Fullextensionofthemainarm

56m

Maximumweight

80t

Maximumliftingtorque

1935KN.m

bob-weight

13t

Trinityfullground crane

SAC800C7-8

Technical Specification

[Edition of February 29,2024]

QUALITY CHANGES THE WORLD

目录

Avantages of the whole machine

general situation

■ Three-axle all-terrain wid e-weight load -carrying chassis, Large cross-section 7-section main boom with full extension 56m, jib 16m, Maximum lifting height 72.5m, 13t counterweight fully loaded transition,525 large tires,Brand new two bed rooms,New look.

Lifting performance

■ Main jib : 7-section U-shaped main boom, full extension arm 56m

■ Jib : 16m jib, maximum lifting height up to 72.5m

■ It can meet the working cond itions of 70m height line tower hoisting operation, achieving 99% coverage of d omestic 500KV and 50% coverage of 1000KV.

Driving performance

■ Three-axle reinforced chassis structure, all wheel steering, Full bridge driver , Multiple steering and drive modes,Excellent driving adaptability.

■ Equipped with a pneumatic suspend ed main d river's seat and two fixed passenger seats that can be fold ed flat to become a sleeper, automatic heating and cooling air cond itioning

■ SANY ind epend ently d esigns a high-strength, high-bearing all-terrain oil and gas suspension, which can achieve suspension lifting of ±100mm and has one-button leveling.

function to improve d riving passability and d riving comfort.

Efficient and stable operation

■ Using a newly d eveloped d ual-pump intelligent flow system, the combined movements of the luffing winch d o not interfere with each other, and the controllability of the combined movements is improved by more than 50%.

■ The highly integrated electronically controlled main valve has flow compensation and load feed back control functions, easily achieving stable control of single actions and combined actions.

■ The rotary system is equipped with an integrated rotary buffer valve, which has a free-slip function, smooth rotation start and control, and excellent micro-movement.

Safe and reliable

■ Multifunctional wireless remote control system makes crane operation more convenient and safer.

■ Adopting a high-precision, high-stability, and highly intelligent torque limiter system to fully protect lifting operations

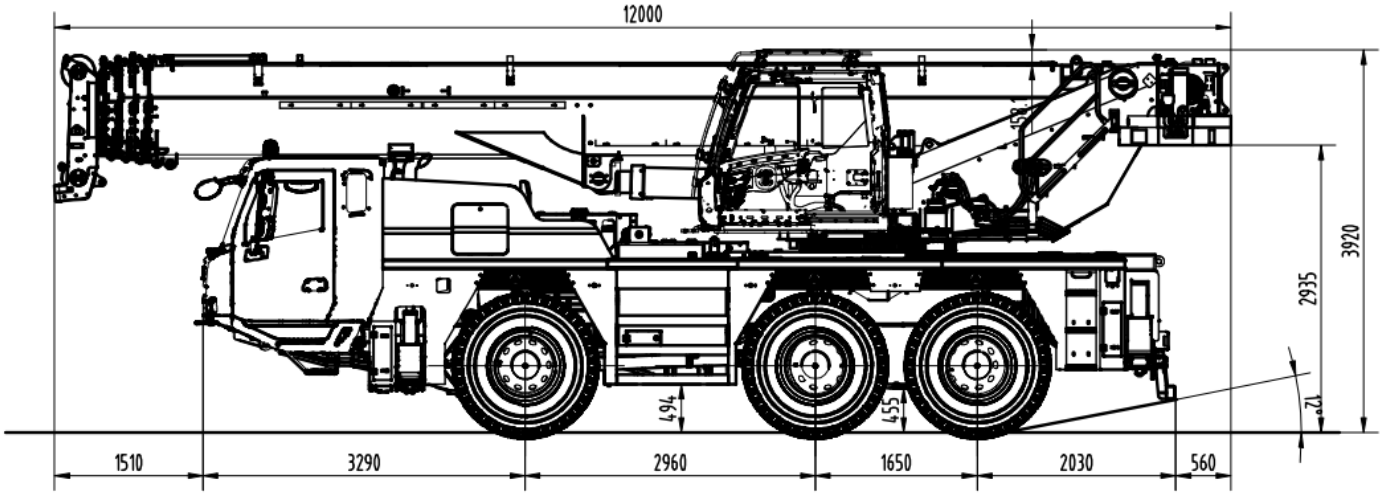
■ Equipped with rich sensor d evices, timely feed back of d ata information, real-time monitoring, and grasp the working status of the vehicle at any time

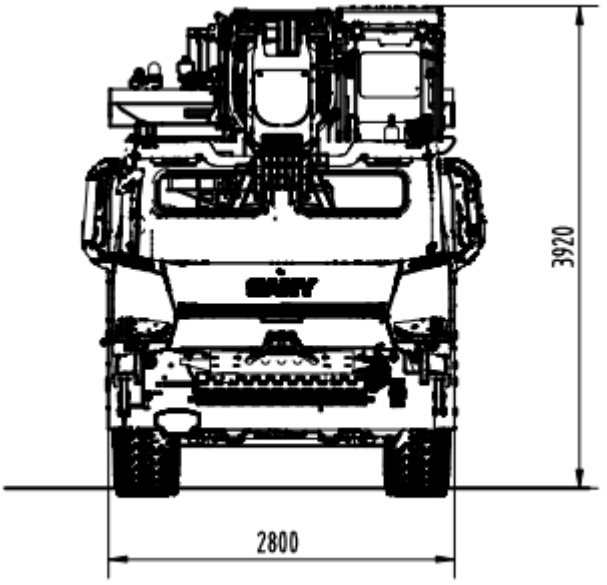
■ The hyd raulic system is equipped with hyd raulic balance valves, relief valves, two-way hyd raulic locks and other components to ensure a stable and reliable hyd raulic system.

