

ZRT300



ZOOMLION

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ZOOMLION

40
PRODUCTS

30
t
Max. capacity

10.7-35
m
Max. boom length

45
m
Max. tip height

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FEATURES



The ZRT300 has a 35 m telescopic boom .Its telescoping system consists of one hydraulic cylinder with a rope extension/retraction mechanism .The extension/retraction mechanism has been designed for high telescoping lifting capacities .

4-sections U-shaped boom made with high-yield steel which reduces the operating weight of the boom and maximizes performance.



We chose the KESSLER.CO brand axle because it offers the most reliable product on the market ,all wheel and crab steering ensure easy handling and high manoeuvrability in constricted conditions.



Full-vision operator cab is designed for maximum comfort and ease of operation.



A 6-speed powershift transmission from DANA offers the latest technology for the diverse needs of off-road cranes.



The crane is powered by a WeiChai WP6 diesel engine,which is proven to have superior performance and durability. The Best engine Brand in China and have strong global network of parts and service.



























The crane's work is secured by the WIDE MSC670 LMI(Load Moment limiter),delivers the industry's most reliable electronic monitoring system available.

STANDARD EQUIPMENT

- Formed boom
- Offsettable jib 5° -17° -30°
- Auxiliary winch
- Cameras
- Auxiliary lifting sheave
- 30 ton hook block, with 5 sheaves and hook latch
- 3 ton hook ball ,with hook latch
- Rotation-resistant wire rope
- Deluxe tiltable seat
- Air conditioner/Heater
- Work light package : boom, cab and suprestructure
- Revolving amber light
- AM/FM radio
- Battery disconnect switch
- Front and rear lift lugs

KEY/SYMBOLS

	Engine	p4		Transmission	p6
	Axles	p4		Cameras	p6
	Steering	p4		Brakes	p6
	Gradeability	p4		Main boom	p6
	Tires and wheels	p4		Hook ball	p6
	Outrigger system (100%, 50%, 0% extended)	p4		Hook block	p6
	Swing	p5		Main and auxiliary winches	p6
	Hydraulic system	p5		Crane with counterweight	p7
	Counterweight	p5		Side-stowed jib	p7
	Operator cab	p5		Distance from the hook to the head	p7
	Max. boom length with jib ext.	p5		Tip height	p7
	Load Moment Indicator(LMI)	p5		Working radius	p7

TECHNICAL DESCRIPTION



ENGINE

WEICHAI WP6.....Inline 6 cylinder intercooled turbo diesel.
 Kilowatts KW.....154 @ 2200 rpm.
 Peak torque Nm.....990@1200rpm ~ 1800rpm
 300 liter fuel tank capacity.

China national III emission rating.



AXLES

KESSLER.CO front and rear steering axles .

Front- Steer and drive axle rigidly attach to the chassis frame, with planetary reducer and brakes.

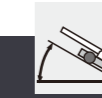
Rear- Full-float steer and drive axle, with planetary reducer and brakes.



STEERING

Power steering with four independent modes:

Front Wheel
 Rear-Wheel
 All-Wheel
 Crab



GRADEABILITY

51% max.gradeability



TIRES AND WHEELS

14.00R25 radial tire.



OUTRIGGER SYSTEM

Four independent horizontal beams and vertical jacks with integral holding valves, each independently controlled from the operator cab.

100%-Fully extended outriggers

Footprint.....43.55sq.m

50%-Mid position outriggers

Footprint.....29.8sq.m

0%-Fully retracted outriggers

Footprint.....16sq.m

Outrigger span.....Length 6.7m, Width 6.5m

TECHNICAL DESCRIPTION



SWING

Bi-directional hydraulic swing drive with multi-disc wet brake and planetary reduction gearbox. Spring-applied hydraulically released swing brake and 360° pneumatic positive swing lock.
Max. swing speed:2.5 rpm.



HYDRAULIC SYSTEM

Gear pump for main and auxiliary winches, boom hoist and telescope cylinders.
Gear pump for steering.
Gear pump for outriggers and slewing.
580 liter hydraulic reservoir with external sight and temperature gauge.

Easily accessible (10 micron) cartridge-style full-flow filters with bypass protection.
Max. operating pressure:22Mpa.



