

GTC-700EX

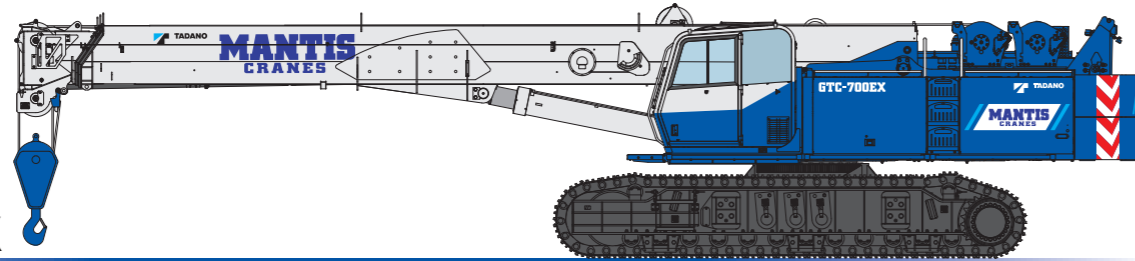
70 METRIC TON CAPACITY

GTC-400EX GTC-300EX

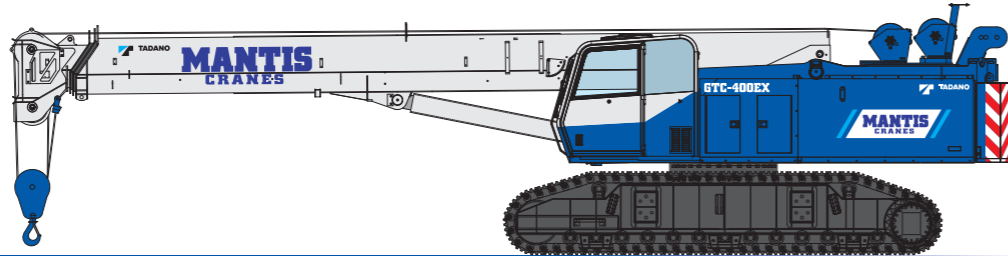
40 METRIC TON CAPACITY

27 METRIC TON CAPACITY

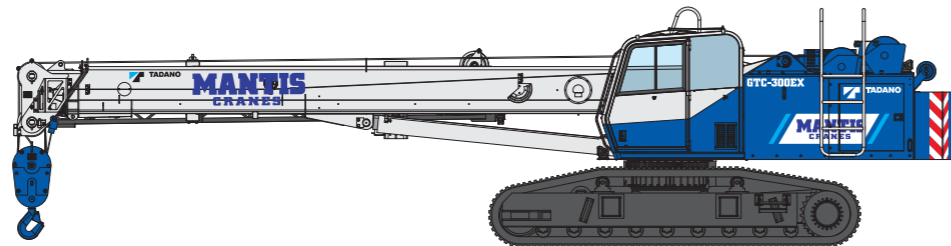
GTC-700EX



GTC-400EX



GTC-300EX



**TELESCOPIC
BOOM
CRAWLER
CRANE**



The Simple and Sturdy Spirit

TADANO MANTIS cranes are engineered like no other. Massive steel fabrications and powerful diesel engines matched to state of the art hydraulics and controls make this crane ideal for both lift applications as well as rugged heavy duty work.



CONTENTS

BENEFITS OF TELESCOPIC BOOM CRAWLER CRANES	03 - 04
PRODUCT CONCEPTS	05 - 06
PRODUCT FEATURES	07 - 11
OPTIONAL ITEMS	12
WORK APPLICATION	13 - 16



MANTIS[®]
CRANES

GTC-700EX

Crane capacity: 70 t at 3.0 m
Main boom: 4-section,
11.4 m - 34.0 m
Extension boom: 9.1 m*
Jib section boom: 6.1 m*

*optional

GTC-400EX

Crane capacity: 40 t at 3.0 m
Main boom: 4-section,
10.4 m - 32.0 m
Extension boom: 9.1 m*
Jib section boom: 6.1 m*

*optional

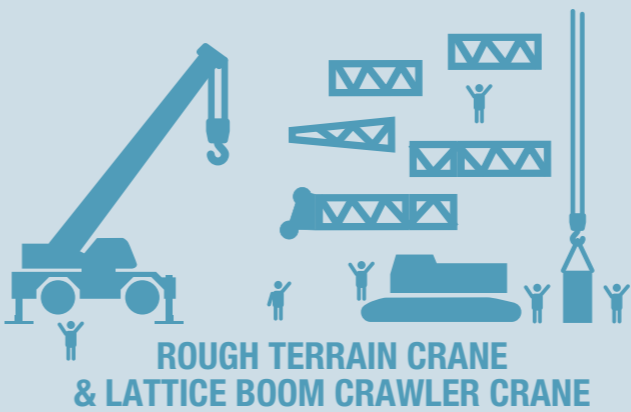
GTC-300EX

Crane capacity: 27 t at 3.0 m
Main boom: 3-section,
10.0 m - 24.4 m
Extension boom: 6.1 m*
Jib section boom: 6.1 m*