Product size

Overall length of the machine	Full wid th of the machine	Overall height of the machine
12000mm	**2800mm**	**3920mm**

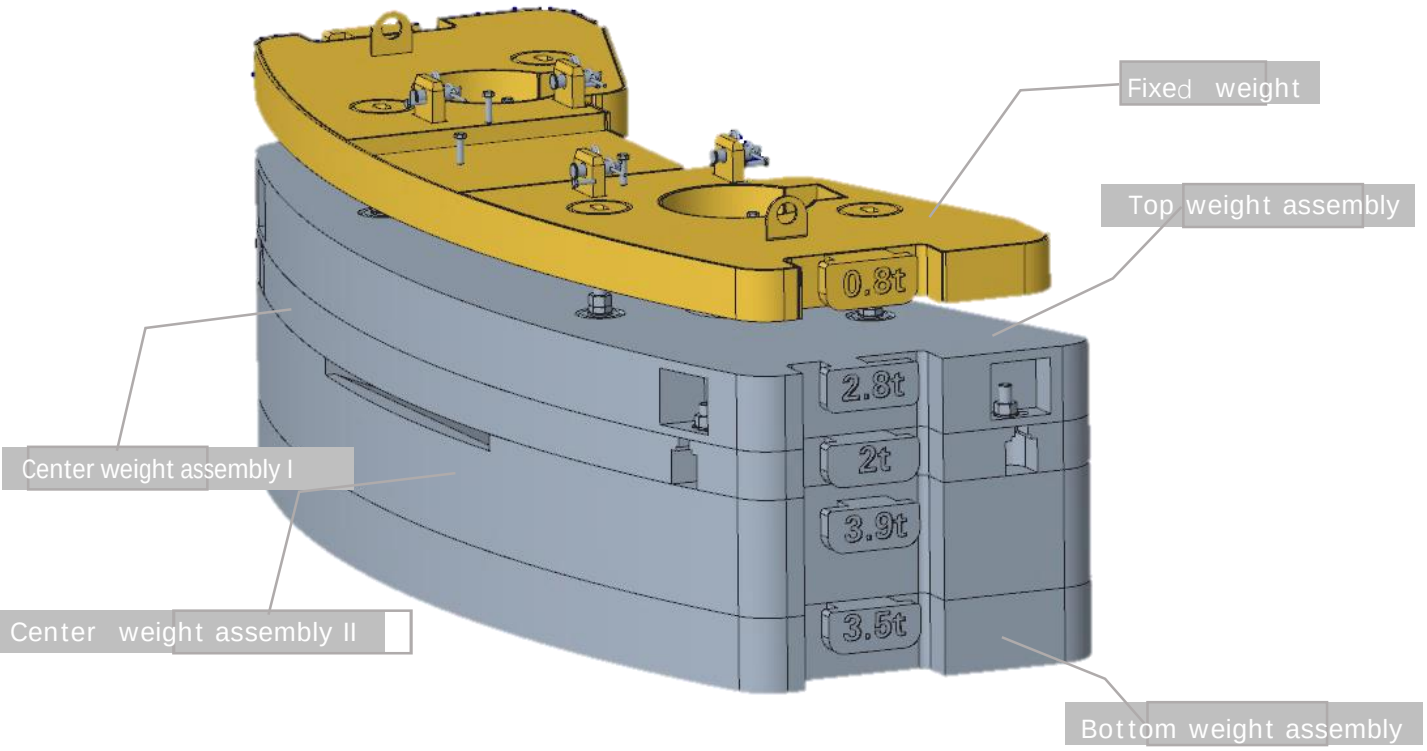
First and second wheelbase: 2960 Second and third wheelbase: 1650

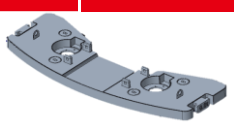
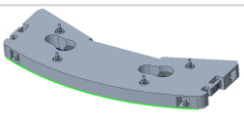
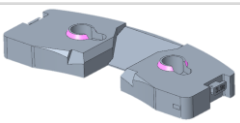
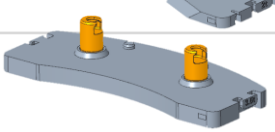




Main technical parameters

project		unit	parameter
Main performance parameters			
Maximum rated lifting capacity		t	80
Minimum rated amplitude		mm	2.5
Turntable tail turning radius		m	3.6
Maximum number of boom sections		-	7
arm shape		-	U-shaped arm
Maximum lifting moment	basic arm	kN.m	1935
	Fully extend ed main arm	kN.m	986
	The longest main arm + the longest jib	kN.m	588
Arm length	basic arm	m	10.94
	Fully extend ed main arm	m	56
	The longest main arm + the longest jib	m	72
Outrigger span (vertical*horizontal)		mm	7.45*6.4
Working speed parameters			
Maximum lifting speed of main winch (no load)		m/min	130
Maximum lifting speed of auxiliary winch (no load)		m/min	130
Main arm full extension time		s	400
Boom full lift/lower time		s	60/60
Rotation speed		rpm	1.5
Power parameters			
	Engine model	-	Weichai WP10H375E62 (National VI)
	Maximum output power	kW/rpm	276/1900
	Maximum output torque	N.m/rpm	1785/1000
Driving parameters			
Maximum driving speed		km/h	75
Minimum turning radius		m	6.5
Minimum ground clearance		mm	455
Approach angle		°	18
Departure angle		°	14
Fuel consumption per 100 kilometers		L	60
Wheel mode		-	6*6*6
Weight parameters			
Machine weight (without jib, arm tip pulley)		kg	35990
Load	First axle load	kg	12000
	Second axle load	kg	12000
	Third axle load	kg	11990
air cinditioner			
Car air conditioning		-	Heating, cooling
Get off air conditioning		-	Cooling, heating

