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THE BADEN DAVIS CRANE CONNECTION PTY LTD 43 Holbeche Rd Arndell Park NSW 2148 craneconnection.com.au



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# TELESCOPIC CRAWLER CRANE

# XGTC100











Connection

# 100 t LIFTING CAPACITY

13.3 - 52 m FIVE-SECTION BOOM

17.5 m JIB

**CUMMINS QSL9 EU STAGE III DIESEL ENGINE** 

REAR VIEW, RIGHT SIDE AND HOIST CAMERAS

**HIGH VISIBILITY CAB WITH 15° TILT** 



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Main Boom



Counterweight



Jib Offset Angle



360° Lifting Zone



Lifting Radius



Carbody CWT



Jib Length



Full Extended Tracks



Boom Length



Slope Angle



Retracted Tracks

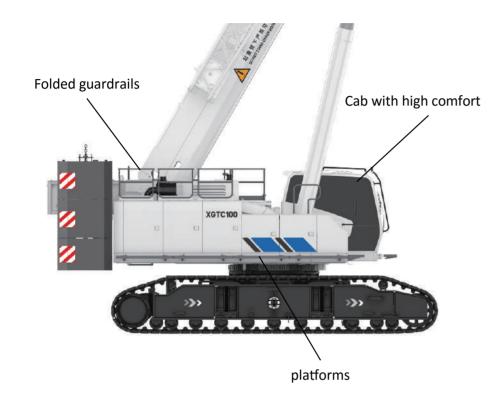


Jib



Weight Units





#### Strong lifting capacity

Five U-shaped boom sections.

The rated lifting capacity of 20.5m boom at radius 7m is 46t.

Arbitrary telescoping of main boom, with higher boom length switching efficiency.

#### ► Rapid working speed and strong maneuverability

Retractable crawler tracks meet the requirements on machine size when passing the narrow space (minimum width 3.5m).

Working conditions of travel without load, static lifting, travel with load and etc.

Two slewing reducers make the start and stop of slewing operations more stable.

#### **▶** Self-assembly function

Track frames and counterweight can be assembly and dis-assembly without the use of auxiliary crane.

Full remote.



Base counterweight 11t

#### Comfortable operation and convenient maintenance

The cab can be tilted upward 15°.

 $Foot \ pedal \ is \ used \ to \ control \ boom \ extension \ and \ retraction, \ more \ comfortable.$ 

10.4- inch touch screen.

Air conditioning device is equipped to provide comfortable and intelligent operation experience.

#### All-round safety design, safe and reliable operation

The control system is equipped with virtual wall, crawler track gauge detection and remote management functions.

Wireless zoom camera on boom top and reversing radar are installed, to monitor the crane. The crane shed is equipped with folding guardrail, safe and reliable, convenient site transfer and transport.

Sealing plate is installed at the bottom of turntable so that the pipe line will not be damaged easily.

#### Suitable for long-time and high power work

The capacity of fuel tank is 500L. which can effectively guarantee continuous lifting operation.



### **TECHNICAL DESCRIPTIONS**

#### **BASIC MACHINE**

Capacity 100t at 2.5m

#### Boom

Five section boom with single-cylinder pinned

telescoping system.
Retracted Length: 13.3m
Extended Length: 52.0m
Extension Time: 150 seconds
Elevating Angles: -1.5° to 80°
Elevating Time: 65 seconds

Boom Top: Five, 440 mm diameter cast nylon sheaves on heavy-duty roller bearings, and

two lead-in sheaves.

#### XCMG LTI Load Moment Indicator

Control function shutdown with audible and visual warnings.

Full color touch screen provides 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.

Configurable working range limits with automatic soft stop.

External 3-color LED light stack indicates safe working conditions.

#### SUPERSTRUCTURE

High-strength steel structure precision machined to accept boom and swing components. Centralized plumbing of lubrication points for slew bearing and boom pivot pin.

#### Counterweight

Self-erecting counterweight system with configuration sensing and remote control. Integrated access steps and mounting for handrails. Load charts available for various counterweight configurations.