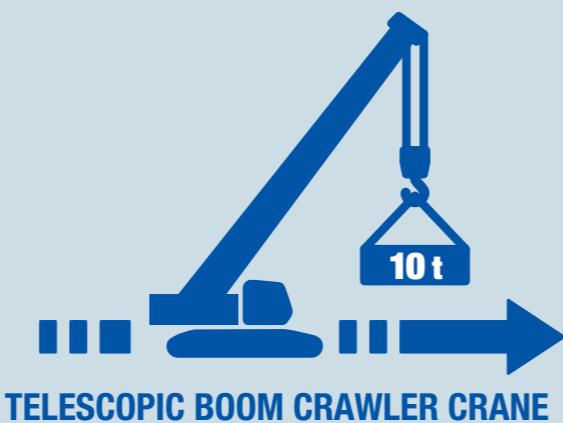
*optional

BENEFITS OF TELESCOPIC BOOM CRAWLER CRANES

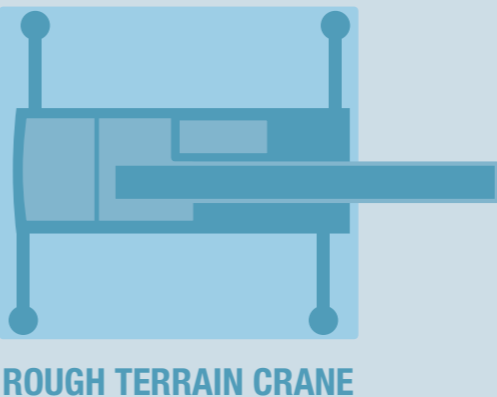
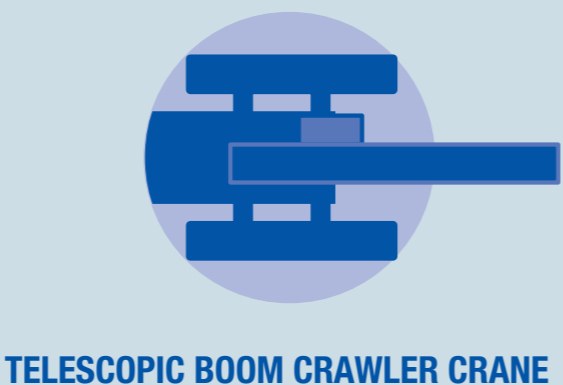
Quick & Safer Set Up



Maximum Pick & Carry Capacity at 360°



Compact Work Dimension Low Ground Bearing Pressure



Less Transportation Costs

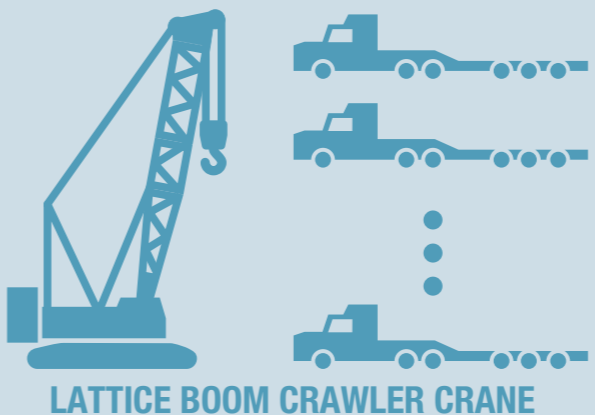


Photo: GTC-700EX

PRODUCT CONCEPTS

HEAVY DUTY

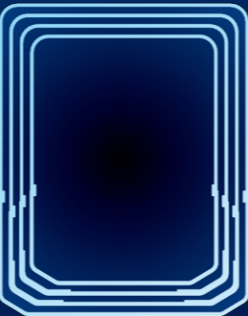
Benefits obtained from our “Heavy Duty” product concepts:

- Pick & Carry the load on uneven and rough terrain and 360 degrees slew conditions
- Pick & Carry the load with track in retracted position* Pick & Carry the load without counterweight
- Telescope under full load lifting capacity
- Stronger lifting capacity at working radius used for Pick & Carry
- Use of foundation attachments such as vibratory hammer**
- More than 50% gradeability across the product line

*Counterweight needs to be installed.
**TADANO MANTIS Guideline for piling extraction using vibratory hammer needs to be followed.

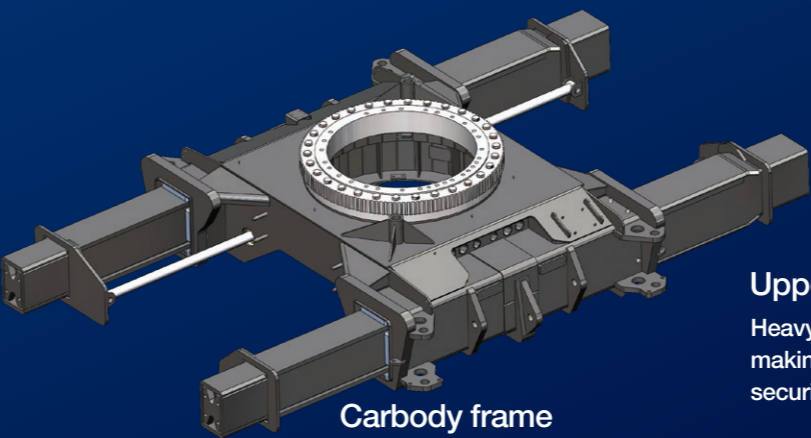
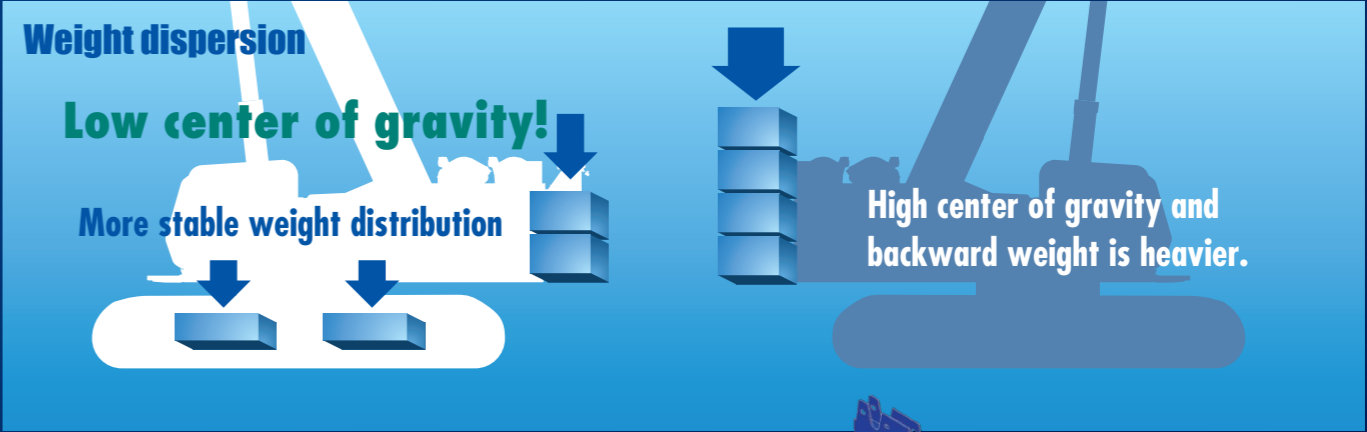
Tough & Durable Design

