

Rough  
terrain crane

# ZRT600



# ZRT 600



Capacity CE  
50 T



Boom length  
9.5-37.1 m



Jib  
8 m



Max height  
47.4 m





# / Rough terrain crane **ZRT600**

## Carrier Frame

---

### Carrier Frame

Chassis torsion-resistant box type construction in high strength steel

---

### Outriggers

Four hydraulic H-stabilizers moved by horizontal cylinders and jacks with locking valves with self-levelling system

---

Excursion of the beams in three positions: 0%, 50% and 100%. Easily removable floats

---

Controls and position indicator placed in the cab.

---

### Engine

Diesel CUMMINS QSB6.7 (Stage V - Euromot 5) turbo intercooler electronically controlled and water-cooled

---

Maximum power 194 KW (260 HP) at 2400 rpm.  
Fuel tank 300 l

---

### Transmission

Electrically controlled automatic hydraulic transmission DANA, with torque divider

---

Powershift transmission with 6 forward and 6 reverse gears

---

### Hydraulic Pumps

LS pump for main operations.

Gear pumps for slewing, outriggers and steering

---

### Axles

Front: towing / steering with differential and hubs with planetary reductions, rigidly mounted on the chassis

---

Rear: tractor / steering with differential and hubs with planetary reductions, oscillating for use off-road or locked in a horizontal position for use on tires

---

Differential lockable by means of a button in the cabin

---

### Steering

Fully independent hydraulic steering operated through the steering wheel

Four steering modes: only front wheels, only rear wheels, coordinated, crab

---

### Brakes

Service/Emergency: dual independent pneumatic circuit operated by pedal acting on all wheels

---

Parking: with spring cylinder acting on all wheels

---

### Tyres

"Off-road" type, single mounted 16.00-25

---

### Electrical Equipment

Two 24 Volt / 120 Ah batteries

---

CE



# / Rough terrain crane

# ZRT600

## UPPER STRUCTURE

### Telescopic Boom

Composed of five elements with a "U" section, hydraulically operated with the first section independent and the last three proportional

Two operating modes to maximize performance. Maximum height at tip main boom 45.1 m. Maximum height at tip with Jib 61.2 m

### Contrappeso

Contrappeso fisso da 7,8 t

### Winches (Main and Auxiliary)

Grooved drum with rope press.  
Multiple-disc negative brake and counterbalance valve

Rope length: on the main winch: 210 m  
On the auxiliary winch: 130 m  
Diameter of the rope: 17 mm

### Slewing

Hydraulic motor coupled to reducer  
Continuous 360° rotation  
Sistema di bloccaggio pneumatico della rotazione  
Angular sensor for viewing the turret position on the main display in the cabin

### Cabin

Hydraulic tilt of 20° controlled by the operator  
Large windows with panoramic visibility with the possibility of front glass opening  
Ergonomic sliding seat adjustable in height, depth and according to the weight of the operator  
Cabin air circulation fan, two electric wipers, fire extinguisher, seat belt, hot/cold air conditioning system  
14" main display for both travel and crane functions  
Additional display for viewing winch cameras and rear side camera

### Crane Controls

Turret movements are controlled by two hydraulically controlled joysticks located on the armrests of the operator seat. The left joystick controls rotation and auxiliary winch, the right joystick controls swing/lift and main winch

Electrical switches for controlling outriggers, winch fast running and free rotation on electrical system

Steering wheel for steering control of all steering modes.  
Manual transmission and electric parking brake. Slow and fast gear control via in-cab selector switch. Engine warning instrumentation.