Four upper counterweight configurations:

26,000 kg

18,500 kg

11,000 kg

0 kg

Carbody countweights:

2×45000kg

#### Fuel system

500L capacity diesel tank, with engine mounted filter and inline fuel/water separator.

#### Operator's Cab

Fully-enclosed, all-steel modular cab with lockable sliding door, acoustical lining, anti-slip floor, and tinted safety glass. Grab bars and steps are provided for easy access to the cab.

15° tilt

Air conditioned with defroster, heater, and circulating fan.

Four-way adjustable seat with headrest and seat belt Electronic foot pedals control travel.

Two electrical foot pedal, one controls the boom telescope, another for track travel.

Four-way adjustable armrest-mounted electronic joysticks control swing, main winch, auxiliary winch, boom hoist, and boom telescope.

Selectable modes for Fine Control and Travel

Seat termination switch immediately disables all joysticks and control pedals as the operator rises from the seat. Can also be disabled by switch on console.

Camera views: Four cameras for view of winches, and rear, right and left sides of upper Remote control work lights mounted at front side, front right side.

Two-speed windshield wipers for front and top glass.

Dome light

Dry-chemical fire extinguisher

#### Electrical system

**24 VDC** 

Equipped with arbitrary extension and retraction of boom, virtual wall, track gauge detection and remote management functions.

The crane is intelligent and has high safety in limit working conditions.

CAN-bus transmission and port status inquiry in display interface (monitor all BUS sensors) make troubleshooting more easily. Shrapnel terminal and overload improves the maintenance convenience.

Monitoring systems on winch, turntable and boom head are used to improve the operation comfort and safety.

#### **▶** Engine

CUMMINS QSL9 - 6 cylinder, 4 cycle, turbocharged and inter cooled

Maximum power: 242 kW at 2,100 rpm Maximum torque: 1,526 N•m at 1,400 rpm Emission Certifications: EU Stage III



#### ▶ Hydraulic system

Hydraulic Pumps: one high pressure, variable piston pumps with positive displacement and power limiting controls for crane functions; one gear pumps for pilot ,cooling and swing. Total Pump output: 615 l/min@ 2000 RPM engine speed. 320 bar maximum pressure. Directional Valves: Multiple pressure and flow compensated valves with hydraulically controlled integrated relief valves.

Reservoir: 1500 liter capacity with filler breather, sight gauge, cleanout, and sump drain. Filtration: one 20-micron, full flow return filters with electrical clogging indicator. 10-micron inline pilot oil pressure filter.

#### Winches

Planetary geared two-speed winch with grooved drum, hydraulic motor, multi-disc internal brake and counterbalance valve. Includes drum rotation and last layer indicators. (Complete winch performance specs on page 7).

Main Winch

Rope Diameter and Length: 20 mm × 295 m

**Auxiliary Winch** 

Rope Diameter and Length: 20 mm × 165 m

#### Swing

An axial piston swing motor with planetary gear reducer drives the pinion and the internal gear shear-ball slew bearing allowing smooth rotation even at low speeds.

Swing Speed: 0 - 1.5 rpm

Modes: Free swing with counter swing, or controlled swing with hydraulic braking Swing Parking Brake: Spring applied failsafe brake with hydraulic release that is controlled from the operators cab

Swing Service Brake: Hydraulically applied, controlled through electronic joystick. House Lock Systems: 360° house lock actuated from the operator's cab.

#### Carbody Counterweights

Two carbody counterweights with integrated lift points.  $2\times45000$ kg

#### CRAWLER CARRIER

Carrier comprising a center carbody, 4 extension beams, 2 crawlers, and integrated assembly jacks. Tool-free connection between crawlers and extension beams.

#### Carbody

Torsion resistant welded structure constructed of high strength steel. Hydraulic lines with quick connection to crawler drives.

Track Extension and retration

Cylinder is used to extend and retract the crawler tracks for site transfer and passing the narrow space.

#### **▶** Crawlers

Two crawler frames are paired with a track group. Self-assembly with 4 track frame lifting points.