Less electronic components and simple control system. Class exceeding larger boom sections and boom head, stronger telescopic cylinder.



Proven Genuine Pick & Carry Design

Good weight and low center of gravity.
(more than 30% less dependent on counterweight with weight transferred to the undercarriage)



Upper frame

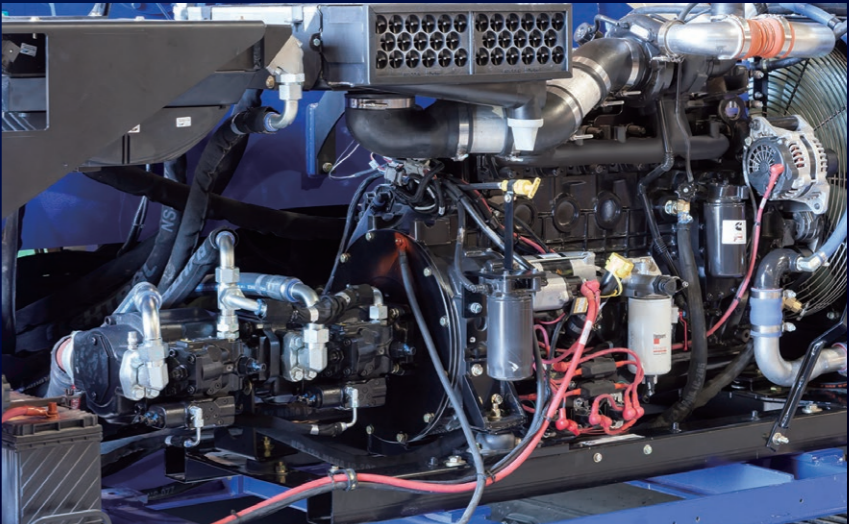
Heavy duty upper frame design making full use of FEM analysis for securing its high rigidity.

Carbody frame

Heavy duty rugged carbody frame with strong track extension cylinders.

Designed to allow foundation attachment and high gradeability

Powerful engine and pump.
Powerful track drive motor.



PRODUCT FEATURES

Operator Comfort

The spacious crane cab and simple controls offer a more comfortable and functional working environment.



Photo: GTC-700EX, GTC-400EX



Photo: GTC-300EX

Tiltable Cab (GTC-700EX)



