



GTC-300EX

27t Telescopic Boom Crawler Crane



MANTIS
CRANES

SPECIFICATIONS & LOAD CHARTS



Tadano Mantis Corporation builds on the long tradition of the Mantis telescopic boom crawler crane, and sets the global standard with the dependability, versatility and performance expected of a market leader. Tadano Mantis cranes are built like no other. At their hearts are massive steel fabrications, over-sized to handle the toughest jobs, year-in and year-out. Powerful state-of-the-art hydraulics coupled with diesel engines available in a choice of sizes match perfectly to meet the most rigorous of project demands. Tadano Mantis Corporation remains one of the few crane makers prepared and equipped to work with contractors and project engineers to develop customized lifting solutions that meet the most unusual of project challenges. Thanks to the versatile combination of heavy duty telescopic booms, hydraulically extendable crawlers, and extremely compact dimensions, Mantis cranes can often get closer to a job than bulkier, fixed length lattice boom crawler cranes or rubber-tired cranes that need outriggers to work effectively.





FEATURES

NO OTHER CRANE COMBINES SO MANY VALUABLE FEATURES:

- Pick-and-carry the full crane load chart through 360°.
- Lift and walk...even with tracks retracted.
- Climb steeper grades, thanks to minimized counterweight and low center of gravity.
- Pull through deep mud without bogging down.
- Telescope or lift the boom with a full load on the hook.
- Save time and money on the job due to low clearance height, retract on-the-fly tracks and telescopic boom.
- Independent hydrostatic track drives allow pivot turns and counter rotation.
- Hydraulic tool circuit option powers wide choice of Mantis-approved tools.
- New luxury cab with state-of-the-art operator aids.
- Saves time and money on deployment and shipping with less haul vehicles, less time wasted on boom erection and fewer personnel on the erection crew.



Large access doors, spacious machinery compartments simplify preventative maintenance and service of the crane.



Conveniently positioned cameras display the winch as well as the blind area directly behind the crane. Full color video display in operator cab is standard equipment.



Spacious cab, adjustable seat, and conveniently located controls are common in all Tadano Mantis Cranes.



State-of-the-art, user friendly rated capacity limiter provides continuous feedback of crane lift and position data.



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ON THE JOB

With 10-plus years worldwide service behind it, the GTC-300EX is one of the most performance-proven, bullet-proof telescopic boom crawler cranes available – anywhere! This 27t capacity crane has super-compact dimensions, and like all Mantis cranes, it can pick-and-carry its entire load chart – through 360°.

Low center of gravity and a wide stance make the GTC-300EX a favorite where extra lifting capacity and reach are needed. The GTC-300EX can walk with full boom and jib deployed, or with full nominal capacity suspended. It can even walk with 27t suspended with full counterweight removed or tracks retracted when lower ground bearing pressure or narrower widths are needed.



Low ground bearing pressure, fully sealed track drives and bearings, and high ground clearance allow the Mantis crane to traverse through extreme conditions. Above picture shows optional complete auger kit.

KEY FEATURES INCLUDE:

- 27t pick-and-carry capacity – at 3m radius through 360°
- Fully synchronized three-section full power boom of 24,4m length
- Two-piece swingaway lattice boom extension & offsettable jib for up to 37,8m tip height
- 129kW diesel engine standard
- Low ground bearing pressure of 0,47 kg/cm2
- Mantis-engineered auger options with optional hydraulic tool circuit
- Fast two-speed independent hydrostatic track drive to 4,0 km/hr
- Full boom telescoping and boom lift under full hook load
- 2,59m minimum travel width (with 450mm tracks)
- Choice of track shoe widths, Apex swamp pads or bolt-on rubber track pads to suit any ground surface
- 28,5t shipping weight fully equipped – hauls as a single, ready-to-work load
- Steep 56% gradeability thanks to low centre of gravity
- Hydraulic on-the-fly track frame retraction and extension
- 5t planetary main winch with full load single line speeds to 78 mpm
- High 358mm ground clearance helps avoid damage and snagging



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An excellent tool for highway and bridge construction. Low clearance height and narrow working widths minimize traffic interruption, full pick-and carry capacity and the flexibility of telescopic boom length adjustment eases the delicate placing of heavy bridge beams.



Special options - "snow shoes" and pole guide are utilized to enhance productivity in all climates and conditions.



Pick-and-carry towers, their foundations and string the wires.