Track Rollers: Fifteen bottom rollers and replaceable top wear pads on each track frame. Idler: Oil filled, self-lubricating with nitrogen type tensioner.

Track Shoes: 850 mm.

#### Crawler drive

The tracks are powered by a planetary gear reducer and oblique axis piston motor controlled. Each crawler speed is infinitely variable, both independently and in

opposite direction. Multi-sheet wet constant closed brake, spring brake, hydraulic release brake, to ensure a high braking safety during travel.

1.7 km/h

Gradeability (unladen): 45%

#### Assembly Jacks

Jacks mounted to carbody structure with radio remote control, easily assembly/ disassembly for transport. Includes 4 octagonal outrigger pads.

#### **▶** OPTIONAL EQUIPMENT

Hook Blocks

100t hook block - seven steel sheaves with swivel hook & safety latch

#### ▶ Other

Cold Weather Packages: Cold weather options are available for operation to -40°C (Consult factory for application support)

Automatic central lubrication system

Aircraft Warning Beacon

Cab Mounted Rotating Beacon

Additional handrails for top of engine side covers

Boom Removal System

Full function Cable remote control package

Equipped with boom top wireless zoom camera, reversing radar

Electronically controlled rotary locking pin

Air suspension seat

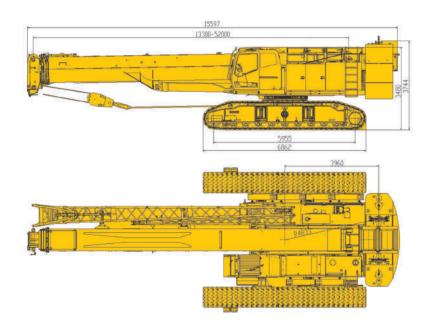
Spherical electric control handle

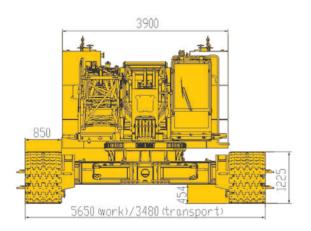
Wireless remote control

#### ▶ Special reminder

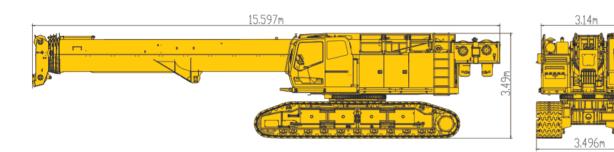
This sample only represents the current configuration, such as later changes will not be special notice, the final interpretation belongs to the factory.

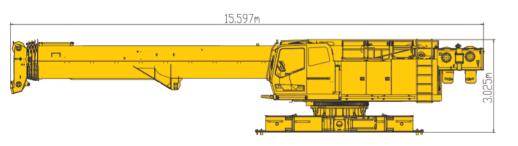
		MAIN WIN	CH PERFORMANC	F		
	Wire Rope: 20 m	m diameter rotation resis			rope strength.	
Rope Layer	Max Line Pull (kN)	High Line Speed (m/min)	Pitch Dia (mm)	Layer (m)	Total (m)	
1	115.6	102.8	450	53.7	53.7	
2	106.1	111.9	490	58.5	112.2	
3	98.1	121.0	530	63.2	175.4	
4	91.2	130.2	570	68.0	243.4	
5	85.3	139.3	610	72.8	316.2	
		AUXILIARY W	INCH PERFORMA	NCE		
Wire Rope: 20 mm diameter rotation resistant. Line pulls are not based on wire rope strength.						
Rope Layer	Max Line Pull (kN)	High Line Speed (m/min)	Pitch Dia (mm)	Layer (m)	Total (m)	
1	115.6	103	450	53.7	53.7	
2	106.1	112	490	58.5	112.2	
3	98.1	121	530	63.2	175.4	
4	91.2	130	570	68.0	243.4	
MACHI	NE WEIGHTS				t	
<b>Standard</b> integrated		thout dismantling any par	ts		99.9	
		winches with wire rope, a removed)	auxiliary nose sheave		64.2	
with 5 section, 52m boom, 2 winches with wire rope, auxiliary nose sheave 42.7 (counterweights , hook block and crawlers removed)				42.7		
MACHI	NE WEIGHTS				kg	
80t hook	block - six sheave				700	
7t Overha	ul Ball				150	