### Distributors

No. 2 Hydraulic distributors that ensure the simultaneous combination of the crane movements of which the main one for lifting, extension and winching maneuvers and the secondary one for rotation

### Load Moment Indicator

Limiter with 7" color touchscreen display  
Anti-two block system for block limit switch  
Movement locking system with acoustic and visual alarm  
Angle recognition system and boom extension  
Automatic recognition of stabilizer configuration on display

### Optional Accessories

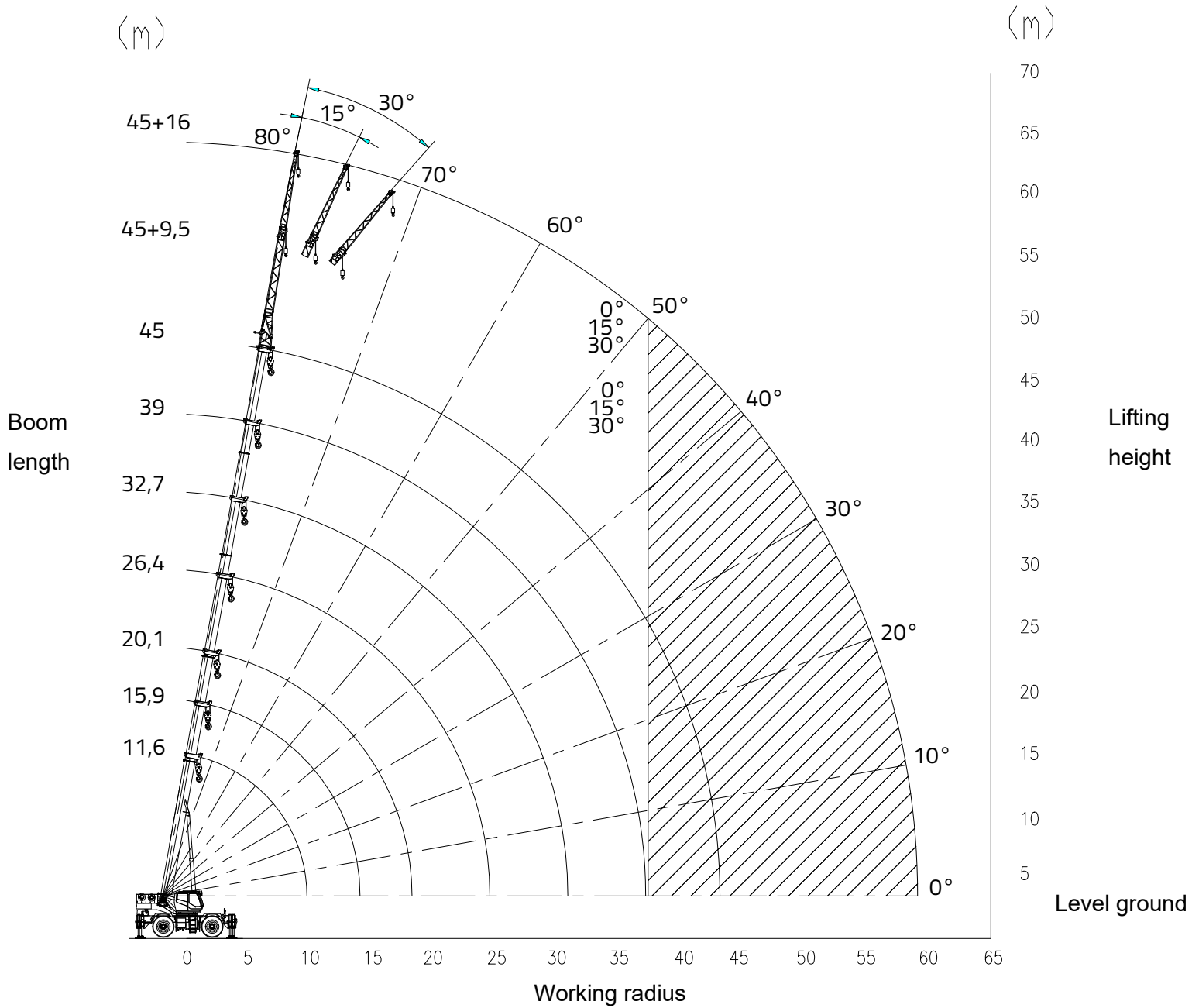
Rooster  
Mechanically adjustable 9.5/16 m variable spout double sickle 0°- 15°- 30°  
Miscellaneous pulleys