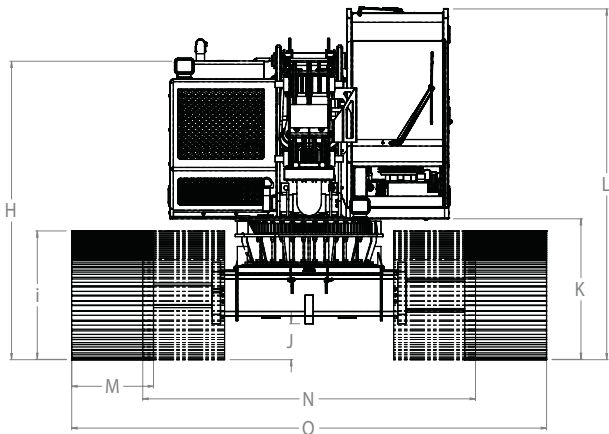
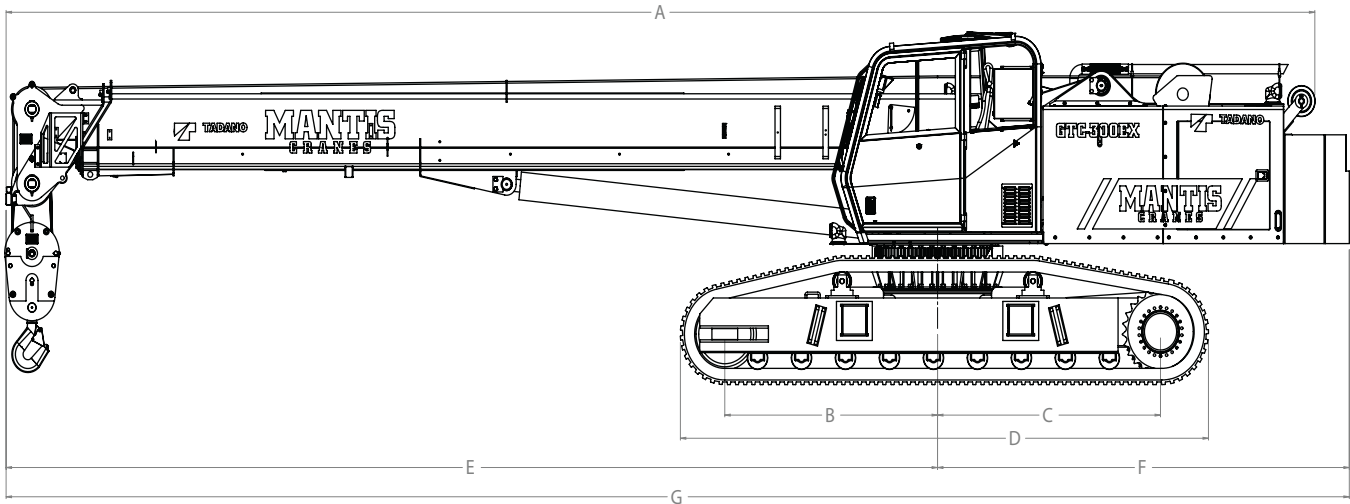
Equipped with a special rear-mounted power pack, this GTC-300EX is operating with an auger casting attachment.



The GTC-300EX can be transported on a single trailer and be ready to work within minutes of arrival at a jobsite.

DIMENSIONS

GTC-300EX
27t Telescopic Boom Crawler Crane



PRINCIPAL DIMENSIONS

A	Length (Counterweight Removed)	12,24 m
B	CL Front Track Drive to CL Rotation	2,03 m
C	CL Rear Track Drive to CL Rotation	2,06 m
D	Track Length	4,90 m
E	Boom Length to CL Rotation	8,69 m
F	Tailswing	3,86 m
G	Overall Length	12,52 m
H	Ground to Top of Engine Cover	2,29 m
I	Track Height	1,07 m
J	Ground Clearance	279 mm
K	Ground to Bottom of Cab	1,17 m
L	Maximum Overall Height	2,90 m
M	Track Width	760 mm
N	Overall Width (Tracks Retracted)	3,10 m
O	Overall Working Width	4,42 m

WIDTHS, WEIGHTS, AND GROUND PRESSURES*

Shoe Width	Overall Width		Area	Ground Pressure	Working Weight
	Retracted	Extended			
450 mm	2,59 m	4,11 m	3,72 m ²	0,74 kg/cm ²	27,445 kg
610 mm	2,95 m	4,27 m	4,95 m ²	0,56 kg/cm ²	27,971 kg
760 mm	3,10 m	4,42 m	6,19 m ²	0,46 kg/cm ²	28,495 kg

* Crane equipped with: 24.4m boom, extension, jib, 27t hook block, and 6.3t headache ball



SPECIFICATIONS

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CRANE SPECIFICATION

Boom

3-section full power synchronized telescoping boom. Synchronized telescoping system consists of a double acting hydraulic cylinder with load holding valves and extension and retraction cables.