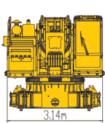


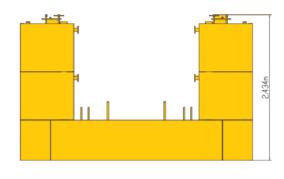


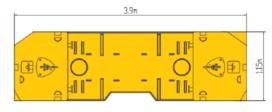
Parameters			Unit	Data	
	Max. rated	Boom	t	100	
	lifting capacity	Jib	t	6.5	
Lifting	Max. lifting moment		t.m	360(60t@6m)	
capacity	Boom/Jib length	Boom	m	13.3~52 (five sections)	
		Jib	m	10.5/17.5 (two sections)	
		Longest combination	m	69.5 (52+17.5)	
Weight	Overall crane weight		t	99.9	
	Ground pressure		Мра	0.102	
	Max. dimension of single unit in transport state (with crawler tracks)		m	15.59×3.496×3.48	
	Outline dimension of the crane		m	15.59×5.65×3.74	
Dimension	Min. slewing radius		m	4.83	
	Crawler chassis width (wide track gauge/narrow track gauge)		m	5.65/3.496	
	Crawler shoe width		m	0.85	
Wire rope	Diameter/ single line pull		mm/t	Ф20/8.5 (aux. winch 6.5)	
	Lifting	Main winch	m/min	130	
	speed	Aux. winch	m/min	0.85 Φ20/8.5 (aux. winch 6.5)	
Speed	Slewing speed		r/min	1.6	
	Travel speed		km/h	1.7	
	Gradeability		%	45	
	Engine brand		/	CUMMINS	
Power	Power/rated speed		kW/rpm	252/1800	
system	Fuel tank capacity		L	500	
	Emission standard		/	EU Stage III	



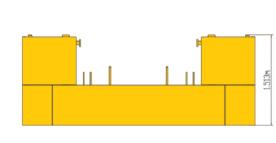


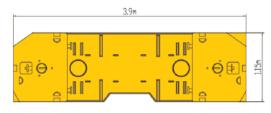




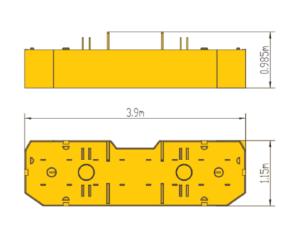




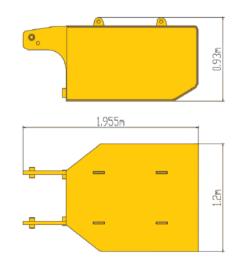




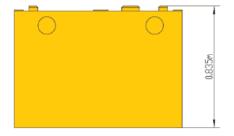
18.5t COUNTERWEIGHT CONFIGURATION

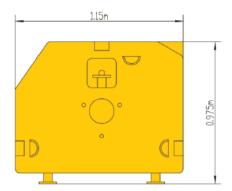


BEASE ASSEMBLY COUNTERWEIGHT (11t)

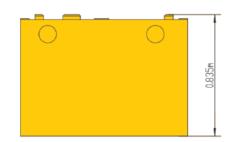


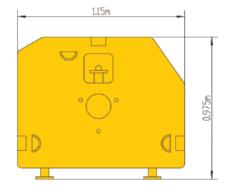
**CARBODY COUNTERWEIGHT** (4.5t)



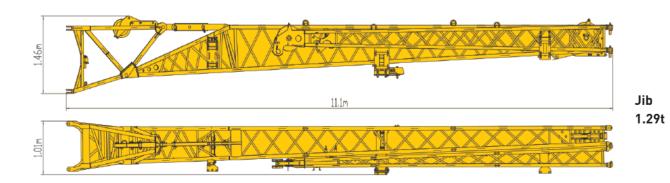


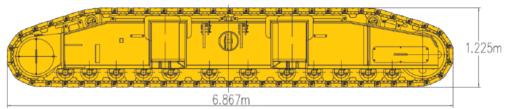
MID LEFT COUNTERWEIGHT (3.75t)