Cab tilt switch

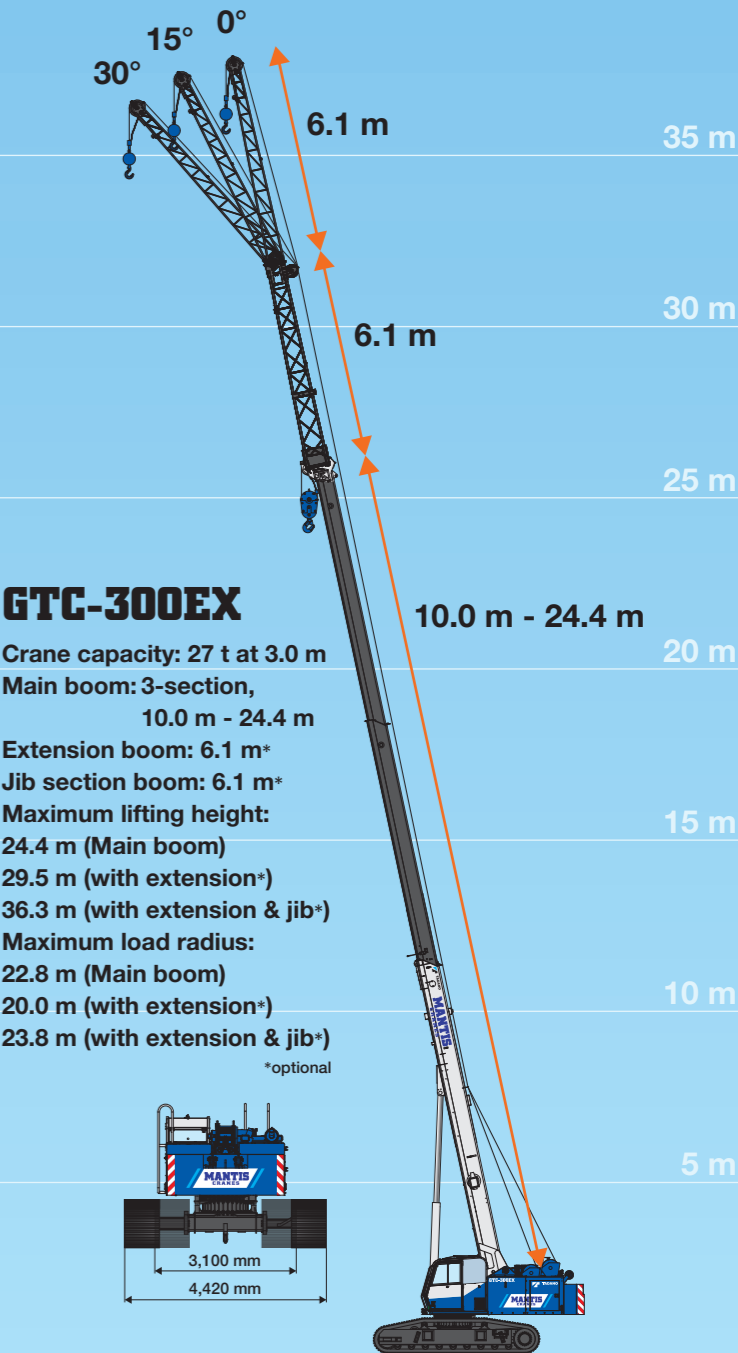
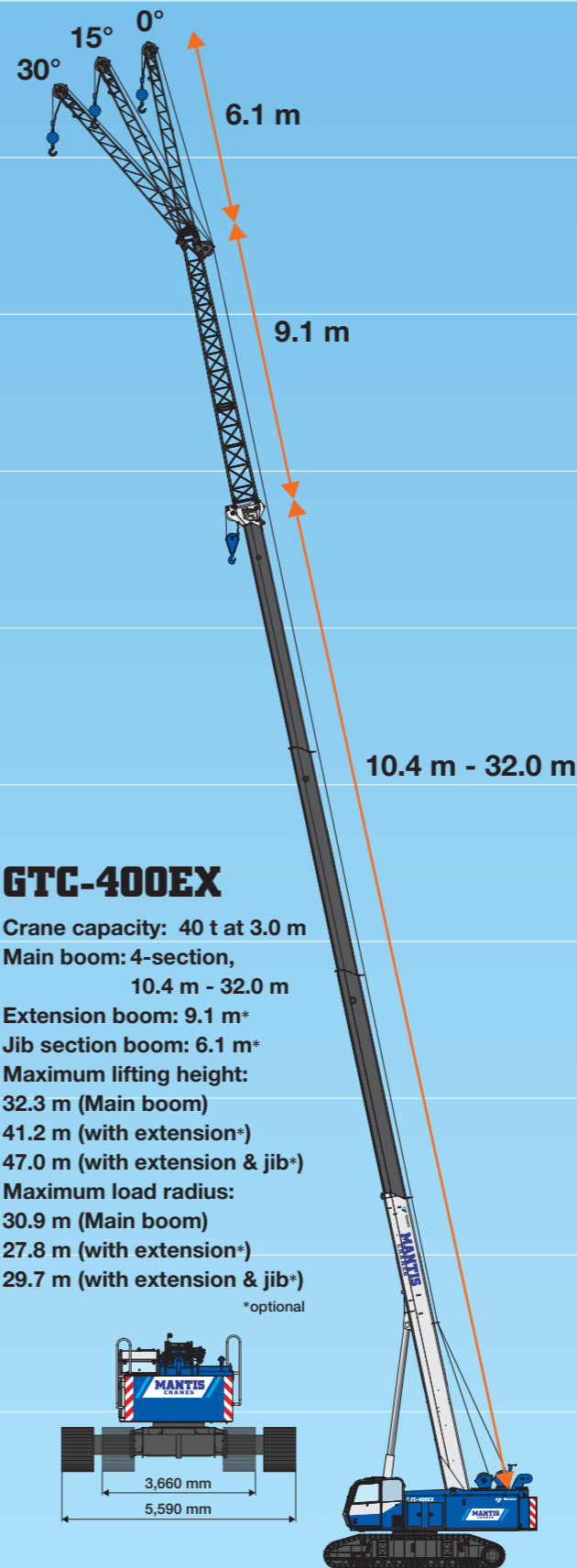
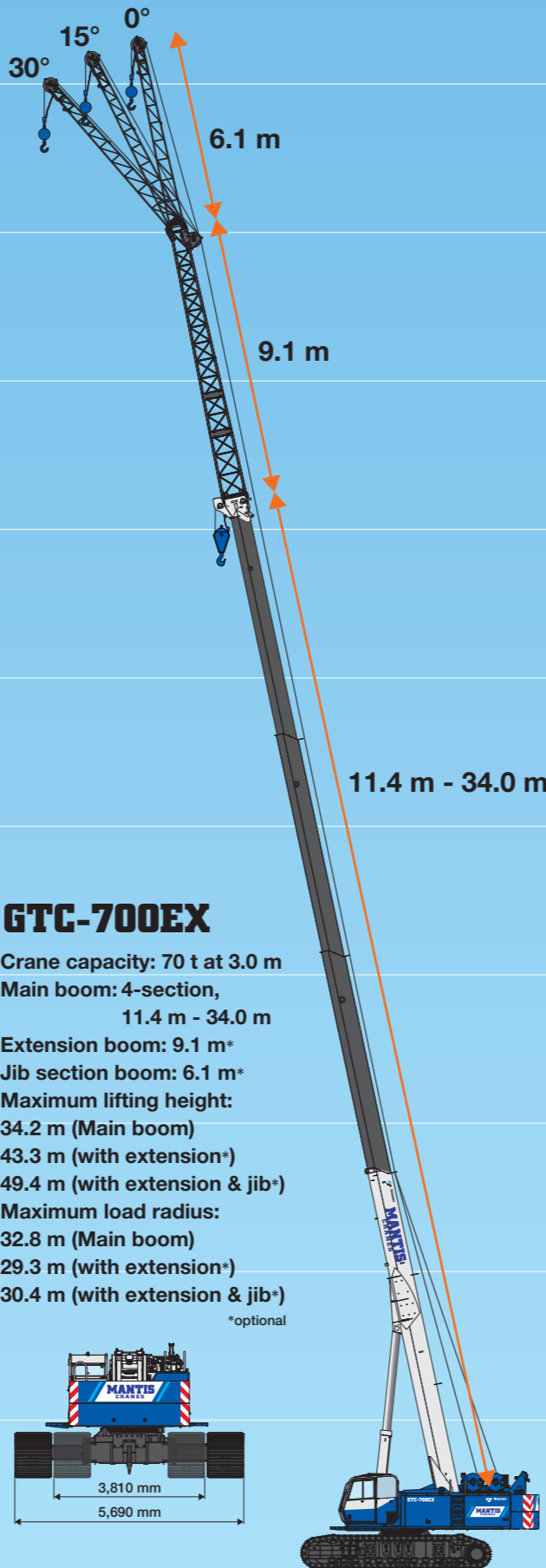
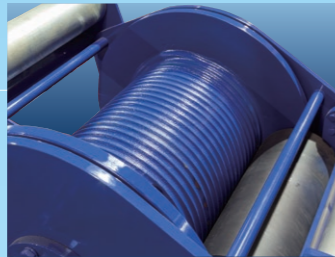