COUNTERWEIGHT

Single 4500kg fixed counterweight.
Length2400mm
Width580mm
Height620mm



OPERATOR CAB

Full-vision operator cab designed for maximum comfort. All steel fabrication with acoustical lining and safety glass throughout. The cab has a sliding door on the right and a sliding window on the left with a swing-up skylight with retractable shade and wiper motor. Fully adjustable deluxe seat with tilt. Foot controls for boom telescope, service brake and engine throttle. Tilt steering.

Temperature control is provided by a hydraulically driven air conditioning unit. Easy view dashboard with gauges for all engine sensors and rocker switch outrigger controls. Standard amenities also include bubble level, dome light, left-side rearview mirror, seat belt, travel swing lock and signal horn.



MAX. BOOM LENGTH WITH JIB EXTENSION

It consists of one jib section. Jib section is lattice structure (8 m) and the whole jib is secured onto the bottom of main boom via moveable pins during traveling. Main jib is offsettable at 5°, 17° and 30°. Max. tip height with 8m jib erected is 45m.



LOAD MOMENT INDICATOR (LMI)

WIDE MCS-670 LMI control system. Microguard graphic display load moment and anti-two block system with audiovisual warning and function limiter.

System displays the following information: crane configuration, boom length, boom angle, load radius, allowed capacity, actual load, and load percentage of allowed capacity.

System includes settable work parameters: min./max. boom length, min./max. boom angle, defined swing area.



TRANSMISSION

Dana powershift transmission - 6 speeds forward and 3 speeds reverse.
Front axle disconnection offering both 4x4 and 4x2 operation.
Max. speed41.4 km/hr(25.7 mph)



CAMERAS

The crane comes equipped with two cameras—a winch camera for viewing hoist operation and a rear camera for viewing the rear of the crane. The monitor is located in the cab and one can easily toggle between both camera views.



MAIN BOOM

Four-section, U-shape, full-power synchronized boom. Boom is constructed of high-yield steel, 5 sheave quick reeve boom tip with removable rope guards. Rope termination lugs on both sides of boom head. Auxiliary lifting sheave and manual angle indicator are included.

Full extended boom length35m
Full retracted boom length10.7m
Max. tip height, main boom37.2

Boom angle range (min./max.)2° / +80°
Boom raising/lowering time35sec/50sec
Boom extension/retraction time67sec/50sec



BRAKES

470 millimeters (18.5 in) diameter disc brakes on all wheels hydraulically operated.



HOKK BLOCK AND HOOK BALL

30-ton, 5 sheave (steel),
Hook block weight340kg
3-ton ball hook
Ball hook weight80kg




MAIN AND AUXILIARY WINCHES





Standard two speed main and auxiliary hoists, each with planetary reduction and spring applied multi-disc wet brake.

Each hoist features
Grooved drum lagging.
Hoist drum cable followers.
Max. permissible line pull: 3000kg.
Winch speed: 0-140m/min .
Power up / power down
Electronic drum rotation indicators.

Rope construction: 17mm rotation-resistant compacted strand.