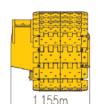




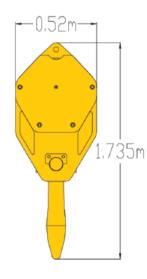
MID RIGHT COUNTERWEIGHT (3.75t)



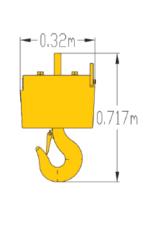




Crawler track 10.7t each

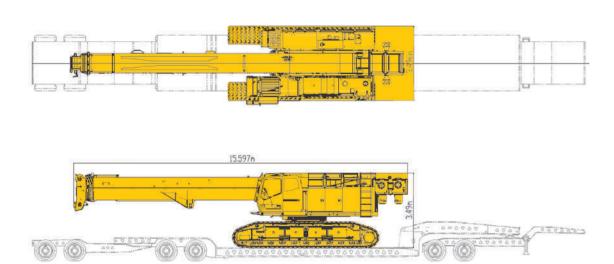


80t HOOK BLOCK (700kg)



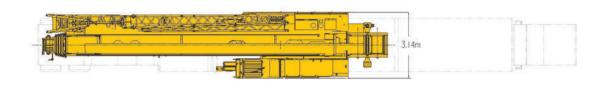
7t HOOK BLOCK (150kg)

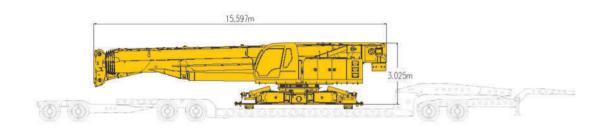
# Transport plan A



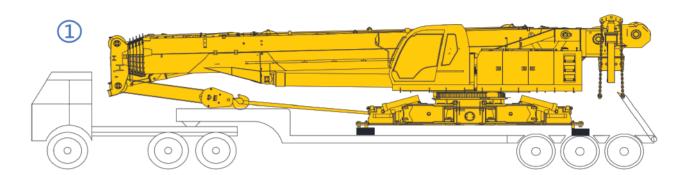
Transport Plan A							
ltem	Weight	Dims	suggested trailer loadout				
iteili	t	(L x W x H)	#1	#2			
Basic machine(with 5 section, 52m boom, 2 winches with wire rope, auxiliary nose sheave; counterweights , hook block removed)	64.2	15.597×3.14×3.025	٧				
Counterweight - Base assembly	11	3.9×1.15×0.985		٧			
Counterweight – Mid Left	2×3.75	1.15×0.975×0.835		٧			
Counterweight –Mid Right	2×3.75	1.15×0.975×0.835		٧			
Carbody counterweight	2×4.5	1.955×1.2×0.89		٧			
Hook Block – 80 t	0.7	1.735×0.6×0.52		٧			
Overhaul Ball - 7 t	0.15	0.717×0.32×0.32		٧			
Approx. Total Shipping Weight	t		64.2	26.9			