# WORK DIAGRAM

/Rough terrain crane

# ZRT600



# WORK DIAGRAM

/Rough terrain crane  
**ZRT600**



100%



45 m



7.8 t



360°



**Outriggers extended at 100% - Telescopic cylinder I 100% extended  
Counterweight 7,8 t - Unit: t**

**TAB 1**

Radius	Boom length						
(m)	11.6	15.9	20.1	26.4	32.7	39.0	45.0
3.0	60	46	36				
3.5	59	46	36				
4.0	56	46	36				
4.5	53	44	34	27			
5.0	47	42	33.5	27			
5.5	42	40	32.5	27			
6.0	37.5	36.5	32	26	19.8		
6.5	35	34.3	30.6	25	19.8		
7.0	30.5	31	29.5	24	19.8		
7.5	29.2	29	27.5	23	19		
8.0	26.7	26.5	26	22	18.4	14.4	
9.0	20.2	20	19.5	20	17	13.6	
10.0		16	16	16.5	15.8	12.8	10
11.0		13.2	13	13.6	14	12	9.6
12.0		11	11	11.8	12.2	11.5	9.2
14.0			7.7	8.8	9.2	9.6	8.4
16.0			5.5	6.7	7.1	7.5	7.6
18.0				5.1	5.6	6	6.2
20.0				3.9	4.4	4.8	5
22.0					3.5	3.8	4.1
24.0					2.75	3.1	3.4
26.0					2.15	2.4	2.7
28.0						1.9	2.15
30.0						1.5	1.75
32.0						1.1	1.35
34.0							1.05
36.0							750
I (m)	0	4.3	8.5	8.5	8.5	8.5	8.5
II (m)	0	0	0	6.3	12.6	18.9	24.9
Reeving	12	10	8	6	4	4	3
Hook				60t			

# WORK DIAGRAM

/Rough terrain crane

# ZRT600



50%



40.8 m



7.8 t



360°



Outriggers extended at 100% - Telescopic cylinder I 50% extended  
Counterweight 7,8 t - Unit: t

TAB 2

Radius (m)	Boom length					
	11.6	15.9	22.2	28.5	34.8	40.8
3.0	60	46				
3.5	59	46	27			
4.0	56	46	27			
4.5	53	44	27			
5.0	47	42	27	24		
5.5	42	40	27	24		
6.0	37.5	36.5	27	24		
6.5	35	34.3	27	24	16.5	
7.0	30.5	31	27	23	16.5	
7.5	29.2	29	26	22	16	
8.0	26.7	26.5	25	21	15.5	10.8
9.0	20.2	20	20.5	19	14.5	10.4
10.0		16	17	17.2	13.5	10
11.0		13.2	14.2	15	12.5	9.6
12.0		11	12.3	13	11.6	9.2
14.0			9	9.7	9.8	8.4
16.0			6.9	7.5	7.8	7.6
18.0			5.3	5.9	6.2	6.7
20.0				4.7	5	5.5
22.0				3.8	4.1	4.5
24.0					3.3	3.7
26.0					2.7	3.1
28.0					2.2	2.5
30.0						2.1
32.0						1.7
34.0						1.4
I (m)	0	4.3	4.3	4.3	4.3	4.3
II (m)	0	0	6.3	12.6	18.9	24.9
Reeving	12	10	6	5	4	3
Hook				60t		