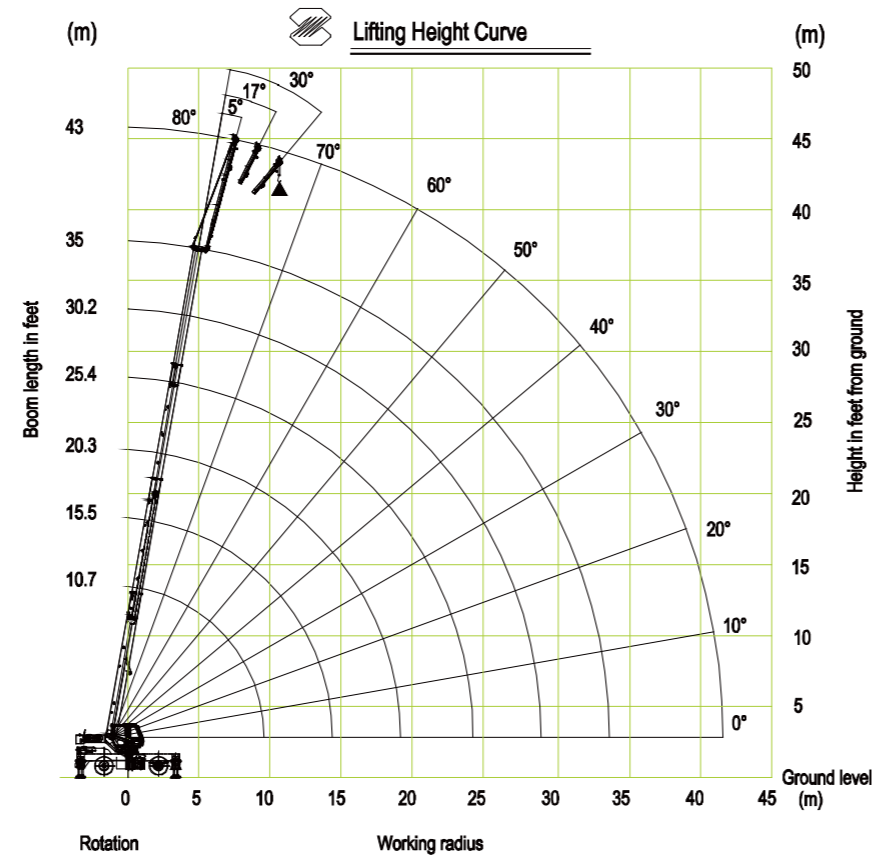
CRANE AND COMPONENT WEIGHTS

CRANE OPERATING WEIGHTS			
	Gross Vehicle Weight	Front Axle Load	Rear Axle Load
 CRANE WITH CTWT.	Kg	Kg	Kg
	28,300	14,600	13,700

DEDUCTIONS FOR LOAD HANDLING				
	 JIB STOWED	 AUXILIARY HEAD	 5 sheave 60-ton hook block	 5.5-ton hook ball
Kg	493	33	340	80

Front WHEEL(4x2)STEERING	METRIC
WALL TO WALL OVER CARRIER	11.15m
ALL WHEEL(4x4)STEERING	METRIC
WALL TO WALL OVER CARRIER	5.7m
TAIL SWING	METRIC
WALL TO WALL OVER BOOM ATTACHED	3.175m