Telescoping System:	Double acting hydraulic cylinder with load holding valves and extension and retraction cables
Retracted Length:	10,0m
Extended Length:	24,4m
Boom Extension Time:	70s
Maximum Lifting Height:	24,4m
Elevating System:	Double acting hydraulic cylinder with load holding valves
Elevating Angles:	-1° to 78°.
Boom Elevating Time:	41s
Boom Head:	Five, 381 mm diameter cast nylon sheaves on heavy-duty roller bearings
Auxiliary Boom Head:	Quick reeve, single 381 mm diameter high-strength, cast nylon sheave mounted on a heavy-duty roller bearing.
Hook Block:	27t hook block three 406 mm diameter sheaves mounted on heavy-duty roller bearings with swivel hook and safety latch.
Headache Ball:	6,3t ball includes a swivel hook with a safety latch.

Load Moment Indicator & Anti-Two Block

- Standard Rated Capacity Limiter and Anti-Two Block system
- Control function shutdown
- Audio and visual warnings
- LCD screen provides a continuous display of working boom length, boom angle, working load radius, tip height, 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 blocks.

SUPERSTRUCTURE

Frame

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

Operator's Cab

- Fully-enclosed, air conditioned all-steel modular cab with lockable swinging door, acoustical lining, anti-slip floor and tinted safety glass.
- Sliding windows located in the cab door and cab boom side.
- Vent window in the rear of the cab.
- Grab bars and steps are located for easy access to the cab.
- Rear view cameras are appropriately located as are three remote control work lights.
- 2-speed windshield wiper, top glass wiper
- Defroster, heater, circulating fan
- Six-way adjustable fabric seat with headrest, seat belt
- Dome light
- Dry-chemical fire extinguisher.
- Dash instrumentation: tachometer, voltmeter, oil pressure gauge, temperature gauge, hour meter and fuel gauge. Indicators are provided for crane level, load moment, drum rotation, air filter restriction, hydraulic oil temperature and filter restriction, engine oil pressure and temperature.
- Seat and armrest termination switches immediately disable all hydraulic functions as the operator rises from the seat or lifts the left hand armrest.
- Two-way hydraulic armrest mounted joysticks control swing, boom extend, main winch and boom hoist. Three two-way hydraulic foot pedals control the travel and swing service brake functions.
- Adjustable hand and foot throttles

Counterweight

The 5,220 kg single piece counterweight can be removed and installed via a pendant attached to the boom.

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°

Free Swing system

Swing Speed:	Up to 3 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:	2-position manually pinned
Lubrication system:	Cab mounted grease applicator

Fuel System

Capacity:	303 liter
Filtration:	Inline fuel/water separator and engine mounted fuel filter.

Hydraulic System

Hydraulic Pumps:	Two high pressure, variable axial piston pumps with load sense and torque limiting control for crane functions. One gear pump for cooling loop
Directional Valves:	Multiple pressure and flow compensated valves with integrated relief valves controlled by hydraulic pilot signals.
Pump output:	437 liter/min @ 2100 RPM engine speed. 330 bar maximum pressure
Reservoir:	568 liter capacity, spin-on filler/breather, sight gauge, cleanout, and sump drain.
Filtration:	5 micron, full flow tank mounted return filters with electrical clogging indicator; 5 micron pilot oil in-line pressure filter with electrical clogging indicator.
Diagnostic Ports:	Provided for system, load sense, and pilot pressure.



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UNDERCARRIAGE

Carbody

The steel box type carbody is fabricated with square axles to accept the crawler side frames. The top surface is precision machined to receive the swing bearing.

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: Nine sealed rollers on bottom of track frame
- Idler: Self lubricating with spring type tensioner
- Track Shoes: 760mm 3-bar semi grouser (standard)
610mm 3-bar semi grouser (optional)
450mm 3-bar semi grouser (optional)
760mm flat shoe (optional)

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.

- Low travel speed: 2,6 km/h
- High travel speed : 4,0 km/h
- Gradeability (unladen): 56%

OPTIONAL EQUIPMENT

- Boom Extension: Lattice type, swingaway, stores along boom base section and can be used with or without optional jib. One of two parts of line may be reeved.
- Length: 6,10m
- Head: Two, 483 mm diameter cast nylon sheaves on heavy-duty roller bearings
- Maximum lifting height: 29,6m
- Boom Jib: Lattice type, swingaway, stores along boom extension and can only be used with extension deployed.
- Length: 6,10m
- Offset Angles: 15° & 30°
- Maximum Tip Height: 36,3m
- Auger Ready Package: Includes hoses, fasteners and stowage bracket assembly mounted to the base section of the boom with a flow capability of 130 liter/min
- Complete Auger Package: Adds a two speed auger motor/gear box and one 1,5 m kelly bar to the Auger Ready Package.
- Tool Circuit: Provides 23 liter/min and 45 liter/min at 176 bar through a 15,24 m twin hose reel with quick disconnect fittings to operate open center tools.
- Free Fall Hoists: All winches are available in controlled free fall configurations.
- Cab Access Walkways: A pair of 1,38 m wide x 635 mm deep walkways which attach to both the front and rear of the carbody and allow for easier egress and ingress to the operator's cab when the crane's upper rotating frame is not aligned front to rear.