Two powerful winches with cable follower

Two powerful winches with cable follower, drum rotation indicator and 3rd wrap indicator.



Photo: GTC-700EX



PRODUCT FEATURES



Load Moment Indicator [AML-C]

AML-C allows the operator to simultaneously monitor: boom angle, boom length, operating pressure of the elevating cylinder, crane inclination angle, track extension width, counterweight configuration, rated lifting capacity and present hook load. With the crane inclination angle provided while the operator is travelling under the load, AML-C provides the corresponding rated lifting capacity on the screen.

The work range alarm function warns the operator when the crane approaches the pre-registered boom angle (upper limit, lower limit), lifting height and load radius.



AML lamp

Auto Engine Idle Mode

Operator can set the engine speed at low, medium, high (900, 1800, 2100 rpm) or at any desired engine speed by either touch screen or pushing a button on the control screen. When auto engine idle mode is ON, engine will run at low idle speed until a function is activated, then engine will increase to selected speed. After all controls are returned to neutral, engine speed will return to low idle speed.

This function eases the operator's fatigue of stepping on the pedal and improves operability.



Engine page, control screen

Color Rear View and Winch Monitor



Rear view page, control screen



Winch page, control screen



Camera

Control Panel (GTC-700EX, GTC-400EX)

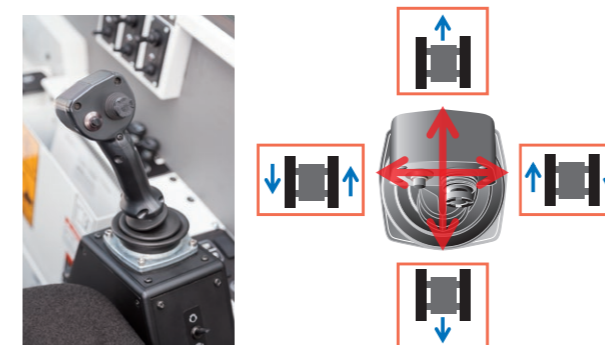
Switches are illustrated based on switch status ; Red – OFF / Green - ON



Travel Mode

(GTC-700EX, GTC-400EX)

Select travel mode by either using the touch screen or pushing a button on the control screen, right joystick acts as a travel controller for improved operability.



Wide Access Walkways

(GTC-700EX, GTC-400EX)



3 Rotation Work Lights



Light angle can be adjusted by 360° degrees horizontally and 135° degrees vertically from the crane cab.



Control switch

Wide Hand Rails (GTC-700EX)