# WORK DIAGRAM

/Rough terrain crane

# ZRT600



100%



36.5 m



7.8 t



360°



**Outriggers extended at 100% - Telescopic cylinder I not extended  
Counterweight 7,8 t - Unit: t**

**TAB 3**

Radius (m)	Boom length				
	11.6	17.9	24.2	30.5	36.5
3.0	60	27			
3.5	59	27			
4.0	56	27	24		
4.5	53	27	24		
5.0	47	27	24		
5.5	42	27	23.2	18.6	
6.0	37.5	27	22.5	17.9	
6.5	35	27	21.7	17.2	
7.0	30.5	27	21	16.5	11.5
7.5	28.5	25.5	20.2	15.7	11.5
8.0	26	24	19.5	15	11.5
9.0	20.2	22	18	13.8	11
10.0		18	16.5	12.8	10.5
11.0		15	15.5	11.8	9.8
12.0		12.8	13.6	11	9.2
14.0		9.6	10.3	9.5	8.2
16.0			8.1	8.3	7.2
18.0			6.5	6.7	6.4
20.0				5.5	5.6
22.0				4.6	4.8
24.0				3.8	4
26.0					3.4
28.0					2.9
30.0					2.4
32.0					
34.0					
I (m)	0	0	0	0	0
II (m)	0	6.3	12.6	18.9	24.9
Reeving	12	6	5	4	3
Hook			60t		

# WORK DIAGRAM

/Rough terrain crane  
**ZRT600**



100%



45+9.5 m



7.8 t



360°



Nominal loads on boom and jib  
Rated capacity table with arm + 9,5m jib on Ouriggers extended at 100%,  
Counterweight 7,8t - Unit: t

TAB 4

Boom angle (°)	0°	15°	30°
80	5	3.3	2.5
78	5	3.3	2.5
76	4.8	3.2	2.5
74	4.5	3.1	2.5
72	4.2	3	2.4
70	3.9	2.8	2.3
68	3.6	2.7	2.2
66	3.3	2.6	2.1
64	2.8	2.5	2
62	2.4	2.2	1.9
60	2.1	2	1.8
58	1.8	1.6	1.6
56	1.5	1.4	1.3
54	1.2	1.2	1.2
52	1	1	9
50	8	7	7
Reeving		1	
Hook		5.5t	



# WORK DIAGRAM

/Rough terrain crane  
**ZRT600**



100%



45+16 m



7.8 t



360°



Nominal loads on boom and jib  
Rated capacity table with arm + 16m jib on Ouriggers extended at 100%  
Counterweight 7,8t - Unit: t

TAB 5

Boom angle (°)	0°	15°	30°
80	3	2	1.4
78	3	2	1.4
76	2.9	1.8	1.3
74	2.7	1.7	1.3
72	2.5	1.6	1.2
70	2.3	1.5	1.2
68	2.1	1.4	1.1
66	2	1.3	1.1
64	1.9	1.3	1.1
62	1.8	1.2	1
60	1.7	1.2	1
58	1.4	1.1	1
56	1.2	1.1	0.9
54	1	0.9	0.8
52	0.8	0.7	0.65
50	0.65	0.6	0.55
Reeving		1	
Hook		5.5t	

# WORK DIAGRAM

/Rough terrain crane

# ZRT600



50%



45 m



7.8 t



360°



Outriggers 50% - Telescopic cylinder I 100% extended  
Counterweight 7,8 t - Unit: t

TAB 6

Radius (m)	Boom length						
	11.6	15.9	20.1	26.4	32.7	39.0	45.0
3.0	60	46	36				
3.5	54	44	36				
4.0	47	42	36				
4.5	41	38	34	27			
5.0	33	32.5	30.5	27			
5.5	28	26.5	26	26.5			
6.0	23.5	22.5	22	23	19.8		
6.5	20	19.5	19	20	19.8		
7.0	18.5	18.3	18	19	19		
7.5	16	15.8	15.5	16.5	17		
8.0	14.2	13.8	13.5	14.5	15	14.4	
9.0	11.2	10.8	10.6	11.5	12	12	
10.0		8.8	8.6	9.5	10	10	10
11.0		7.1	6.9	8	8.6	9	9
12.0		5.9	5.6	6.7	7.4	7.8	8
14.0			3.7	4.7	5.3	5.8	6
16.0			2.3	3.3	3.9	3.3	3.6
18.0				2.3	2.8	3.3	3.6
20.0				1.5	2	2.5	2.8
22.0					1.4	1.8	2.1
24.0					0.9	1.3	1.5
26.0						0.8	1.1
I (m)	0	4.3	8.5	8.5	8.5	8.5	8.5
II (m)	0	0	0	6.3	12.6	18.9	24.9
Reeving	12	10	8	6	4	4	3
Hook				60t			

