34
36					2.5		2.7	2.7		2.9	2.8	2.7	2.7	2.8	2.8	36
38							2.6	2.5		2.7	2.6	2.6	2.3	2.6	2.7	38
40							2.4	2.4		2.4	2.5		2.0	2.2	2.3	40
45										1.7	1.7		1.3	1.4		45
50													0.8			50
55																55
60																60
PARTS OF LINE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	PARTS OF LINE

LOAD CHARTS

360 DEGREE RATING - LOADS IN kg x 1000

17.1m JIB with TRACKS FULLY EXTENDED - 360°																
UP TO 0.5° SLOPE - NO TRAVEL																
20.5t MAIN COUNTERWEIGHT AND 9.1t CARBODY COUNTERWEIGHT																
RADIUS (m)	MAIN BOOM LENGTH (m)															RADIUS (m)
	11.5			31.2			35.1			39.1			43.0			
	3.5°	25°	45°	3.5°	25°	45°	3.5°	25°	45°	3.5°	25°	45°	3.5°	25°	45°	
3																3
4																4
5	4.5															5
6	4.5															6
8	4.5															8
10	4.5															10
12	4.2	3.7		3.7			3.3			3.1						12
14	3.7	3.4		3.4			3.3			3.1			3.0			14
16	3.3	3.1	2.7	3.1	3.4		3.3			3.1			3.0			16
18	3.0	2.9	2.5	2.9	3.3		3.3	3.3		3.1	3.1		3.0			18
20	2.8	2.6	2.3	2.6	3.2	2.5	3.3	3.2		3.1	3.1		3.0	3.0		20
22	2.6	2.4	2.2	2.4	3.0	2.4	3.3	3.1	2.4	3.1	3.1		3.0	3.0		22
24	2.4	2.2	2.1	2.2	2.9	2.3	3.3	2.9	2.4	3.1	3.0	2.4	3.0	3.0	2.4	24
26	2.2	2.1		2.1	2.7	2.3	3.2	2.8	2.3	3.1	2.8	2.3	3.0	2.9	2.3	26
28					2.6	2.2	3.0	2.6	2.2	3.1	2.7	2.2	3.0	2.8	2.2	28
30					2.4	2.1	2.8	2.5	2.1	2.9	2.6	2.2	2.9	2.6	2.2	30
32					2.3	2.1	2.6	2.4	2.1	2.7	2.5	2.1	2.7	2.5	2.1	32
34					2.2	2.0	2.4	2.3	2.0	2.5	2.4	2.0	2.6	2.4	2.1	34
36					2.1	2.0	2.3	2.2	2.0	2.4	2.2	2.0	2.4	2.3	2.0	36
38					1.9	1.9	2.1	2.0	2.0	2.2	2.1	2.0	2.3	2.2	2.0	38
40					1.8		2.0	1.9	1.9	2.1	2.0	1.9	2.1	2.0	1.9	40
45					1.6		1.7	1.7		1.8	1.7	1.7	1.6	1.8	1.8	45
50							1.5			1.4	1.5		1.0	1.2		50
55													0.6	0.7		55
60																60
PARTS OF LINE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	PARTS OF LINE

PLEASE READ, UNDERSTAND, AND FOLLOW THE MANUALS FURNISHED WITH THE CRANE AS WELL AS THE CAPACITY LIMITATIONS AND GENERAL CONDITIONS LISTED BELOW PRIOR TO OPERATION OF THE CRANE. FAILURE TO DO SO MAY RESULT IN AN ACCIDENT.

Performance of this TADANO crane as manufactured by Tadano Mantis Corporation applies only to machines as originally equipped by the manufacturer and in a properly maintained condition. Capacities given are maximum covered by the manufacturer's warranty and are based on a freely suspended load with NO allowance for factors as out-of-level operation (beyond the limits specified on the charts), supporting surface conditions, hazardous surroundings, experience of personnel, etc. The operator shall establish practical working loads based on prevailing operating conditions, such as, but not limited to the above.

The lifting capacities in the structural area are based on DIN 15018 parts 2 and 3 and F.E.M.

The lifting capacities in the stability area are based on DIN 15019 part 2 / ISO 4305 / EN 13000.

Maximum admissible wind velocity for working with telescopic boom and jibs is 32 km/hr. Consult TADANO for ratings at higher wind speeds.

Side pull on boom is extremely dangerous and must be avoided.

DO NOT exceed manufacturers maximum specified reeving.

Boom angle/boom length relationships given are an approximation of the resulted load radius, which should be an accurate measurement. Boom height dimensions are measured from ground to center of lower boom head sheave.

It is permissible to attempt to telescope boom with a load within the limits of rated capacities. However, boom angle system hydraulic pressure, and/or boom lubrication may affect operation.

It is permissible to travel with loads within the rated capacity of the crane. Travel speeds should be greatly reduced to reflect terrain limitations and minimize dynamic loads applied to the crane structure.

Lifting capacities are shown in metric tons.

The weight of load handling devices such as hook blocks, slings, etc., must be considered as part of the load and must be deducted from the lifting capacities.

The lifting capacities for the telescopic boom apply to a crane with no jibs or other optional equipment stowed or mounted on the crane.

The working radius is the horizontal distance from the center of rotation to the center of the freely suspended, non-oscillating load.

The lifting capacities are subject to change without prior notice.

The above remarks are for basic information only and the operator's manual must be consulted before operating this crane. All data and performances refer to the standard crane. The addition of optional and other equipment may affect the performance of the crane.

Load moment indicating and anti-two block systems are operator aids and must never be used in lieu of job site lift planning calculations by the operator which must take into account ground conditions, weather and all other environmental factors prevailing at the time of the lift. Specifications are subject to change at any time without prior notice. Illustrations and photographs may show optional equipment. Supercedes all previous issues.

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