PRODUCT FEATURES

Easy access for maintenance



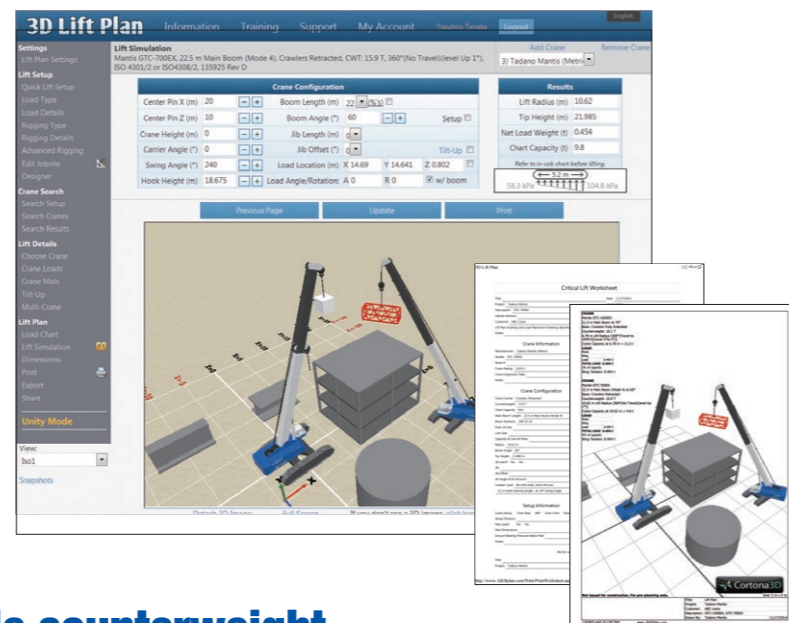
Hydraulic Measuring Points



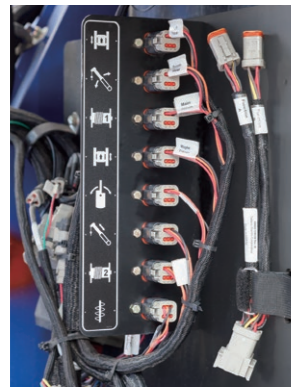
3D Lift Plan (GTC-700EX, GTC-400EX)*

Customized 3D lift simulation at your fingertips for FREE** for GTC-700EX and GTC-400EX. Easy access and user friendly web page allows you to calculate crane configurations and ground bearing pressure simultaneously. Moreover, you can print out detailed configurations and 3D graphics to further support your work preparation.

*3D Lift Plan is a product of A1A Software LLC.
**Advanced customized functions will be extra.



Emergency Backup System



In the event of electrical or CAN BUS failure, it is possible to bypass the normal control system. This allows the operator to operate one or two functions at a time at reduced speed.

Remote Controller

(counterweight, emergency backup operation, carbody jack*)
*optional



Self-removable counterweight

Counterweight can be hydraulically installed/removed by operating the pendant remote controller without the need of a support crane.

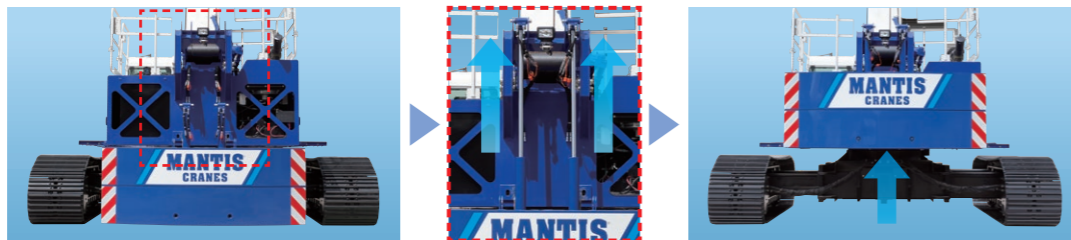


Photo: GTC-700EX

GTC-300EX Low profile type

GTC-300EX Low profile type is designed for the storage tank building industry. It is able to work inside of storage tanks due to its low ground bearing pressure. Thanks to its low overall height, it can crawl in and out without cutting additional steel tank plates.



OPTIONAL ITEMS

Complete Auger Package

Includes circuit, hoses, fasteners, stowage bracket, two-speed auger motor and 2 pieces of kelly bar.



	GTC-700EX	GTC-400EX	GTC-300EX
Max. drilling depth	5.7 m	6.0 m	6.3 m
Max. drilling radius	9.8 m	8.4 m	7.9 m
Max. drilling torque	18.9 kN/m		
Max. auger rotation speed	38 rpm		
Diameter of auger	0.610 m/0.762 m/0.914 m		
Auger bits type	Dirt heads or Rock heads		



Work Platform (Australia only)

Work Platform can be fitted to the boom head or first section of boom extension. Heavy duty all steel construction with non-skid floor, Self-leveling platform with position locking pin, Tool storage racks and interior handrails inside. By selecting Work Platform Chart, permissible operating range will be monitored by the load moment indicator. It also comes with DC hydraulic pump integrated into the crane system to lower and retract the boom with Work Platform to the ground in the event of main hydraulic system failure.



- Size: 914 mm x 1,828 mm
- Maximum load capacity: 340 kg



Travel Hand Lever

(GTC-300EX)



Clip on Polyurethane Flat Pads

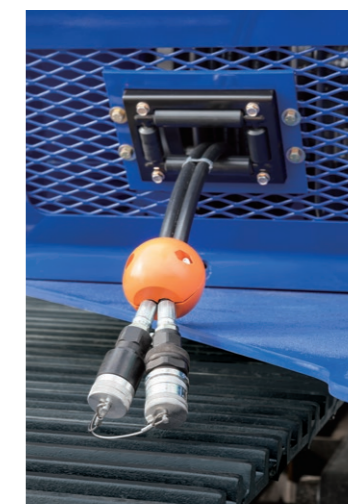


Clip on polyurethane flat pads can be easily installed/removed on top of the standard 3-bar semi grouser shoes.



Standard,
3-bar semi grouser shoe

Hydraulic Tool Circuit



Provides 23 l/min and 45 l/min at 176 bar through a 15.2 m twin hose reel with quick disconnect fittings.