# WORK DIAGRAM

/Rough terrain crane

# ZRT600



50%



40.8 m



7.8 t



360°



Outriggers 50% - Telescopic cylinder I 50% extended  
Counterweight 7,8 t - Unit: t

TAB 7

Radius	Boom length					
(m)	11.6	15.9	22.2	28.5	34.8	40.8
3.0	60	46				
3.5	54	44	27			
4.0	47	42	27			
4.5	41	38	27			
5.0	33	32.5	27	24		
5.5	28	26.5	26	24		
6.0	23.5	22.5	24	24		
6.5	20	19.5	21.5	21.5	16.5	
7.0	18.5	18.3	19	19	16.5	
7.5	16	15.8	17	17	16	
8.0	14.2	13.8	15	15	15	10.8
9.0	11.2	10.8	12	12.5	12.5	10.4
10.0		8.8	10	10.2	10.5	10
11.0		7.1	8.4	9	9.5	9.5
12.0		5.9	7	7.6	8.1	8.5
14.0			5	5.6	6.1	6.4
16.0			3.6	4.2	4.5	4.9
18.0			2.6	3.2	3.5	3.8
20.0				2.4	2.7	3
22.0				1.7	2	2.3
24.0					1.5	1.8
26.0					1.1	1.3
28.0					0.75	1
30.0						0.7
I (m)	0	4.3	4.3	4.3	4.3	4.3
II (m)	0	0	6.3	12.6	18.9	24.9
Reeving	12	10	6	5	4	3
Hook				60t		

# WORK DIAGRAM

/Rough terrain crane

# ZRT600



50%



36.5 m



7.8 t



360°



Outriggers 50% - Telescopic cylinder I not extended  
Counterweight 7,8 t - Unit: t

TAB 8

Radius (m)	Boom length				
	11,6	17,9	24,2	30,5	36,5
3.0	60	27			
3.5	54	27			
4.0	47	27	24		
4.5	41	27	24		
5.0	33	27	24		
5.5	28	27	23.2	18.6	
6.0	23.5	26	22.5	17.9	
6.5	20	23	21.5	17.2	
7.0	18.5	20	20.5	16.5	11.5
7.5	16	17.5	17.5	15.7	11.5
8.0	14.2	15.5	15.5	15	11.5
9.0	11.2	12.5	12.5	12.5	11
10.0		10.5	10.7	11	10.5
11.0		8.8	9.4	9.8	9.6
12.0		7.5	8	8.5	8.7
14.0		5.5	6	6.5	6.7
16.0			4.6	5	5.1
18.0			3.6	3.8	4
20.0				3.1	3.3
22.0				2.4	2.6
24.0				1.9	2.1
26.0					1.7
28.0					1.3
30.0					1
I (m)	0	0	0	0	0
II (m)	0	6.3	12.6	18.9	24.9
Reeving	12	6	5	4	3
Hook			60t		

# WORK DIAGRAM

/Rough terrain crane

# ZRT600



0%



45 m



7.8 t



360°



Outriggers not extended - Telescopic cylinder I 100% extended  
Counterweight 7,8 t - Unit: t