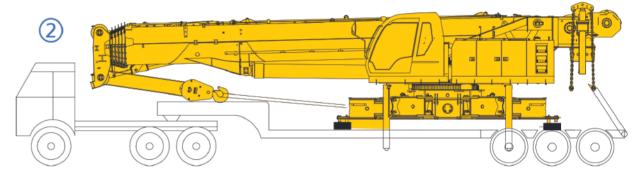
# Transport plan B

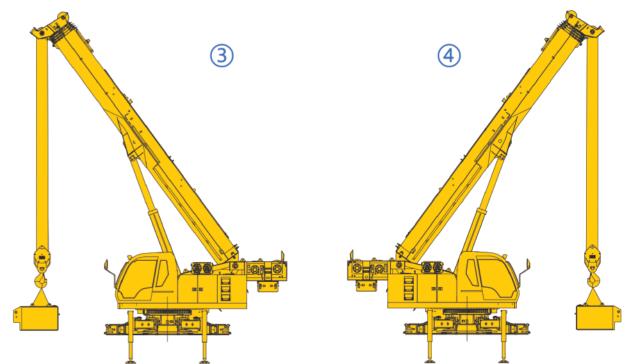




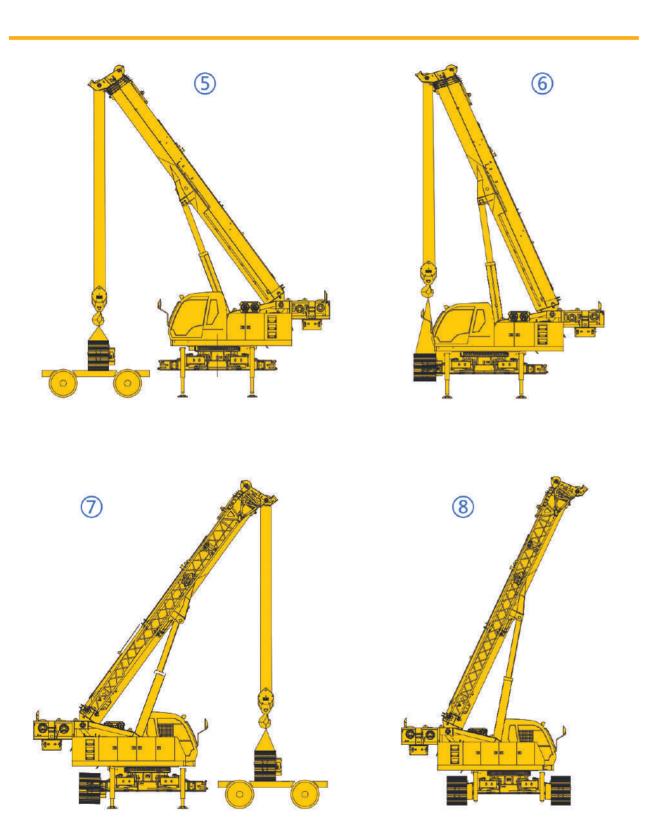
Transport Plan B							
ltem	Weight Dims		suggested trailer loadout				
iteiii	t	(L x W x H)	#1	#2	#3		
Basic machine(with 5 section, 52m boom, 2 winches with wire rope, auxiliary nose sheave; counterweights , hook block and crawlers removed)	42.7	15.597×3.14×3.025	٧				
Left Track	10.7	6.867×1.155×1.225			٧		
Right Track	10.7	6.867×1.155×1.225			٧		
Counterweight - Base assembly	11	3.9×1.15×0.985		٧			
Counterweight – Mid Left	2×3.75	1.15×0.975×0.835		٧			
Counterweight –Mid Right	2×3.75	1.15×0.975×0.835		٧			
Carbody counterweight	2×4.5	1.955×1.2×0.89			٧		
Hook Block – 80 t	0.7	1.735×0.6×0.52		٧			
Overhaul Ball - 7 t	0.15	0.717×0.32×0.32		٧			
Approx. Total Shipping Weight		t	42.7	26.9	30.4		