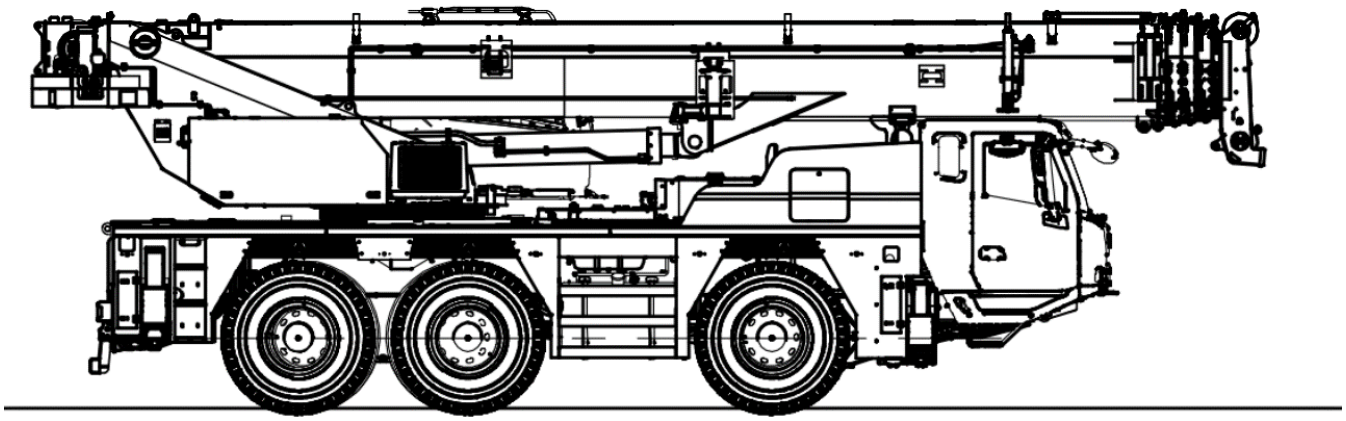


Category	Material Name	Shape	Length x Width x Height (mm)	Quantity (kg)	
Counterweight	Fixed counterweight		220×1821×2793	800	1
	Top counterweight assembly		432×1262×2796	2800	1
	Middle counterweight assembly I		342×1165×2770	2000	1
	Middle counterweight assembly II		275×1534×3511	3900	1
	Bottom counterweight assembly		540×1141×2770	3500	1
Jib	Jib assembly		17692×1939×2685	1037	1

Transition weight status

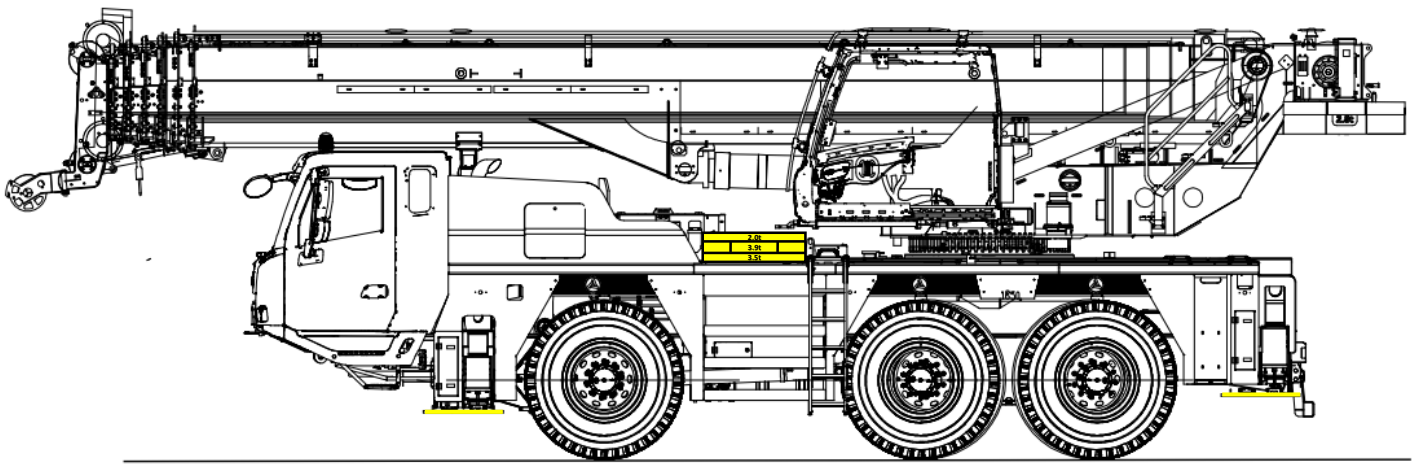
Announcement status:

»»Carrying 3.6T counter weight (0.8t fixed + 2.8t top counter weight), without jib, arm tip pulley, outrigger plate



Reload status:

