

TADANO CARGO CRANE

MODEL : **TM-ZR865RS**

CRANE SPECIFICATIONS

<u>CRANE CAPACITY</u>	8,200 kg at 1.8 m (6-part lines)
<u>BOOM</u>	5-sectioned, fully powered partly synchronized telescoping boom of pentagonal box construction. Retracted length ----- 4.4 m Extended length ----- 15.92 m Extending speed ----- 11.52 m / 40 s Elevation ----- Elevated by a double-acting hydraulic cylinder Elevating speed ----- 1° to 82° / 18 s Boom point ----- 3 sheaves
<u>WINCH</u>	Hydraulic motor driven. Spur gear speed reduction, provided with automatic brake and cable follower. Single line pull ----- 14.7 kN {1,500 kgf} Single line speed ----- 45 m/min (at 4th layer) Wire rope diameter × length --- 10 mm × 95 m breaking strength ----- 73.5 kN {7.5 tf} construction ----- 7 × 7 + 6 × Fi(29) Hook block ----- 3 sheaves
<u>SWING</u>	Hydraulic motor driven Worm gear speed reduction. Continuous 360° full circle swing on ball bearing slew ring. Automatic swing lock. Swing speed ----- 2.5 min ⁻¹ {rpm}

Specifications are subject to change without notice.

OUTRIGGERS

Hydraulically extended sliders and hydraulically extended jacks.
 Integral with crane frame. Power up and down.
 Extended width ----- Min. 2,250 mm
 Mid. 3,500 mm
 Full 4,800 mm

HYDRAULICS

Hydraulic pump ----- Single gear pump
 Hydraulic motors ----- Axial piston type for winch
 Axial piston type for swing
 Control valves ----- Multiple control valves with integral
 safety valve
 Oil tank capacity ----- approx. 90 L

RADIO CONTROLLER

Model : RCS-F
 Control functions of boom telescoping, hoisting up and down,
 boom elevating, swing, acceleration, speed mode selection,
 working height limiting, horn and emergency stop.
 Frequency ----- 40 frequencies in 433 MHz band
 Operating power supply
 Transmitter ----- 6V DC, Dry battery R6P(SUM-3) x 4
 Control unit ----- 24V DC, Vehicle battery
 Transmitter mass ----- Approx. 576 g (includes batteries)

SAFETY DEVICES

AML(Automatic Moment Limiter)
 Load indication
 Warning alarm
 Over load limiter
 WHL(Working Height Limiter)
 Load meter
 Radius indicator
 Emergency stop switch on radio controller
 Terminal for emergency stop switch
 Over-winding alarm
 Hoisting limiter
 Jack interlock
 P.T.O indicator lamp
 Hook safety latch
 Hydraulic safety valves, check valves and holding valves
 Level gauge

CRANE MASS

Approx. 3,200 kg (except mounting parts)

NOTE :

Operating speeds of the crane are guaranteed under the
 condition that the pump delivery is 60 L/min.

RATED LIFTING CAPACITIES IN KILOGRAMS

Empty chassis Rated Capacities

C \ A \ B	4.4m			7.28m			10.16m		
	Full	Mid.	Min.	Full	Mid.	Min.	Full	Mid.	Min.
1.8 m and below	8,200	6,000	4,000	6,000	6,000	4,000			
2.4 m	6,000	6,000	4,000	6,000	6,000	4,000	3,000	3,000	2,900
2.9 m	5,000	5,000	3,000	5,000	5,000	2,900	3,000	3,000	2,900
3.5 m	4,200	4,200	2,300	4,200	4,200	2,150	3,000	3,000	2,150
4.0 m				3,700	3,350	1,750	3,000	3,000	1,750
4.15m	3,550	3,250	1,650						
4.5 m				3,300	2,700	1,350	3,000	2,700	1,350
4.6 m				3,200	2,600	1,300	3,000	2,600	1,300
5.0 m				2,900	2,200	1,100	2,700	2,200	1,100
6.0 m				2,200	1,600	750	2,200	1,600	750
7.0 m							1,800	1,250	500
7.03m				1,750	1,150	500			
8.0 m							1,400	950	350
9.0 m							1,150	750	200
9.91m							1,000	600	130