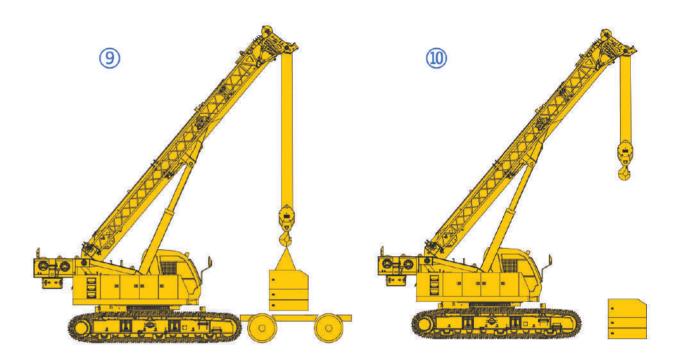


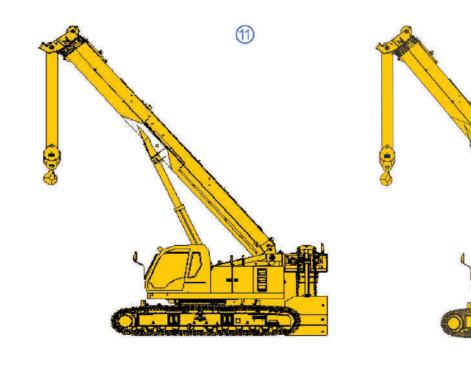


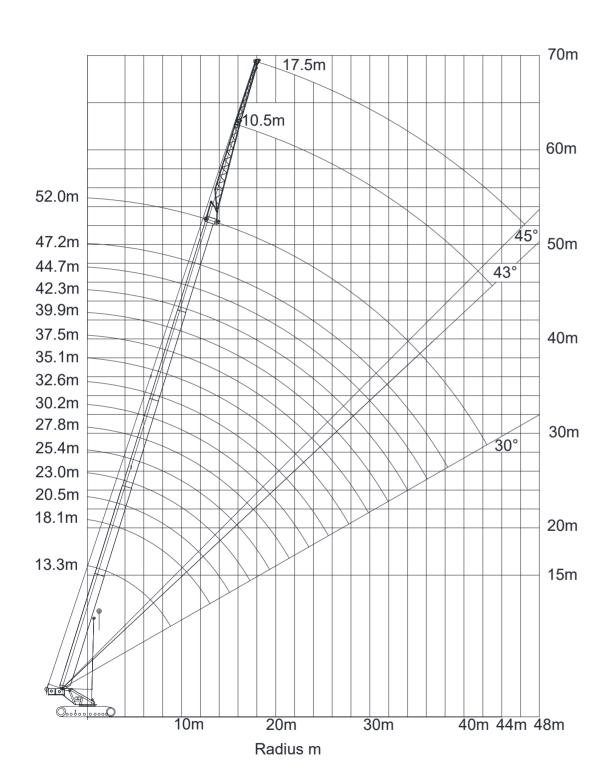


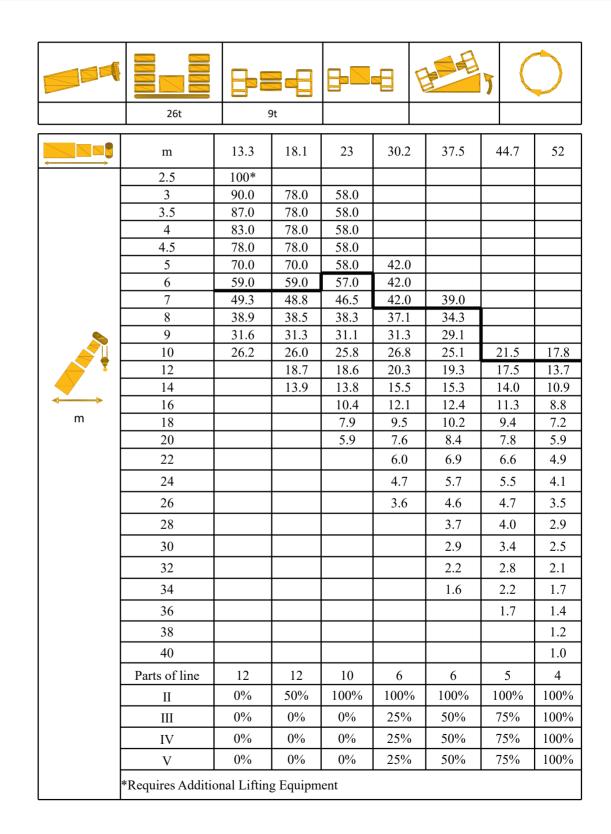
SELF-ASSEMBLY SYSTEM XGTC100 SELF-ASSEMBLY SYSTEM XGTC100











WORKING RANGE XGTC100 CONSTRUCTION CASES XGTC100