»»Carrying 13T counter weight, jib, arm tip pulley, outrigger plate



Chassis

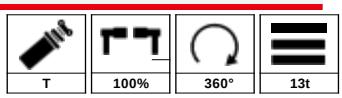
Cab	• Sany independently developed all-steel materials and rubber sealing structure, designed according to ergonomic principles, with outward-opening doors on both sides, excellent shock absorption and sealing. It is equipped with a pneumatically suspended main driver's seat and two fixed co-driver seats that can be laid flat to become a sleeper, equipped with a three-point seat belt, an adjustable multi-function steering wheel, a wide-view electric adjustable rearview mirror, an anti-fog fan, and automatic heating and cooling air conditioning. The button panel is fully functional, making the driving experience more comfortable, safe, and humane.
Frame	• The torsion-resistant box-type frame structure, which is welded by high-strength fine-grained high-strength steel plates designed and manufactured independently by Sany, has a stronger load-bearing capacity.
Axles	• All-wheel steering, light and flexible steering, superior maneuverability and mobility. • Domestic Hande high-performance axle;
Outriggers	• The outriggers are H-shaped with 4-point support, with a longitudinal and transverse span of 7.45m × 6.4m. They are made of fine-grained high-strength steel plates, with good structural strength, strong operational stability, automatic leveling and other functions, high control accuracy, and easy operation.
engine	• Type: in-line, direct injection, water-cooled, four-stroke, supercharged intercooled, electronically controlled high-pressure common rail! • Rated power: 276kW/1900rpm • Maximum torque: 1785N.m/_1000rpm • Environmental protection: Emissions meet the National VI standard • Fuel tank effective volume: 450L'
Gearbox	• Fast 12-speed automatic transmission, with a wide speed ratio range, intelligent adaptive gear shifting, and extreme climbing and escape capabilities, can meet both low-speed field climbing and high-speed highway driving • Drive shaft: The drive shaft is connected by face gear, which optimizes force transmission and transmits large torque. The optimized drive shaft layout ensures stable and reliable drive shaft transmission.
Braking system	Standard hydraulic retarder: air servo brakes for all wheels, dual-circuit braking system, engine with in-cylinder brake Service brakes: air servo brakes for all wheels, dual-circuit braking system, new disc brakes Parking brake: parking brake acts on all axles through springs in air chambers Auxiliary brake: engine in-cylinder brake, ensuring braking safety when going downhill, ensuring safe and reliable driving
Suspension	• Sany independently designed a high-strength, high-load-bearing all-terrain oil-gas suspension that can achieve suspension lifting and lowering of ±100mm and has a one-button leveling function to improve driving performance and ride comfort
	• The whole bridge adopts a hydraulic power steering system with rod feedback! • 6 steering modes achieve higher maneuverability and agility, improve driving comfort, and the minimum turning radius is only 6.5m; • steering mode: 1) Highway driving mode (default mode); 2) Full steering mode; 3) Crab mode; 4) No sway steering mode; 5) Independent rear axle steering mode; 6) Rear axle lock steering mode
Electrical System	• Bus instrument: The bus instrument with integrated intelligent control electrical system can control driving parameters at any time, making driving easy. It has engine fault prompt function, which is convenient and fast to repair and troubleshoot. • 2 x12V maintenance-free battery, equipped with mechanical power main switch, can manually cut off the power of the whole vehicle; remote control can be used to control the outrigger movement, making the operation more flexible and convenient; bus control system can realize the information interaction of getting on and off the vehicle
Drive/Steering	• 6*6*6
tire	• 6个525/80R25 tire