¹Load 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. Prices and specifications are subject to change at any time without prior notice and are for factory installation at time of original manufacture. F.O.B Plant; Richlands, VA 24641. Illustrations and photographs may show optional equipment. Supercedes all previous issues. Please see www.mantiscranes.com for most current information.



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MAIN WINCH					
Planetary geared single-speed winch includes a bent axis, variable displacement hydraulic motor and a multi-disc internal brake. Wire Rope: 183 m 14 mm 6 x 37 EIPS, IWRC, RRL. Line pulls are not based on wire rope strength. Drum rotation indicator is standard.					
Rope Layer	Maximum Line Pull	Full Load Line Speed	Pitch Diameter	Layer	Total
1	48,9 kN	60,4 m/min	284,3 mm	21,4 m	21,4 m
2	44,5 kN	64,6 m/min	309,1 mm	23,3 m	44,7 m
3	40,5 kN	67,4 m/min	333,9 mm	25,2 m	69,9 m
4	37,4 kN	69,8 m/min	358,8 mm	27,1 m	97,0 m
5	34,7 kN	74,4 m/min	383,6 mm	28,9 m	125,9 m
6	32,5 kN	75,3 m/min	408,4 mm	30,8 m	156,7 m
7	30,2 kN	78,0 m/min	433,2 mm	32,7 m	189,4 m

AUXILIARY WINCH					
Planetary geared single-speed winch includes a bent axis, variable displacement hydraulic motor and a multi-disc internal brake, Wire Rope: 91 m 14 mm 6 x 37 EIPS, IWRC, RRL Line pulls are not based on wire rope strength, Drum rotation indicator is standard,					
Rope Layer	Maximum Line Pull	Full Load Line Speed	Pitch Diameter	Layer	Total
1	53,4 kN	55,5 m/min	261,9 mm	20,1 m	20,1 m
2	48,0 kN	60,4 m/min	286,8 mm	22,0 m	42,1 m
3	43,6 kN	62,5 m/min	311,6 mm	23,9 m	66,1 m
4	40,0 kN	65,2 m/min	336,4 mm	25,8 m	91,9 m
5	36,9 kN	69,5 m/min	361,2 mm	27,7 m	119,6 m

ENGINE					
Cummins QSB173 (U.S. EPA Tier 3, CARB Tier 3, Euromot Stage IIIA)			Noise Emissions: Top 96.3 dBa (excludes noise from intake, exhaust, cooling system and driven components)		
Type	6 Cylinder Water Cooled	Weight (Wet)	457 kg	Aspiration	Turbocharged & Aftercooled
Displacement	6,7 liter	Oil Capacity	16,3 liter	Air Filter	Dry Type
Bore	107 mm	Rated Power	129 kW @ 2200 rpm	Electrical System	12 volt
Stroke	124 mm	Peak Torque	800 Nm @ 1400 rpm	Alternator	100 amp

MACHINE WEIGHTS	
STANDARD CRANE WITH 3 SECTION 24,38 m BOOM, 1 PIECE COUNTERWEIGHT & 760 mm TRACK SHOES	27,210 kg
Crane Less Counterweight	21,990 kg
Counterweight	5,220 kg
Auxiliary Nose Sheave	68 kg
Auxiliary Winch with Standard Rope	275 kg
6,3t Headache Ball	82 kg
27t Hook Block	345 kg
OPTIONAL EQUIPMENT	
6,10 m Lattice Extension	544 kg
6,10 m Jib (connects to head of Lattice Extension ONLY)	318 kg
Auger Ready Package	200 kg
Complete Auger Package	690 kg
1,5 m Auger Kelly Bar	54 kg
1,8 m Auger Kelly Bar	64 kg