C \ A \ B	13.04m		15.92m	
	Full	Mid.	Full	Mid.
2.9 m and below	3,000	3,000		
3.5 m	3,000	3,000	2,600	2,600
4.0 m	3,000	3,000	2,600	2,600
4.5 m	3,000	2,700	2,600	2,600
4.6 m	2,900	2,600	2,600	2,600
5.0 m	2,600	2,200	2,600	2,200
6.0 m	2,000	1,600	2,000	1,600
7.0 m	1,700	1,250	1,650	1,250
8.0 m	1,400	950	1,400	950
9.0 m	1,150	750	1,150	750
10.0 m	1,000	600	1,000	600
11.0 m	900	500	900	500
12.0 m	750	450	750	450
12.7 m	650	400		
13.0 m			650	400
14.0 m			550	350
15.67m			450	250

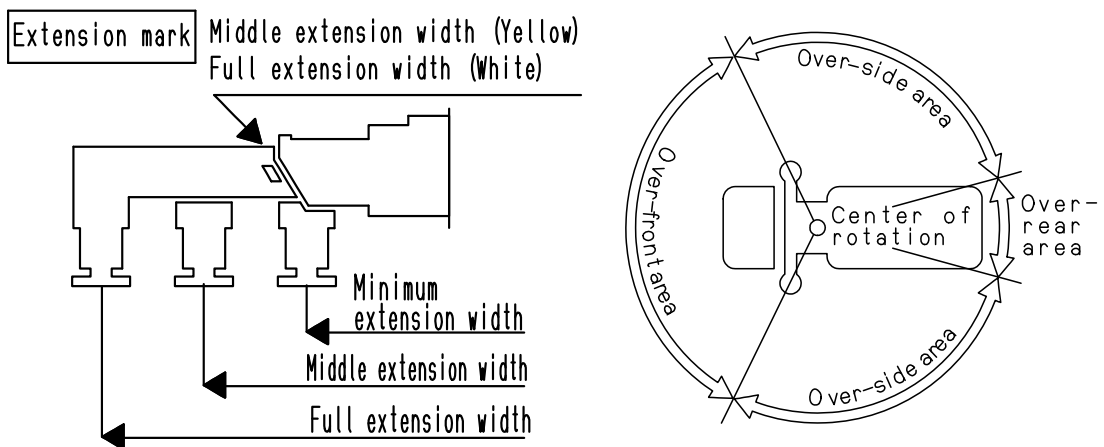
A : Boom Length
 B : Outrigger extension width
 C : Load radius

NOTES :