TAB 9

Radius (m)	Boom length						
	11.6	15.9	20.1	26.4	32.7	39.0	45.0
3.0	35	32	28				
3.5	27	26	25				
4.0	22	21.5	21	20			
4.5	18	17.5	17	17			
5.0	14.5	14	13.8	14			
5.5	12	11.8	11.5	12	12.5		
6.0	10.4	10	9.8	10.5	11		
6.5	9	8.7	8.5	9.2	9.8		
7.0	7.8	7.5	7.3	8.1	8.9	9	
7.5	6.8	6.4	6.3	7.2	7.8	8	
8.0	6	5.5	5.4	6.3	6.9	7.2	7
9.0		4.2	4	4.9	5.4	5.8	6
10.0		3.1	2.9	3.8	4.3	4.6	5
11.0		2.2	2	2.9	3.4	3.8	4
12.0		1.6	1.4	2.2	2.7	3	3.3
14.0				1.2	1.6	1.9	2.1
16.0					1.1	1.2	1.3
18.0						0.7	0.8
I (m)	0	4.3	8.5	8.5	8.5	8.5	8.5
II (m)	0	0	0	6.3	12.6	18.9	24.9
Reeving	12	10	8	6	4	4	3
Hook				60t			

# WORK DIAGRAM

/Rough terrain crane

# ZRT600



0%



40.8 m



7.8 t



360°



Outriggers not extended - Telescopic cylinder I 50% extended  
Counterweight 7,8 t - Unit: t

TAB 10

Radius (m)	Boom length					
	11.6	15.9	22.2	28.5	34.8	40.8
3.0	35	32	27			
3.5	27	26	24			
4.0	22	21.5	20.5			
4.5	18	17.5	17	17.5		
5.0	14.5	14	14.5	15		
5.5	12	11.8	12.5	13	13	
6.0	10.4	10	10.5	11	11.5	
6.5	9	8.7	9.5	10	10.5	
7.0	7.8	7.5	8.5	9	9.4	9
7.5	6.8	6.4	7.5	8	8.4	8.7
8.0	6	5.5	6.5	7.2	7.6	7.9
9.0		4.2	5.1	5.7	6.1	6.4
10.0		3.1	4	4.6	5	5.3
11.0		2.2	3.2	3.7	4.1	4.4
12.0		1.6	2.4	3	3.4	3.7
14.0			1.2	1.8	2.2	2.5
16.0				1.1	1.4	1.7
18.0					0.8	1.1
I (m)	0	4.3	4.3	4.3	4.3	4.3
II (m)	0	0	6.3	12.6	18.9	24.9
Reeving	12	10	6	5	4	3

Hook

60t

# WORK DIAGRAM

/Rough terrain crane  
**ZRT600**



0%



36.5 m



7.8 t



360°



Outriggers not extended - Telescopic cylinder I not extended  
Counterweight 7,8 t - Unit: t

TAB 11

Radius (m)	Boom length				
	11.6	17.9	24.2	30.5	36.5
3.0	35	27			
3.5	27	26	24		
4.0	22	21	22		
4.5	18	18	18.5		
5.0	14.5	15	16	16	
5.5	12	13	14	14	
6.0	10.4	11.5	12.2	12.5	
6.5	9	10	10.8	11	11
7.0	7.8	8.8	9.5	9.8	10
7.5	6.8	7.9	8.5	8.8	9
8.0	6	7	7.6	7.9	8.2
9.0		5.6	6.2	6.5	6.7
10.0		4.5	5	5.4	5.6
11.0		3.6	4.2	4.5	4.7
12.0		2.9	3.5	3.8	4
14.0		1.8	2.4	2.7	2.9
16.0			1.5	1.8	2.1
18.0			0.9	1.2	1.4
20.0				0.8	0.9
I (m)	0	0	0	0	0
II (m)	0	6.3	12.6	18.9	24.9
Reeving	12	6	5	4	3
Hook			60t		