* Deduction from Standard Crane Weight

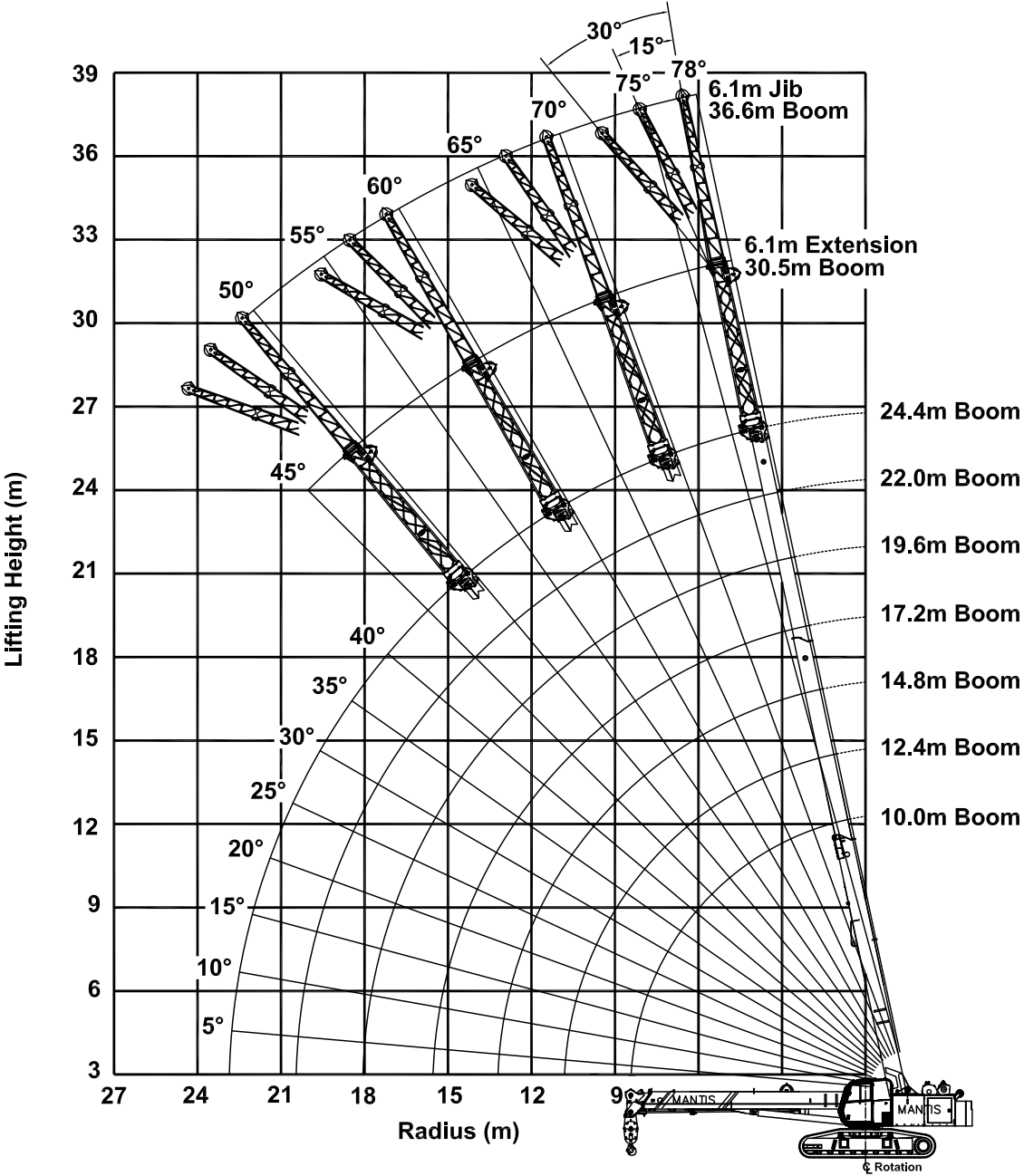
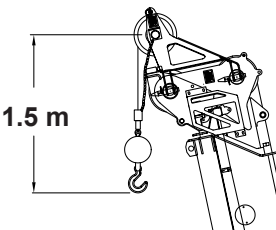
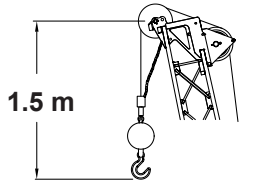
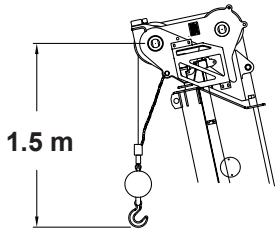
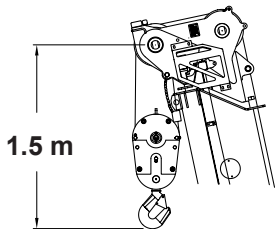


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24,4M MAIN BOOM, 6,1M EXTENSION & 6,1M JIB





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27t Telescopic Boom Crawler Crane