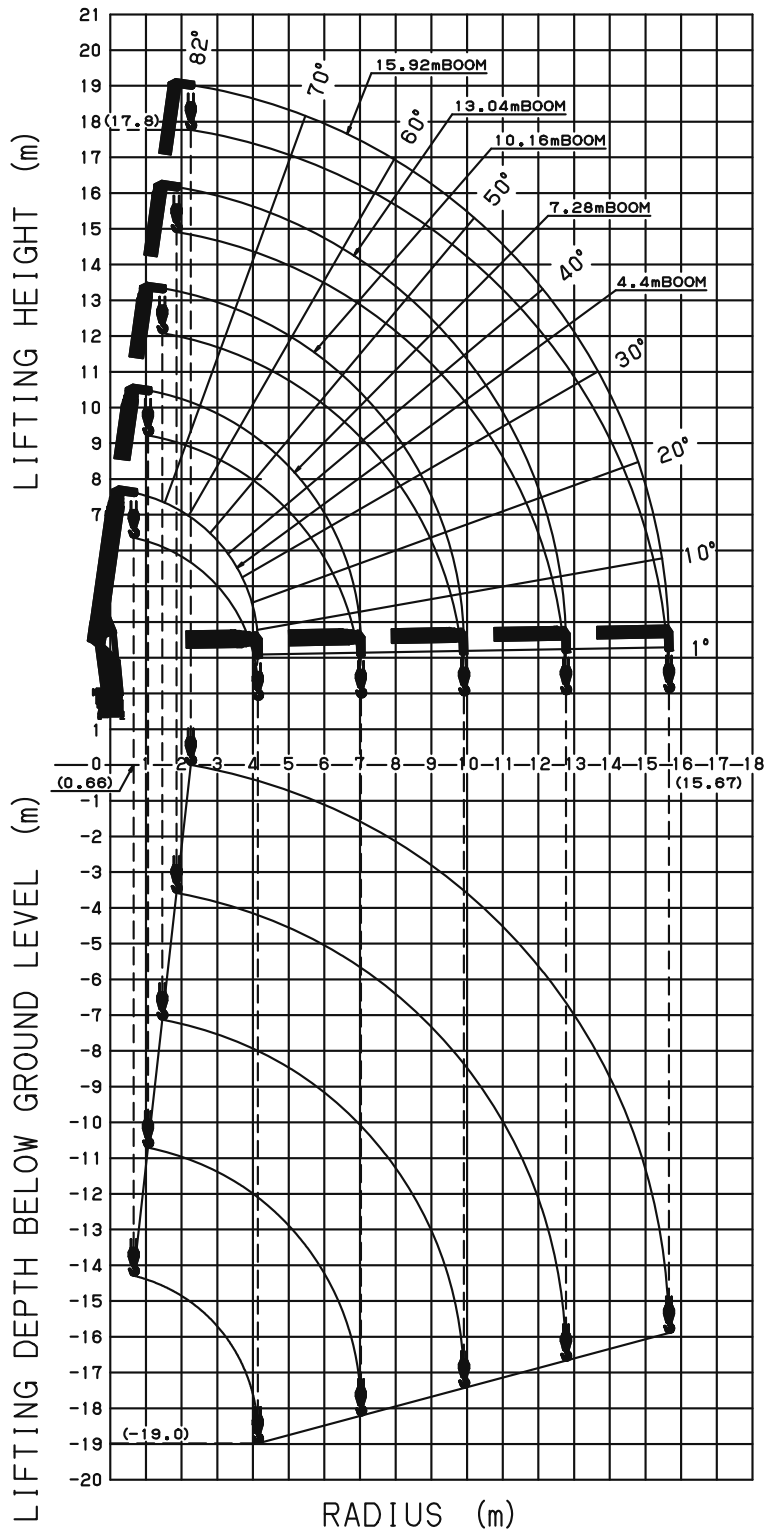
1. Empty Chassis Rated Capacities in these tables depend on condition that crane is set level on firm level ground. Those above bold lines are based on crane strength and those below, on crane stability.
2. The mass of hook block (90kg), slings and all similarly used load handling devices must be added to the mass of load.
3. For boom lengths not shown, use the rated lifting capacity of next longer boom.
4. When the boom length is 13.04m, a half section of the ◻ mark on lateral face of the 4th boom section is exposed out of the 3rd boom section.
5. Standard number of part lines for Max lifting load is as shown below.

Max. lifting load	8,200kg	6,000kg or less
No. of part lines	6	4

6. For boom length longer than 10.16m, extend outriggers to full or middle extension width.
7. Empty Chassis Rated Capacities are shown for over-side areas and over-rear area. These capacities for over-front area may be lowered depending on the types of chassis.
8. Outrigger extension width means the outrigger beam position under the boom which may be the minimum or extended to the middle or the full extension irrespective of the opposite outrigger beam position and the both sides of jacks are properly extended.