# WORK DIAGRAM

/Rough terrain crane  
**ZRT600**



**Rated capacity table for lifting on tires**

**TAB 12**

Unit: t

Radius	Boom length							
	11.6		15.9		20.1		26.4	
(m)	360°	Stroke with front side load	360°	Stroke with front side load	360°	Stroke with front side load	360°	Stroke with front side load
3.0	21	21	20	18	20			
3.5	20	20	19.5	18	19	16		
4.0	17.5	18	17	17	16.5	15.5	17	
4.5	14.5	16.5	14	16.5	13.5	15	14.3	11
5.0	12.5	14.5	12	14.5	11.5	14.5	12.3	11
5.5	10.8	13.5	10	13.5	9.5	13.2	10.5	11
6.0	9.4	12	9	11.8	8.8	11.5	9.2	11
6.5	8	10.5	7.6	10.2	7.4	10	8.1	10.5
7.0	7	9.2	6.6	9	6.3	8.8	7.1	9.5
7.5	6	8.1	5.6	8	5.3	7.7	6.2	8.5
8.0	5.3	7.1	4.8	7	4.5	6.7	5.4	7.5
9.0			3.5	5.3	3.2	5.1	4.1	5.9
10.0			2.5	4.1	2.2	3.9	3.2	4.6
11.0			1.6	3.2	1.4	3	2.4	3.7
12.0			1	2.4	0.8	2.2	1.7	2.9
14.0						1		1.8
16.0								1
I (m)	0		4.3		8.5		8.5	
II (m)	0		0		0		6.3	
Reeving	12		10		8		6	
Hook					60t			

Note: 360° when the crane is stationary



26.4 m



360°







# / Rough terrain crane ZRT600

## SPECIFICATIONS



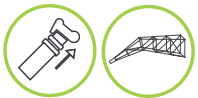
Capacity  
CE

CE Capacity	Work Radius
60 t	3 m



Hook

Capacity	Pulleys	Lines	Weight	Configuration
40 t	4	8	570 kg	Standard
20 t	3	6	230 kg	Optional
6,5 t	-	1	150 kg	Optional



Telescopic boom and jib

Boom length	Max height	Sections	Luffing angle	Jib	Max height with jib
11,6 / 45 m	47,5 m	5	-2° / + 80°	9,5 / 16 m	64 m



Working speed

	Max speed	Line	Line pull	Length
Main winch	0 - 130 m/min. direct pull	Ø 17	55 kN	210 m
Secondary winch	0 - 130 m/min. direct pull	Ø 17	55 kN	130 m
Rotation 360°	0 - 2,4 r/min			
Boom lifting		from -2° to 78°	70 s/ca	
Boom extension		from 9.5 to 37.1 m	135 s/ca	



Engine

Engine	Model (Stage V)	Cylinders	Nominal power	Max torque	Fuel tank	Adblue tank
CUMMINS	QSB6.7	6	194kW@2400 rpm	990Nm@1500 rpm	300 l	25 l



Machine speed

Drive	Transmission	Steering mode	Maximum speed	Slope
4x2      4x4	6 forward gears 6 reverse gears	2 front steering 2 rear steers 4 coordinated steering Crab	45 km/h	75%