LIFTING CAPACITIES

LOADS IN METRIC TON

MAIN BOOM with TRACKS FULLY EXTENDED								
<div><div>10-24,4m</div><div>360°</div><div></div><div>1°</div><div>5,2t</div><div>1.4 km/h</div></div>								
RADIUS (m)	MAIN BOOM LENGTH							RADIUS (m)
	10,0	12,4	14,8	17,2	19,6	22,0	24,4	
2,5	27,2	21,8	21,6					2,5
3,0	27,2	21,8	21,6	20,4				3,0
3,5	25,9	21,7	21,6	18,9	15,7			3,5
4,0	22,4	20,2	20,1	17,5	14,8	13,6		4,0
4,5	18,1	17,9	18,0	16,2	13,7	11,9	10,4	4,5
5,0	15,6	15,7	15,8	14,7	12,8	11,2	9,8	5,0
6,0	11,3	11,4	11,4	11,4	11,1	9,8	8,6	6,0
7,0	9,0	9,1	9,1	9,2	9,1	8,5	7,7	7,0
8,0	7,1	7,3	7,4	7,4	7,4	7,3	6,9	8,0
9,0		6,1	6,1	6,2	6,2	6,2	6,0	9,0
10,0		5,2	5,2	5,3	5,3	5,3	5,3	10,0
12,0			3,9	4,0	4,0	4,0	4,0	12,0
14,0				3,1	3,1	3,1	3,1	14,0
16,0					2,5	2,5	2,5	16,0
18,0					2,0	2,0	2,1	18,0
20,0						1,5	1,6	20,0
22,0							1,4	22,0

NOTE: Capacities appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation. Capacities appearing below the bold line are based on stability and do not exceed 75% of tipping.



THESE CHART VALUES ARE ONLY A GUIDE AND MUST NOT BE USED TO OPERATE THE CRANE. USE ONLY THE IN CAB LOAD CHARTS AND OPERATOR'S MANUAL FURNISHED WITH THE CRANE.

CAUTION





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27t Telescopic Boom Crawler Crane

LIFTING CAPACITIES

LOADS IN METRIC TON

MAIN BOOM with TRACKS FULLY EXTENDED								
<div><div>10-24,4m</div><div>360°</div><div></div><div>1°</div><div></div><div>1.4 km/h</div></div>								
RADIUS (m)	MAIN BOOM LENGTH							RADIUS (m)
	10,0	12,4	14,8	17,2	19,6	22,0	24,4	
2,5	27,2	21,8	21,6					2,5
3,0	24,0	21,8	21,6	20,4				3,0
3,5	18,1	17,6	17,7	17,4				3,5
4,0	14,0	14,1	14,2	14,2	13,7			4,0
4,5	10,7	10,8	10,9	11,0	11,0	10,5		4,5
5,0	9,3	9,5	9,5	9,5	9,5	9,6	9,3	5,0
6,0	6,6	6,7	6,7	6,8	6,8	6,8	6,8	6,0
7,0	5,1	5,2	5,3	5,3	5,3	5,3	5,4	7,0
8,0		4,1	4,1	4,2	4,2	4,2	4,2	8,0
9,0		3,3	3,3	3,4	3,4	3,4	3,4	9,0
10,0		2,7	2,8	2,8	2,9	2,9	2,9	10,0
12,0			1,9	2,0	2,0	2,0	2,1	12,0
14,0				1,4	1,5	1,5	1,5	14,0
16,0					1,1	1,1	1,1	16,0
18,0					0,8	0,8	0,8	18,0
20,0						0,5	0,6	20,0
22,0							0,4	22,0

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LIFTING CAPACITIES

LOADS IN METRIC TON

MAIN BOOM with TRACKS RETRACTED								
<div><div>10-24,4m</div><div>360°</div><div></div><div>1°</div><div>5,2t</div><div>1.4 km/h</div></div>								
RADIUS (m)	MAIN BOOM LENGTH							RADIUS (m)
	10,0	12,4	14,8	17,2	19,6	22,0	24,4	
2,5	27,2	21,8	21,6					2,5
3,0	22,5	21,8	21,6	20,4				3,0
3,5	18,0	18,0	18,0	18,0	15,7			3,5
4,0	14,0	14,0	14,0	14,0	14,0	13,6		4,0
4,5	11,1	11,1	11,1	11,1	11,1	11,1	10,4	4,5
5,0	9,5	9,5	9,5	9,5	9,5	9,5	9,5	5,0
6,0	7,0	7,0	7,0	7,0	7,0	7,0	7,0	6,0
7,0	5,4	5,4	5,4	5,4	5,4	5,4	5,4	7,0
8,0	4,3	4,3	4,3	4,3	4,3	4,3	4,3	8,0
9,0		3,6	3,6	3,6	3,6	3,6	3,6	9,0
10,0		3,1	3,1	3,1	3,1	3,1	3,1	10,0
12,0			2,3	2,3	2,3	2,3	2,3	12,0
14,0				1,8	1,8	1,8	1,8	14,0
16,0					1,4	1,4	1,4	16,0
18,0					1,1	1,1	1,1	18,0
20,0						0,8	0,8	20,0
22,0							0,5	22,0