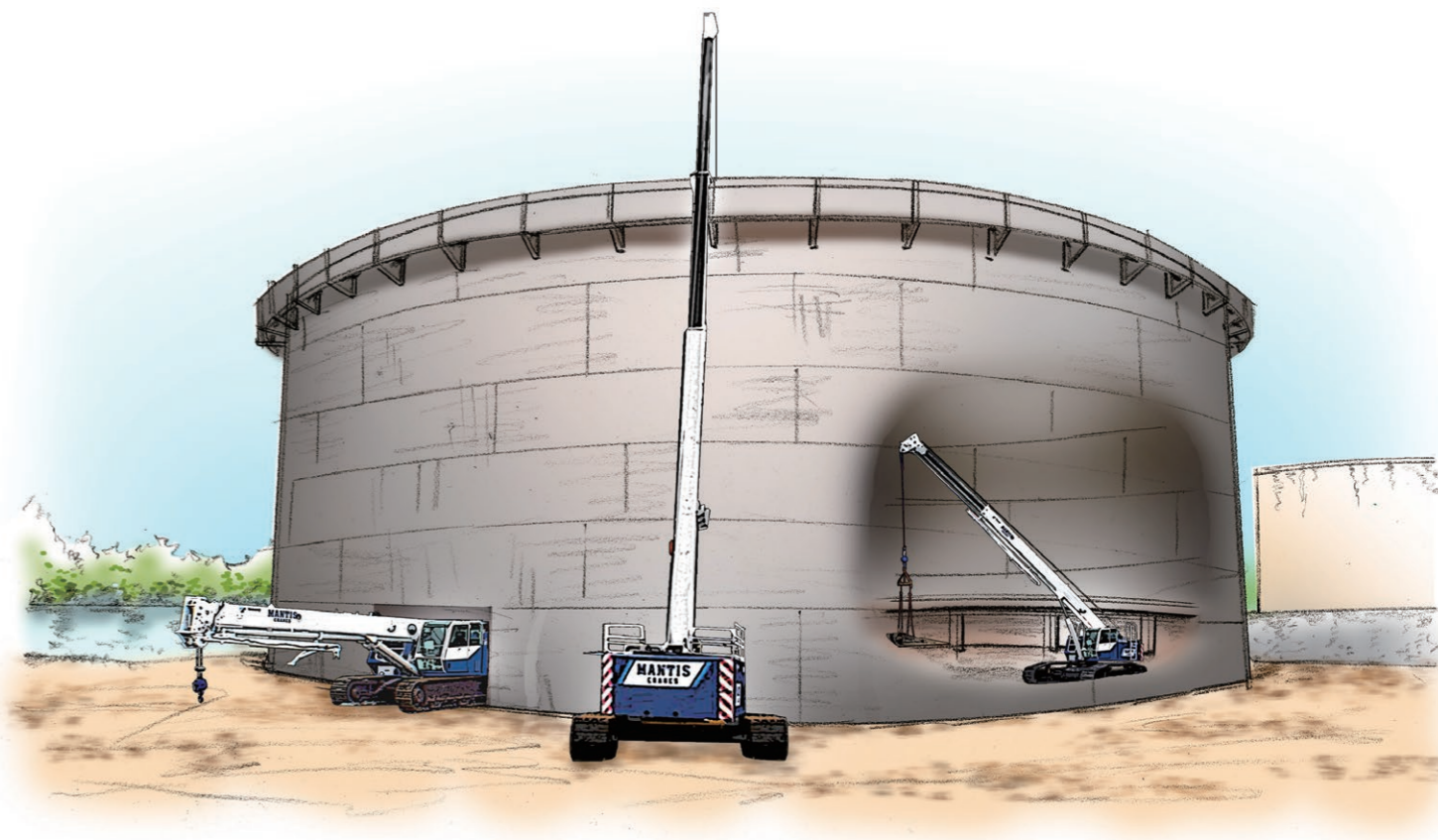
Different size track shoes Emergency engine stop button