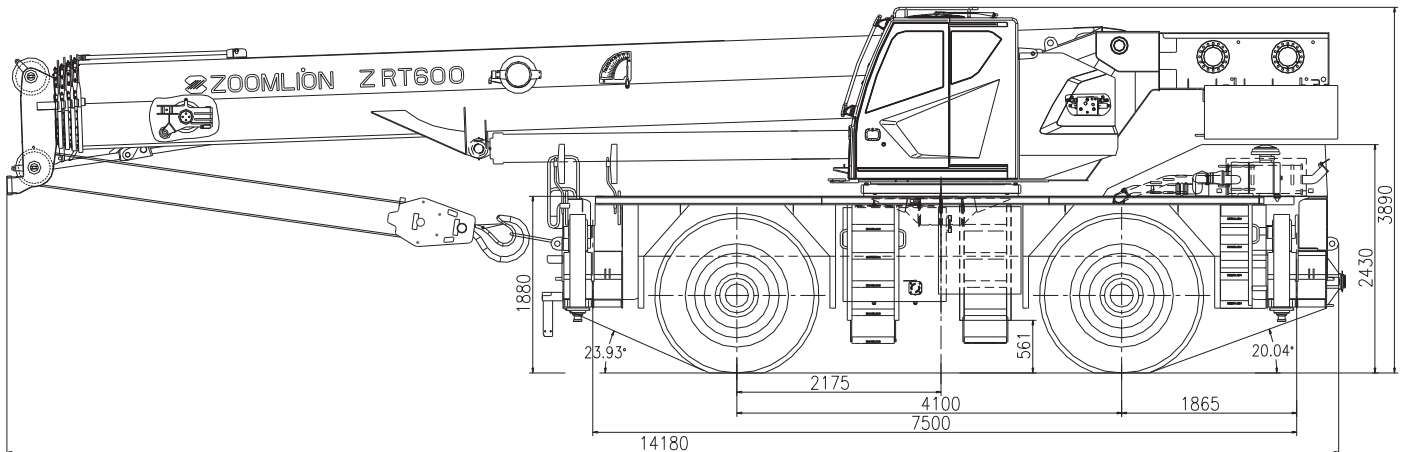
Weights

Axles	1	2	Total weight	Counterweight
Tons.	25	20	45	7,8 (included)



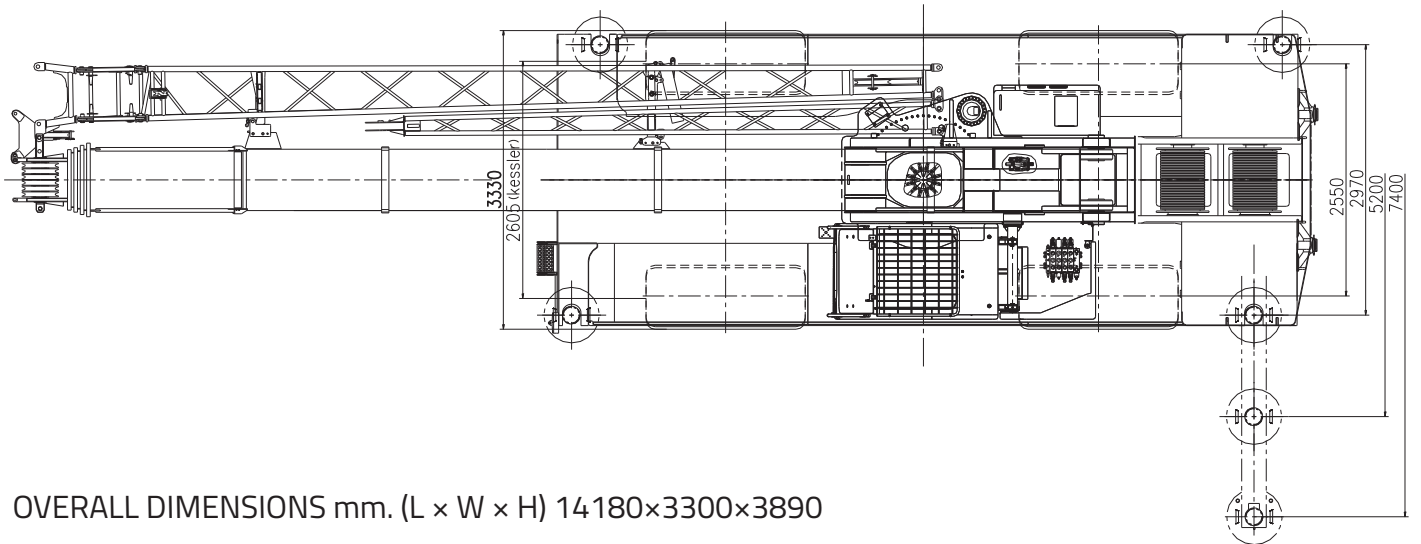
# / Rough terrain crane ZRT600

## DIMENSIONS AND WEIGHTS



**TOTAL WEIGHT: 45000 KG\* | Front axle weight: 25000 KG | Rear axle weight: 20000 KG**

## OUTRIGGERS



**OVERALL DIMENSIONS mm. (L x W x H) 14180x3300x3890**

*Weight including: main winch equipped, secondary winch without rope, 7.8 T fixed counterweight and 45 T block*

Product specifications are subject to change without notice.  
Photographs are for illustrative purposes only.