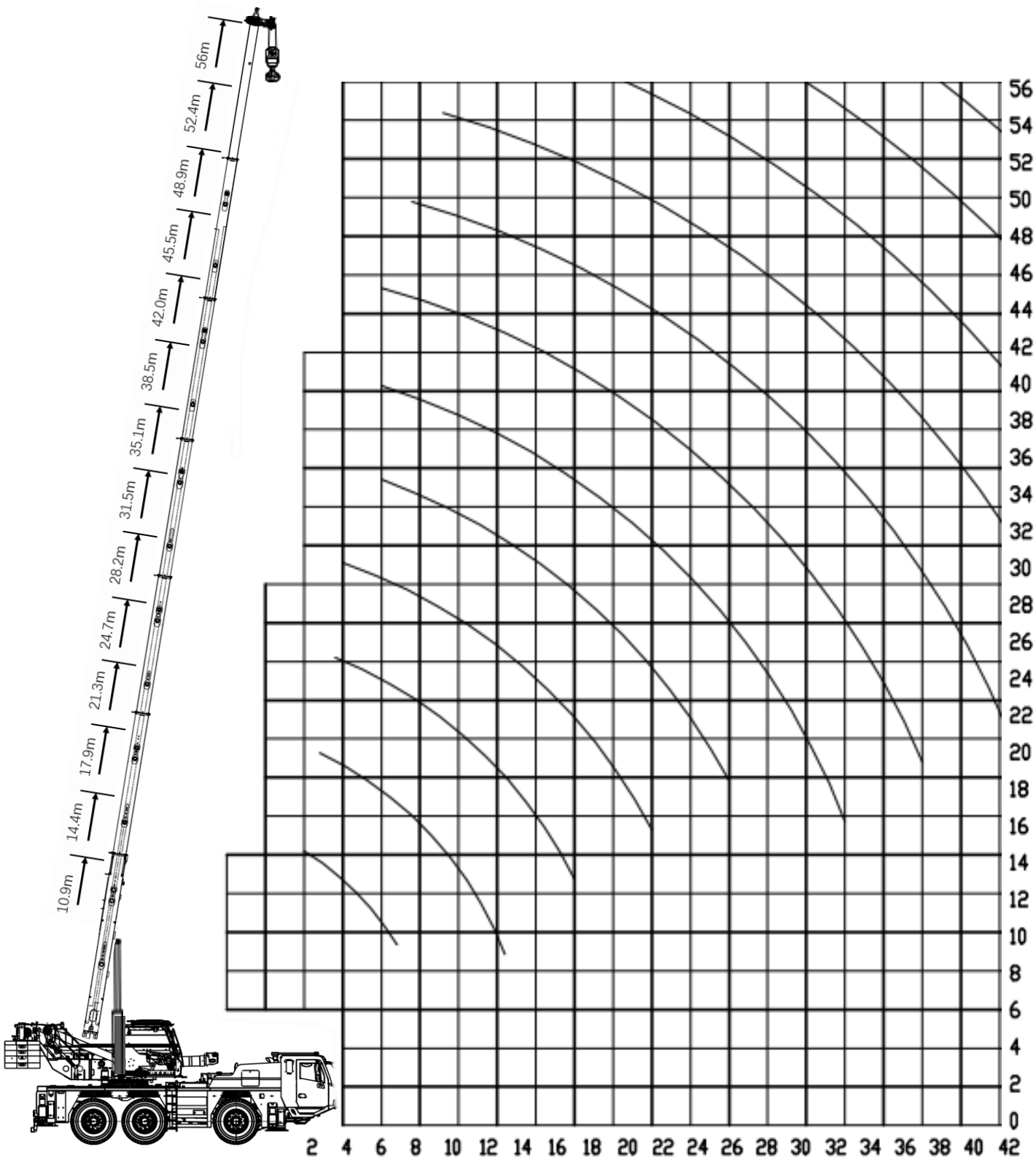
Boarding

Control room	• • Sany independently developed the 312 model with sliding doors and 0°-20° tiltable control room, which makes opening and closing easier and smoother. Equipped with sliding pedals, folding front pedals, openable front windows, and multi-channel three-dimensional air supply systems, the operating environment is more spacious and comfortable. It uses corrosion-resistant steel plates, safety glass, fully covered softened interior, panoramic sunroof, adjustable seats, and electric wipers, showing humanized design. • Equipped with air conditioning
Hydraulic system	• The newly developed dual-pump intelligent flow system is adopted, and the compound actions of the luffing winch do not interfere with each other, and the controllability of the compound actions is improved by more than 50%. • Adopt branded electric proportional load-sensitive double plunger pump to achieve high-precision real-time oil pump flow regulation, greatly reducing energy loss • Highly integrated electric control main valve with flow compensation and load feedback control functions, easily achieving stable control of single and combined actions • The winch adopts high-end brand quantitative motor, and the maximum speed of the main and auxiliary winches is 130m/min • The slewing system has an integrated slewing buffer valve with free sliding function, smooth slewing start and control, and excellent micro-motion
Boom system	• Seven-section boom, made of high-strength welded structural steel, oval cross-section, full-extended boom length 56m, jib 16m, main boom maximum lifting height 56m, maximum lifting height with jib 72.5m • Highly reliable single-cylinder bolt telescopic technology, triple mechanical, electrical and hydraulic protection, integrated automatic telescopic and telescopic buffer technology, easy to operate
Lifting system	• Pump and motor dual variable speed regulation, high efficiency and energy saving • Normally closed winch brake, winch balance valve and unique anti-slip hook technology are perfectly combined to ensure stable lifting and lowering of heavy objects • Standard 6.3t and 16t hooks. The wire rope is 35W × K7 type, 220m long and 15mm in diameter
Luffing system	• Uses deadweight lowering system to reduce energy consumption and improve the stability of lowering operation • Active pitch dynamic compensation, variable angle: -2° ~ 82°
Rotary system	• New electronically controlled rotary system, 360° rotation, maximum speed 1.5 r/min, electronically controlled proportional speed control, stable and reliable operation, automatic load compensation, smooth start and stop without impact
Control System	• All-round safety protection system, main and auxiliary winches are equipped with three-circle protectors and height limiters to prevent over-release and over-winding of wire ropes, anti-rollover protection, and extreme angle protection • Torque limiter: A highly intelligent torque limiter system is used to provide all-round protection for lifting operations, ensuring accurate, stable and comfortable operation • The basic interface on the vehicle displays arm length, elevation angle, working range, ratio, counterweight combination, engine speed, hook selection, etc., which is rich and easy to understand. It also adds multiple functions such as I/O interface and maintenance interface, which can quickly reflect the working status of the vehicle system
Turntable structure	• Sany's independent design, more optimized structure. Made of fine-grained high-strength steel
Safety devices	• Using analytical mechanics methods, a torque limiter calculation system based on the lifting mechanics model was established. Through online no-load calibration, the rated lifting accuracy reached ±3%, providing all-round protection for lifting operations; when overloaded, the system automatically alarms to provide safety for operation • The hydraulic system is equipped with hydraulic balance valves, overflow valves, two-way hydraulic locks and other components to achieve a stable and reliable hydraulic system • The main and auxiliary winches are equipped with three-circle protectors to prevent over-release of the wire rope • The main and auxiliary arm ends are equipped with height limiters to prevent over-winding of the wire rope • Length angle sensors and pressure sensors are configured to display the crane operation status in real time, automatically cut off dangerous actions, and buzz alarm • An anemometer is configured to monitor wind speed in real time to ensure lifting safety
Counterweight	• Combined variable counterweight. Multiple combinations. Total counterweight 13t, fixed counterweight 0.8t, equipped with four movable adjustable counterweights 2t, 2.8t, 3.5t, 3.9t