WORKING RANGE DIAGRM

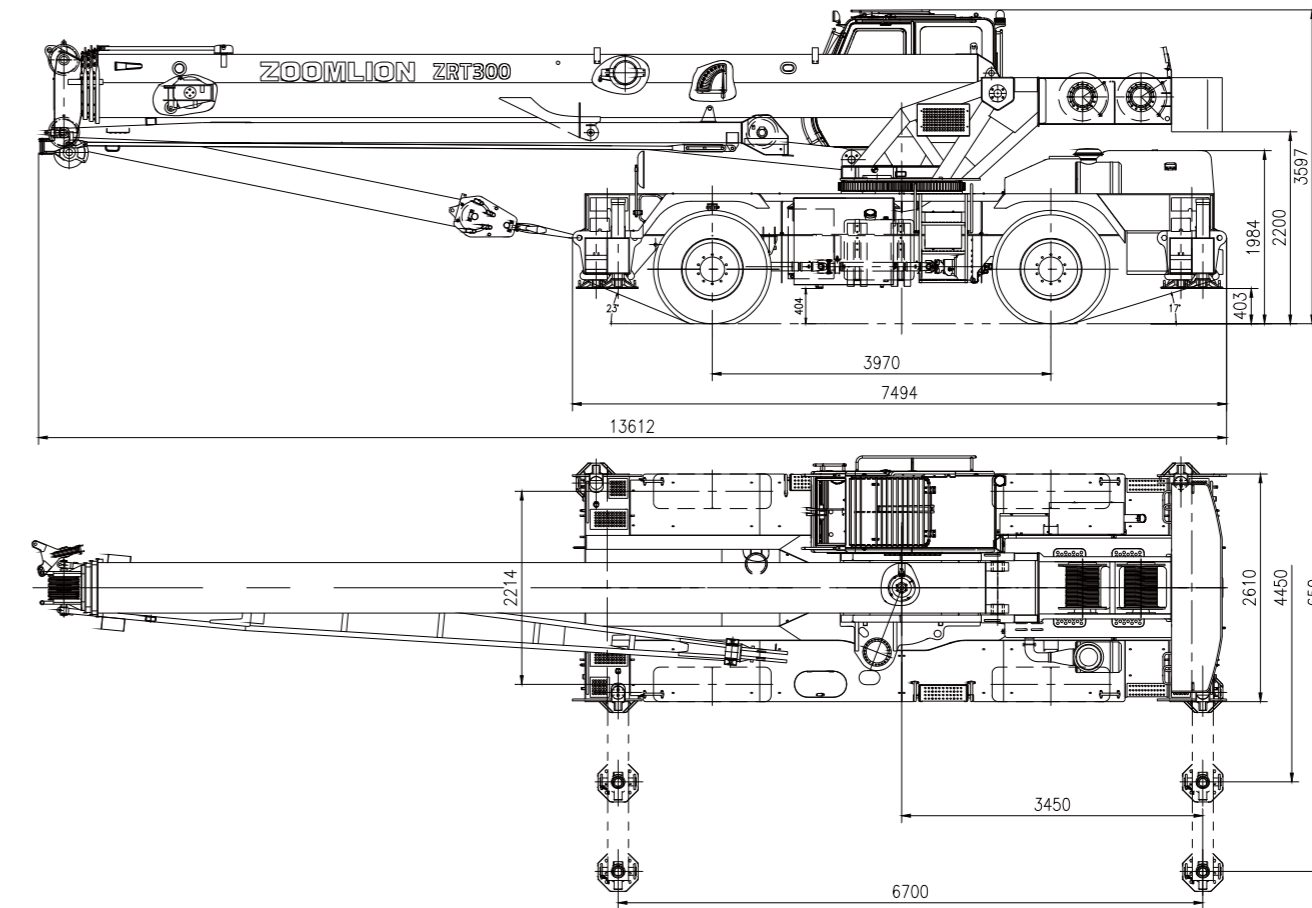


NOTICE:

- 1、 Boom deflections not shown ;
- 2、 This curve is made under the condition of outriggers extension, and the gap between ground and wheels are 0.12m ;
- 3、 The distance between the center of hook and the center of boom head is 1.8m ;
The distance between the center of Auxiliary hook and center of boom head is 1 m .




CRANE DIMENSIONS



LIFTING CAPACITY TABLES

LIFTS WITH OUTRIGGER BEAMS FULLY EXTENDED												
		4500kg.ctwt		ANSI B30.5 EN13000		75%		360° (UNIT:KG)				
MAIN BOOM RATED LOADS												
BOOM LENGTH (mm)	10700		15500		20300		25400		30200		35000	
	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)
3000	70.1	30000	76.7	23000								
3500	67.2	25000	74.8	23000	79.1	20000						
4000	64.3	23000	73.1	21000	77.7	20000						
4500	61.2	21000	71.2	19000	76.4	18500	79.8	15000				
5000	58.2	19000	69.2	18000	75.0	17500	78.8	14400				
5500	54.9	17500	67.3	17000	73.6	16500	77.7	13500				
6000	51.4	16000	65.3	16000	72.1	15200	76.5	12700	79.5	10600		
6500	47.7	14500	63.2	14500	70.6	14100	75.4	12000	78.5	10200		
7000	43.8	13200	61.0	13200	69.1	13000	74.2	11300	77.6	9700		
7500	39.4	12000	58.8	12000	67.5	12000	73	10700	76.6	9300	79.2	8000
8000	34.7	11000	56.6	11000	66.0	11000	71.8	10100	75.6	8800	78.4	7600
9000			51.8	9600	62.7	9600	69.4	9000	73.7	7900	76.8	7000
10000			46.6	8500	59.3	8500	66.9	8200	71.7	7200	75.1	6500
11000			40.9	7300	55.8	7500	64.4	7500	69.6	6600	73.4	6000
12000			34.5	6200	52.2	6400	61.8	6600	67.5	6100	71.7	5600
13000					48.3	5600	59.0	5700	65.4	5600	69.9	5100
14000					44.2	4800	56.2	4900	63.2	5100	68.2	4700
15000					39.7	4200	53.3	4300	61.0	4500	66.3	4300
16000					34.7	3700	50.2	3800	58.7	4000	64.5	4000
18000							43.7	3000	53.8	3200	60.6	3300
20000							36.2	2400	48.6	2500	56.4	2600
22000									42.9	2000	52.1	2100
24000									36.5	1600	47.5	1700
26000											42.4	1400
28000											36.8	1100

LIFTING CAPACITY TABLES

LIFTS WITH OUTRIGGER BEAMS FULLY EXTENDED										
		4500kg.ctwt		ANSI B30.5 EN13000		75%		360° (UNIT:KG)		
MAIN BOOM + 8 M JIB										
Boom angle (°)	5° OFFSET		17° OFFSET		30° OFFSET					
	80	3000		3000		2800				
78	3000		2900		2680					
76	3000		2750		2340					
74	3000		2500		2210					
72	2870		2200		2100					
70	2540		2120		2000					
68	2420		1970		1880					
66	2300		1800		1760					
64	2000		1650		1570					
62	1850		1580		1420					
60	1700		1380		1340					
58	1520		1270		1200					
56	1310		1150		1060					
54	1150		1060		940					
52	1070		960		900					
50	960		910		820					
48	820		820		760					
46	710		700		680					
1 fall										
3t hook										