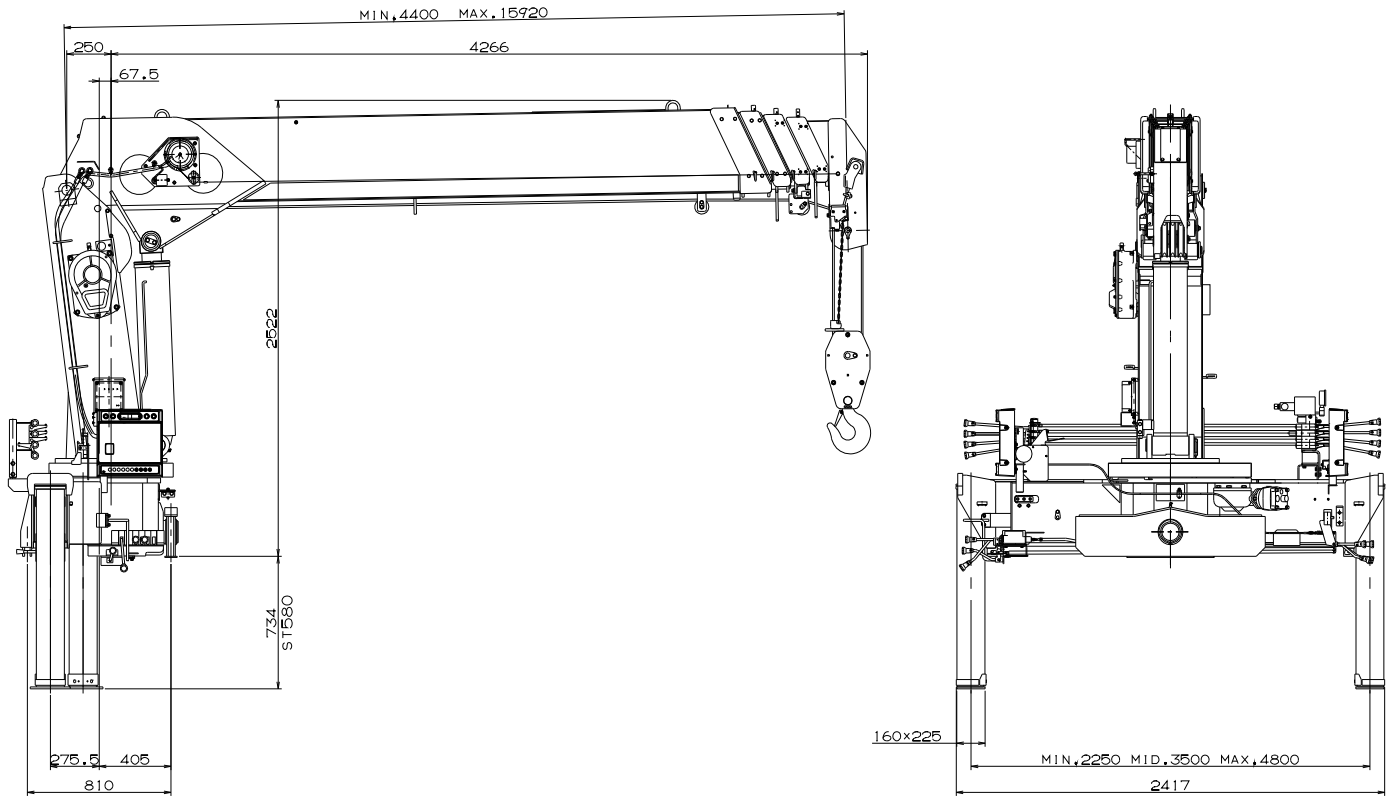
WORKING RANGE



NOTE:

The above lifting heights and boom angles are based on a straight (unladen) boom, and allowance should be made for boom deflection obtained under laden conditions.

DIMENSIONS



GENERAL DATA FOR SUITABLE TRUCKS

- Gross vehicle mass (including crane mass) ----- 20,000 to 25,000kg
- P.T.O. torque ----- 205N·m {20.9kgf·m} min.
- P.T.O. revolution ----- Approx. 350 to 1,700min⁻¹ {rpm}
- Width for crane mounting ----- Approx. 1,115 mm min.
- Frame ----- Weight distribution and frame strength should be calculated for each truck
- Frame width range (inside to outside) ----- Approx. 576 to 953mm
- Frame height (ground to frame top) ----- Approx. 1,055mm max.

Height of crane mounting base can be changed by combination of jack floats and crane bases