Lifting height curve

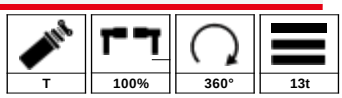
T Main Boom





Lifting performance table - T main boom

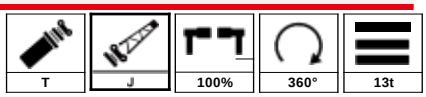
Unit: t

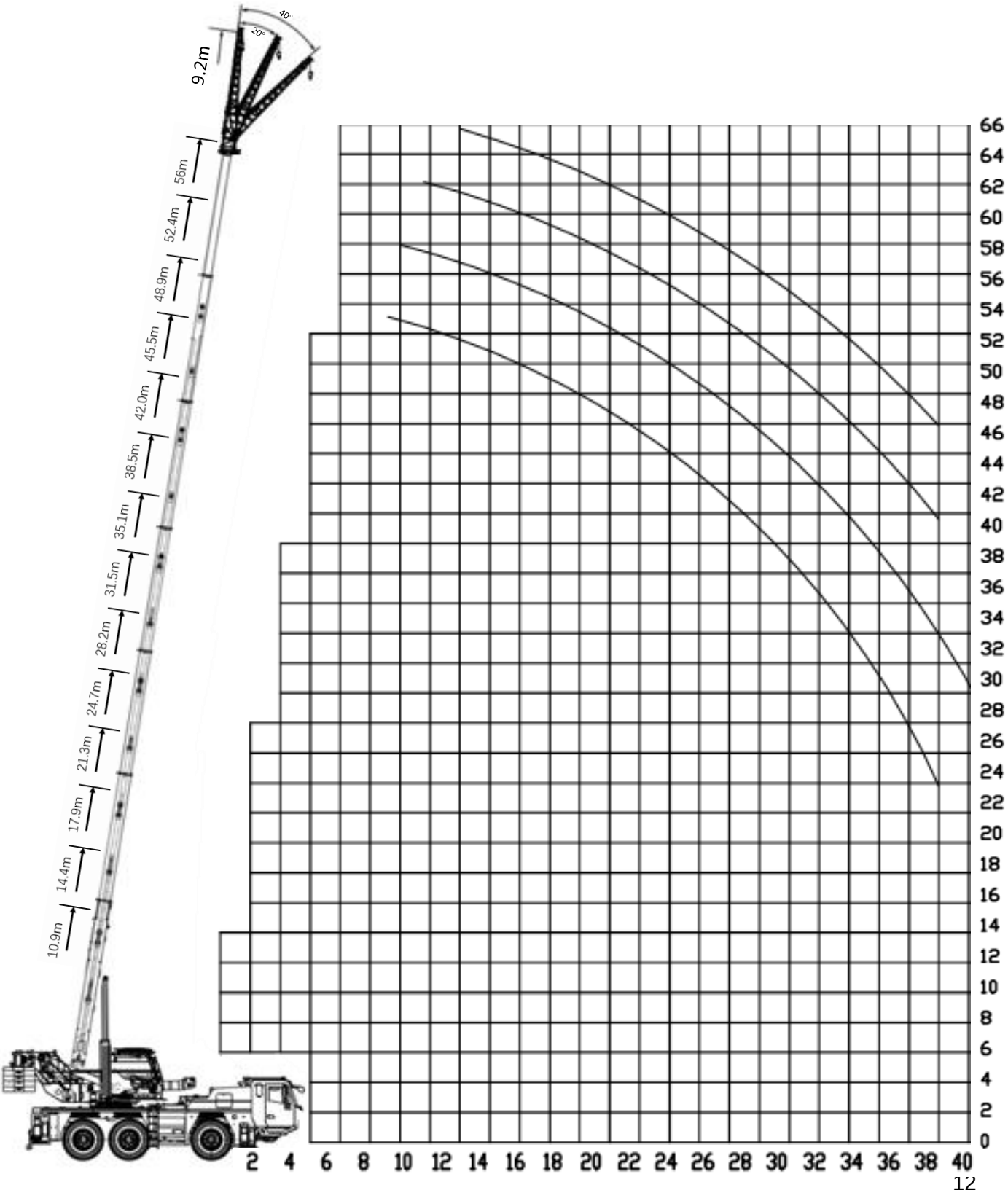


	10.9	10.9	14.4	17.9	21.3	24.7	28.2	31.5	35.1	38.5	42.0	45.5	48.9	52.4	56.0
2.5	80.0*	52.8													
3.0	60.0*	52.8													
3.5	50.0	50.0	40.7												
4.0	46.0	46.0	37.8	42.4											
4.5	44.5	44.5	35.2	39.5	38.7										
5.0	36.8	36.8	32.9	37.1	36.3										
6.0	26.5	26.5	25.6	28.0	26.1	27.7	28.3	27.3							
7.0	20.3	20.3	20.9	21.7	20.9	22.3	22.0	21.5	19.2						
8.0	16.2	16.2	16.8	17.7	17.9	18.1	17.8	17.3	17.0	16.8	11.6				
9.0			14.4	14.7	14.9	15.0	14.8	15.2	14.7	13.8	13.0				
10.0			12.2	12.5	12.9	12.8	13.1	12.9	12.9	12.2	11.7	10.9			
12.0				9.3	9.7	9.9	10.0	9.8	9.9	9.9	9.7	9.2	8.4	7.1	5.9
14.0				7.2	7.6	7.7	7.9	8.0	8.1	7.9	7.8	7.5	7.3	7.1	5.6
16.0					6.1	6.3	6.3	6.6	6.5	6.5	6.2	6.1	5.8	5.6	5.6
18.0					5.0	5.2	5.2	5.4	5.4	5.3	5.1	5.0	4.8	4.5	4.5
20.0						4.3	4.3	4.5	4.5	4.4	4.3	4.1	3.9	3.7	3.7
22.0						3.3	3.6	3.8	3.8	3.7	3.5	3.4	3.2	3.0	3.0
24.0							3.1	3.2	3.2	3.1	2.9	2.8	2.6	2.4	2.4
26.0								2.8	2.8	2.6	2.5	2.4	2.1	1.9	1.9
28.0								2.4	2.4	2.2	2.1	1.9	1.7	1.5	1.5
30.0									2.0	1.9	1.7	1.5	1.3	1.2	1.2
32.0									1.6	1.6	1.4	1.2	1.1	0.9	0.9
34.0										1.3	1.2	1.0	0.8		
36.0											0.9	0.8			
38.0											0.7				
40.0															
倍率	14	12	10	9	8	7	6	5	4	4	3	3	2	2	2
2#	0	0	46	46	46	46	46	46	92	92	92	92	92	92	100
3#	0	0	0	46	46	46	46	46	46	92	92	92	92	92	100
4#	0	0	0	0	46	46	46	46	46	46	92	92	92	92	100
5#	0	0	0	0	0	46	46	46	46	46	46	92	92	92	100
6#	0	0	0	0	0	0	46	46	46	46	46	46	92	92	100
7#	0	0	0	0	0	0	0	46	46	46	46	46	46	92	100
风速	9.0	14.3	14.3	14.3	14.3	14.3	12.8	12.8	11.1	11.1	9.9	9.9	9.0	8.6	7.0