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






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LIFTING CAPACITIES







LOADS IN METRIC TON

6,1m EXTENSION & 6,1m JIB										
										
6,1m EXTENSION				6,1m JIB						
BOOM ANGLE	Total Boom Length (ft)			Jib Offset Angles						BOOM ANGLE
	16,1-28m	>28m								
										
	0°	15°	30°							
78°	5,6	5,6		3,0	1,8	1,0		78°		
75°	4,8	4,8		2,9	1,8	1,0		75°		
72°	4,2	4,2		2,5	1,6	0,9		72°		
70°	3,9	3,9		2,3	1,5	0,9		70°		
68°	3,6	3,6		2,1	1,4	0,8		68°		
65°	3,3	3,1		1,9	1,3	0,8		65°		
62°	3,0	2,6		1,8	1,2	0,8		62°		
60°	2,8	2,2		1,6	1,1	0,8		60°		
58°	2,7	2,0		1,5	0,9	0,6		58°		
55°	2,5	1,7		1,2	0,6	0,5		55°		
52°	2,4	1,5		0,9	0,3	0,2		52°		
50°	2,3	1,3		0,7	0,1	0,1		50°		
48°	2,0	1,2						48°		
45°	1,9	1,0						45°		

NEVER use extension or jib without counterweight in place.

Weight Reductions for Load Handling Devices	
Hookblocks	
27,2 t - 3 Sheave	345 kg
6,3 t Overhaul Ball w/Swivel	82 kg
Optional Load Handling Devices	
6,1m Extension - Stowed*	145 kg
6,1m Extension - Erected*	726 kg
6,1m Ext, and 6,1m Jib - Stowed*	204 kg
6,1m Ext, and 6,1m Jib - Erected*	1406 kg
Auxiliary Nose Sheave*	73 kg
Auger Ready Package*	113 kg
Auger Package Complete - Stowed*	363 kg
Auger Package Complete - Erected*	680 kg

*Reduction of main boom capacities

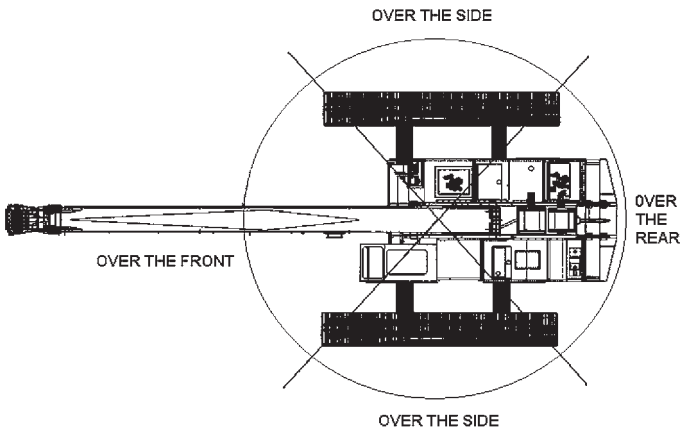
AUXILIARY BOOM NOSE SHEAVE								
<div></div>								
RADIUS (m)	MAIN BOOM LENGTH							RADIUS (m)
	10,0	12,4	14,8	17,2	19,6	22,0	24,4	
2,5	2,7	2,7	2,7					2,5
3,0	2,7	2,7	2,7	2,7				3,0
3,5	2,7	2,7	2,7	2,7	2,7			3,5
4,0	2,7	2,7	2,7	2,7	2,7	2,7		4,0
4,5	2,7	2,7	2,7	2,7	2,7	2,7	2,7	4,5
5,0	2,7	2,7	2,7	2,7	2,7	2,7	2,7	5,0
6,0	2,7	2,7	2,7	2,7	2,7	2,7	2,7	6,0
7,0	2,7	2,7	2,7	2,7	2,7	2,7	2,7	7,0
8,0	2,7	2,7	2,7	2,7	2,7	2,7	2,7	8,0
9,0		2,7	2,7	2,7	2,7	2,7	2,7	9,0
10,0		2,7	2,7	2,7	2,7	2,7	2,7	10,0
12,0			2,7	2,7	2,7	2,7	2,7	12,0
14,0				2,7	2,7	2,7	2,7	14,0
16,0					2,5	2,5	2,5	16,0
18,0					2,0	2,0	2,1	18,0
20,0						1,5	1,6	20,0
22,0							1,4	22,0

NOTE: Capacities appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation. Capacities appearing below the bold line are based on stability and do not exceed 75% of tipping.