LIFTING CAPACITY TABLES

LIFTS WITH OUTRIGGER BEAMS AT MID-POSITION												
		4500kg.ctwt		ANSI B30.5 EN13000		75%		360° (UNIT:KG)				
MAIN BOOM RATED LOADS												
BOOM LENGTH (mm)	10700		15500		20300		25400		30200		35000	
	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)
3000	70.1	25000	76.7	23000								
3500	67.2	25000	74.8	21000	79.1	20000						
4000	64.3	23000	73.1	18000	77.7	18500						
4500	61.3	20000	71.2	17000	76.4	17500	79.8	15000				
5000	58.1	17600	69.2	16000	75.0	16000	78.8	14400				
5500	54.7	14500	67.1	14000	73.4	14000	77.7	13500				
6000	51.2	12000	65.0	12500	71.9	12500	76.5	12700	79.5	10600		
6500	47.5	10000	62.8	10800	70.3	11000	75.4	11700	78.5	10200		
7000	43.5	9200	60.7	9500	68.8	9800	74.1	10000	77.6	9500		
7500			58.4	8000	67.1	8600	72.8	8800	76.6	9000		
8000			56.2	7500	65.5	7800	71.6	8000	75.6	8000	78.4	7600
9000			51.4	6000	62.3	6200	69.0	6300	73.4	6600	76.8	6600
10000			46.3	5000	58.9	5100	66.4	5200	71.2	5400	74.9	5500
11000			40.7	4000	55.4	4200	63.8	4300	69.1	4500	73.0	4500
12000			34.3	3350	51.8	3500	61.1	3500	66.9	3900	71.1	3950
13000					47.9	3000	58.4	3100	64.7	3400	69.3	3400
14000					43.8	2500	55.7	2700	62.4	2850	67.4	2900
15000					39.4	2000	52.8	2200	60.2	2500	65.4	2500
16000					34.4	1600	49.7	1940	57.8	2150	63.5	2200
18000							43.2	1410	53.0	1650	59.6	1700
20000							35.8	1000	47.8	1200	55.5	1200
22000									42.2	900	51.1	900
24000									35.8	650	46.5	670

LIFTING CAPACITY TABLES

LIFTS WITH OUTRIGGER BEAMS FULLY RETRACTED												
		4500kg.ctwt		ANSI B30.5 EN13000		75%		360° (UNIT:KG)				
MAIN BOOM RATED LOADS												
BOOM LENGTH (mm)	10700		15500		20300		25400		30200		35000	
	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)	Boom Angle (°)	360° (KG)
3000	70.2	18000	76.8	15000								
3500	67.2	14000	74.9	14500	79.0	12000						
4000	64.2	11000	72.9	12200	77.5	10000						
4500	61.1	9000	70.9	9700	76.0	9800	79.5	9800				
5000	57.8	7800	68.8	8100	74.5	8200	78.3	8300				
5500	54.5	6200	66.8	6800	72.9	7000	77.0	7100	79.8	7100		
6000	51.0	5300	64.7	5800	71.4	6000	75.8	6100	78.8	6200		
6500	47.3	4500	62.6	5000	69.8	5100	74.6	5200	77.7	5300		
7000	43.4	3600	60.4	4200	68.3	4500	73.4	4600	76.7	4700	79.2	4800
7500			58.2	3600	66.7	4080	72.2	4150	75.6	4200	78.3	4230
8000			56.0	3100	65.2	3400	70.9	3500	74.6	3600	77.4	3700
9000			51.2	2300	61.9	2700	68.4	2900	72.5	3000	75.6	3100
10000			46.1	1800	58.6	2200	65.8	2300	70.4	2400	73.8	2500
11000			40.6	1300	55.1	1700	63.3	1800	68.3	1900	72.0	2000
12000			34.2	1000	51.5	1300	60.7	1400	66.2	1500	70.1	1500
13000					47.6	1050	58.0	1100	64.0	1200	68.3	1200
14000					43.5	700	55.2	900	61.8	1000	66.4	1050
15000							52.3	720	59.6	800	64.6	820
16000									57.3	640	62.7	680