Lifting height curve

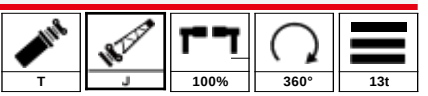
TJ9.2m Jib





Lifting performance table - TJ 9.2m jib

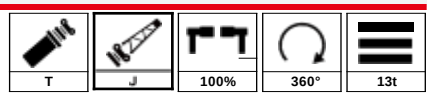
Unit: t

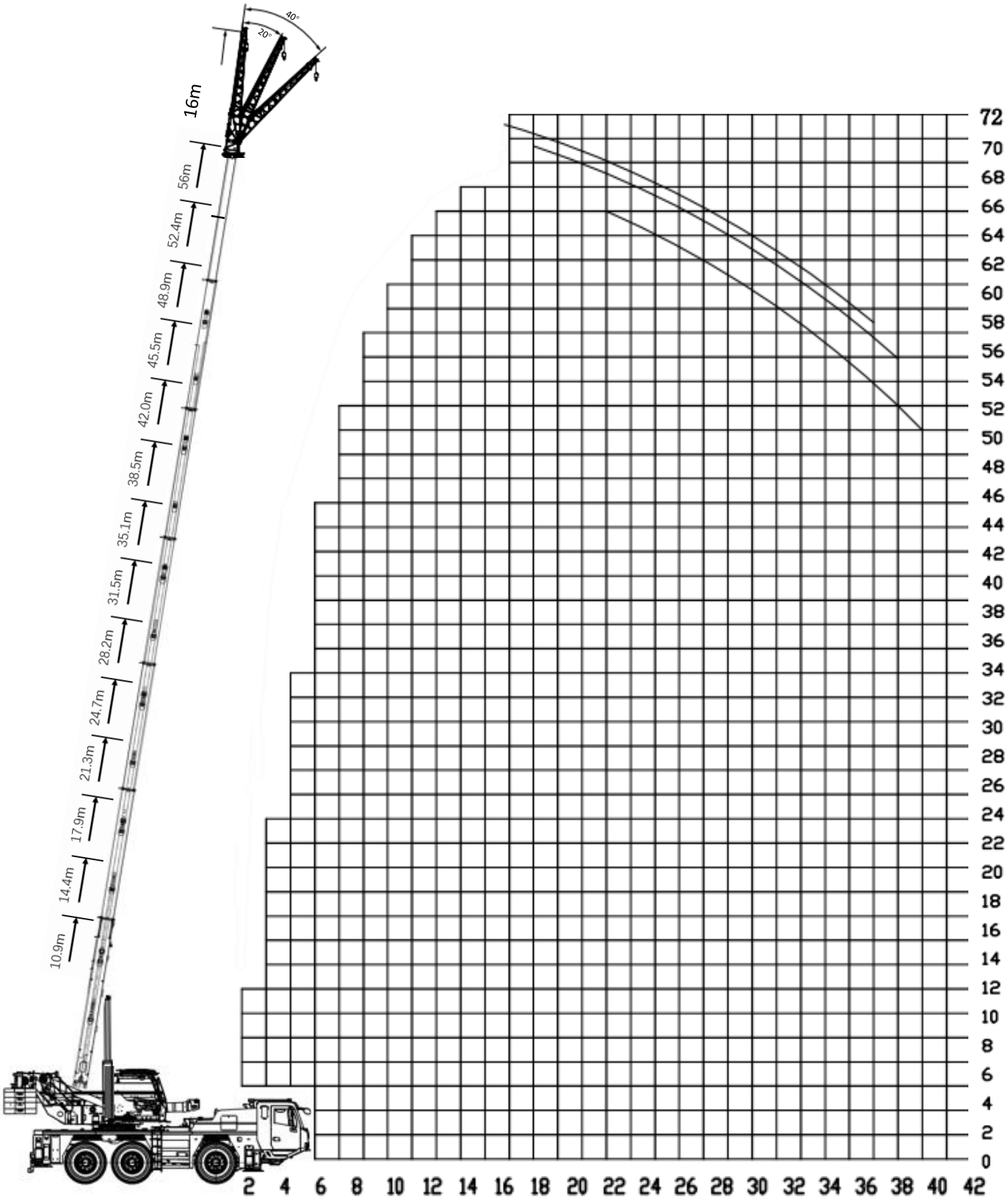


R/L	10.9			38.6			42.1			45.6			52.4			56.0		
副臂安装角	0.0	20.0	40.0	0.0	20.0	40.0	0.0	20.0	40.0	0.0	20.0	40.0	0.0	20.0	40.0	0.0	20.0	40.0
3.0	7.9																	
3.5	7.7	6.7																
4.0	7.4	6.7																
4.5	7.1	6.7																
5.0	6.8	6.1																
6.0	6.3	5.8	4.7	7.6														
7.0	5.8	5.4	4.5	7.6			6.3											
8.0	5.2	5.0	4.3	7.5			6.3			5.3								
9.0	4.7	5.0	4.1	7.4	6.5		6.3			5.3								
10.0	4.2	4.6	4.0	7.2	6.4		6.3	5.8		5.3								
12.0	3.3	4.0	3.8	7.0	6.1	4.7	6.1	5.6	4.7	5.3	5.0		3.6	3.8		3.1		
14.0	2.7	3.3	3.4	6.7	5.8	4.6	6.0	5.4	4.6	5.2	4.8	4.5	3.5	3.7		3.1	3.2	
16.0	2.0	2.5		5.3	5.5	4.5	5.3	5.2	4.5	5.0	4.7	4.3	3.5	3.6	3.6	3.0	3.1	3.3
18.0				4.3	4.8	4.5	4.2	4.8	4.4	4.3	4.5	4.2	3.4	3.5	3.5	3.0	3.0	3.2
20.0				3.4	3.8	4.3	3.4	3.8	4.3	3.4	3.9	4.1	3.4	3.4	3.3	2.9	3.0	3.1
22.0				2.7	3.1	3.4	2.7	3.1	3.4	2.7	3.1	3.5	3.0	3.3	3.2	2.9	2.8	3.0
24.0				2.1	2.6	2.8	2.1	2.5	2.8	2.2	2.5	2.9	2.4	2.8	3.0	2.4	2.7	2.9
26.0				1.7	2.0	2.3	1.6	2.0	2.3	1.7	2.0	2.3	2.0	2.3	2.5	1.9	2.3	2.5
28.0				1.3	1.6	1.8	1.3	1.5	1.8	1.3	1.6	1.8	1.5	1.9	2.1	1.5	1.8	2.1
30.0				0.9	1.2	1.4	0.9	1.2	1.4	1.0	1.2	1.4	1.2	1.4	1.7	1.2	1.5	1.7
32.0				0.7	0.9	1.1		0.9	1.1	0.7	0.9	1.1	0.9	1.2	1.3	0.9	1.1	1.3
34.0									0.7		0.7	0.8	0.7	0.9	1.0		0.8	1.0
36.0															0.8			0.7
38.0																		
40.0																		
42.0																		
44.0																		
倍率	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1
2#	0	0	0	92	92	92	92	92	92	92	92	92	92	92	92	100	100	100
3#	0	0	0	92	92	92	92	92	92	92	92	92	92	92	92	100	100	100
4#	0	0	0	46	46	46	92	92	92	92	92	92	92	92	92	100	100	100
5#	0	0	0	46	46	46	46	46	46	92	92	92	92	92	92	100	100	100
6#	0	0	0	46	46	46	46	46	46	46	46	46	92	92	92	100	100	100
7#	0	0	0	46	46	46	46	46	46	46	46	46	92	92	92	100	100	100
风速	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0

Lifting height curve

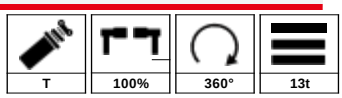
TJ16m Jib





Lifting performance table - TJ 16m jib

Unit: t



R/L	10.9			38.6			42.1			45.6			52.4			56.0		
副臂安装角	0.0	20.0	40.0	0.0	20.0	40.0	0.0	20.0	40.0	0.0	20.0	40.0	0.0	20.0	40.0	0.0	20.0	40.0