WORK APPLICATION

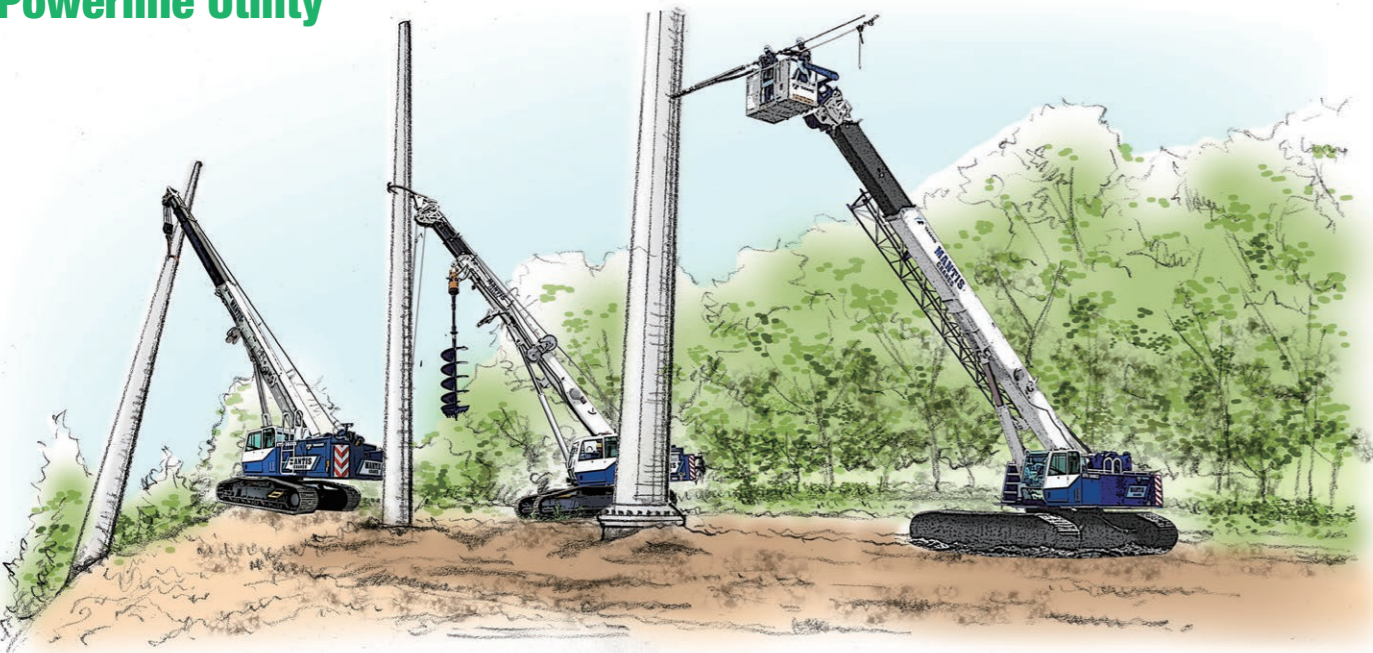
Powerline Transmission
& Construction



Storage Tank Building



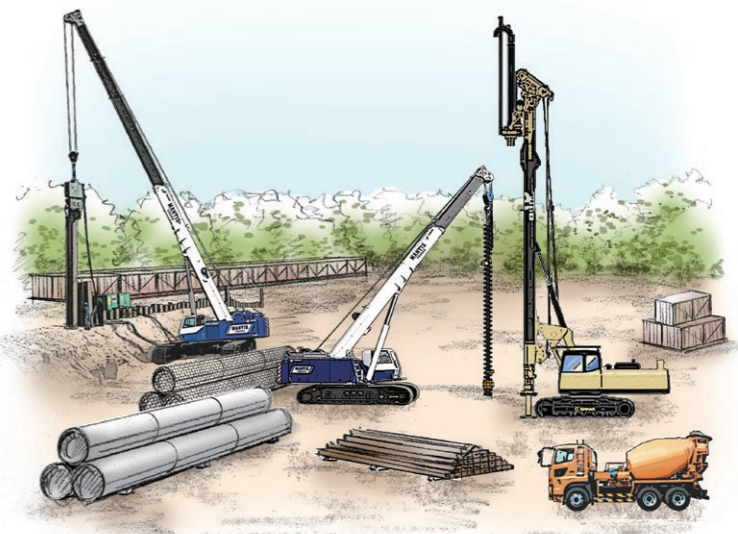
Powerline Utility



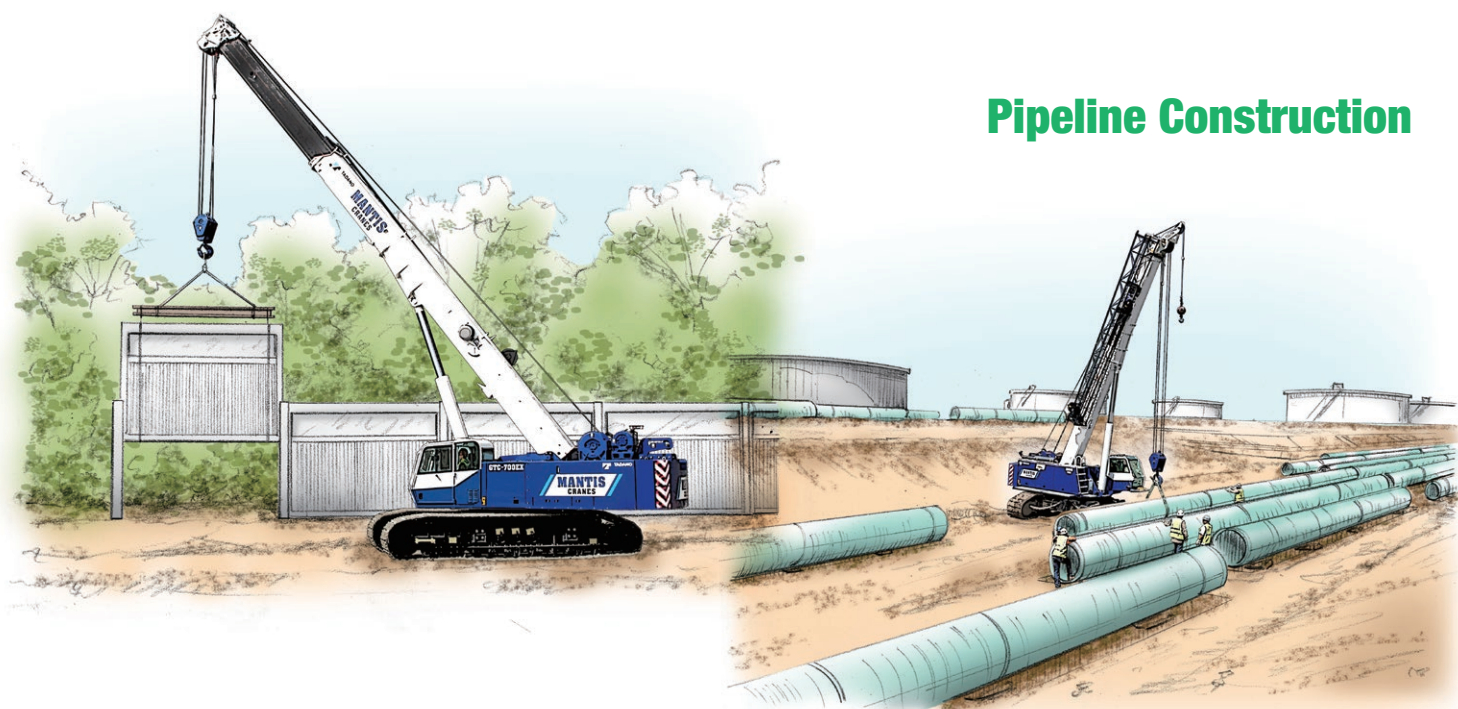
Mining



Foundation
& Foundation Support



General Construction



Pipeline Construction

Wind Energy



Tunnel

Barge