LOAD CHARTS

GTC-300EX
27t Telescopic Boom Crawler Crane



GTC-300EX				
WIRE ROPE LINE PULL CAPACITIES				
PARTS OF LINE	MAIN WINCH (kN)	AUX WINCH (kN)	PARTS OF LINE	MAIN WINCH (kN)
1	43	43	5	214
2	85	85	6	256
3	128	N/A	7	299
4	171	N/A		
14mm diameter wire rope, 6 x 37 Class, EIP, IWRC				

PLEASE READ, UNDERSTAND, AND FOLLOW THE MANUALS FURNISHED WITH THE CRANE (OPERATOR'S AND SAFETY) 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.

Capacity Limitations and General Conditions:

1. This TADANO MANTIS CRANE as manufactured, meets the requirements of ANSI B30.5. Structure and stability have been tested in accordance with SAE J1063 and SAE J765, respectively. Modifications to the crane or use of optional equipment other than specified by the manufacturer can result in a reduction of capacity.

2. The main boom and auxiliary boom head lifting capacities are determined by boom length and load radius. The extension and jib lifting capacities are determined by boom angle.

3. Rated capacity loads given are maximum covered by the manufacturer's warranty and are based on a freely suspended load with NO allowance for factors such as out-of-level operation, 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.

4. All rated capacity loads shown apply to original equipment as supplied by Tadano Mantis Corporation

5. All rated capacity loads appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation.

6. All rated capacity loads appearing below the bold line are based on stability and do not exceed 75% of tipping.
7. Deductions from rated capacities must be made for the weight of the hook block, headache ball, slings, spreader bar, and any other suspended equipment. See Lifting Capacity Deduction Chart for load handling devices supplied by Tadano Mantis Corporation

8. A properly calibrated and maintained Load Moment Indicator (LMI) system will indicate boom mounted and other suspended equipment.

9. When making lifts where capacities may be within a zone limited by structural strength, the operator shall determine that the weight of the load is known within plus or minus (+/-) ten percent (10%) before making lift.

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

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


12. **DO NOT** exceed manufacturers maximum specified reeving.


13. **DO NOT** lift load or extend boom without proper configuration of crane per load chart selected.


14. **DO NOT** attempt to lift any load when wind speed exceeds 32,2 km/h.


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. Prices and specifications are subject to change at any time without prior notice and are for factory installation at the time of original manufacture. F.O.B Plant; Richlands, VA 24641. Illustrations and photographs may show optional equipment. Supersedes all previous issues. Please see www.mantiscranes.com for most current information.


Load Chart Symbol Key


SLEWING SYSTEM


MAXIMUM OUT OF LEVEL LIMIT


TRACKS FULLY EXTENDED


TRACKS FULLY RETRACTED


10-24,4m
MAIN BOOM

10-24,4m
MAIN BOOM WITH AUXILIARY NOSE SHEAVE

1.4 km/h
MAXIMUM PICK AND CARRY SPEED

5,2t
COUNTERWEIGHT

16,1-28m
MAIN BOOM WITH LATTICE EXTENSION

MAIN BOOM WITH JIB AND EXTENSION



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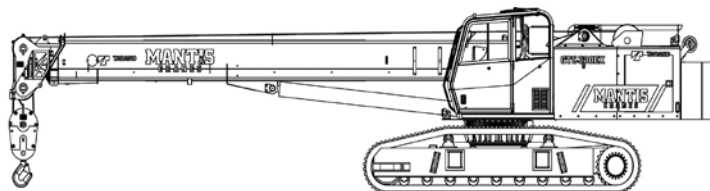
Fax: +81 3 3621 7785

E-mail: tdnihq@tadano.co.jp

www.tadano.co.jp/indexe.html

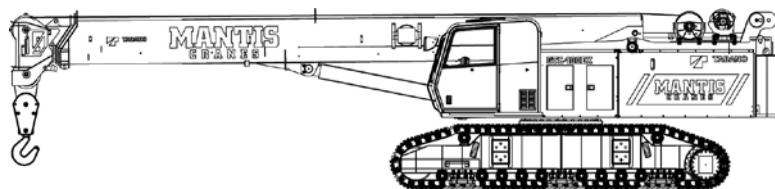
GTC-300EX

27t Telescopic Boom Crawler Crane



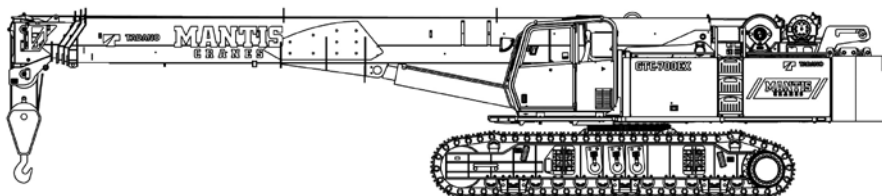
GTC-400EX

40t Telescopic Boom Crawler Crane



GTC-700EX

70t Telescopic Boom Crawler Crane



GTC-1000EX

100t Telescopic Boom Crawler Crane