3.0	4.1																	
3.5	4.1																	
4.0	4.0																	
4.5	4.0																	
5.0	3.9																	
6.0	3.7																	
7.0	3.6	2.9		3.2														
8.0	3.4	2.8		3.2			3.0			2.7								
9.0	3.2	2.5		3.0			3.0			2.7			2.1					
10.0	3.1	2.3		3.0			2.9			2.7			2.1			1.9		
12.0	2.8	2.2	1.8	2.9	2.9		2.9			2.7			2.1			1.9		
14.0	2.6	2.0	1.7	2.9	2.9		2.8	2.8		2.7	2.7		2.1			1.9		
16.0	2.0	1.8	1.6	2.8	2.9	1.9	2.8	2.8		2.7	2.6		2.1	2.2		1.9		
18.0	1.8	1.7	1.5	2.8	2.8	1.8	2.7	2.7	1.8	2.7	2.5		2.1	2.2		1.9	2.0	
20.0	1.6	1.6	1.4	2.7	2.7	1.8	2.7	2.6	1.7	2.7	2.5	1.8	2.1	2.2	1.9	1.9	2.0	
22.0	1.4	1.5	1.4	2.6	2.6	1.7	2.6	2.5	1.7	2.7	2.4	1.8	2.1	2.2	1.8	1.9	2.0	2.0
24.0				2.4	2.5	1.7	2.4	2.4	1.6	2.4	2.3	1.8	2.1	2.2	1.7	1.9	2.0	1.9
26.0				2.0	2.4	1.7	1.9	2.4	1.6	1.9	2.3	1.7	2.1	2.2	1.6	1.9	1.9	1.8
28.0				1.5	2.0	1.6	1.5	2.0	1.5	1.5	2.0	1.7	1.7	2.1	1.6	1.6	1.9	1.8
30.0				1.2	1.6	1.6	1.2	1.6	1.5	1.2	1.6	1.7	1.3	1.8	1.6	1.3	1.8	1.7
32.0				0.9	1.3	1.5	0.9	1.3	1.5	0.9	1.3	1.6	1.1	1.4	1.6	1.0	1.4	1.7
34.0				0.7	1.0	1.3		1.0	1.2		1.0	1.3	0.8	1.2	1.4	0.7	1.1	1.5
36.0					0.8	1.0		0.7	0.9		0.7	1.0		0.9	1.2		0.9	1.1
38.0						0.7			0.7			0.7		0.7	0.9			0.9
40.0															0.7			
42.0																		
44.0																		
倍率	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2#	0	0	0	92	92	92	92	92	92	92	92	92	92	92	92	100	100	100
3#	0	0	0	92	92	92	92	92	92	92	92	92	92	92	92	100	100	100
4#	0	0	0	46	46	46	92	92	92	92	92	92	92	92	92	100	100	100
5#	0	0	0	46	46	46	46	46	46	92	92	92	92	92	92	100	100	100
6#	0	0	0	46	46	46	46	46	46	46	46	46	92	92	92	100	100	100
7#	0	0	0	46	46	46	46	46	46	46	46	46	92	92	92	100	100	100
风速	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0

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Tips:
In order to ensure the safe and reliable operation of your diesel engine, please add national VI diesel and urea solution that meet national standards for National VI models. Please refer to the instruction manual and relevant standards for details.
Due to the continuous updating of technology, technical parameters and configurations are subject to change without prior notice. The machine in the picture may include additional equipment. This catalog is for reference only. The actual product shall prevail.

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