TADANO

SPEC. SHEET No.TM-55Z-2-03665/EX-01
DATE October, 2019

TADANO CARGO CRANE

MODEL : TM-ZE555SLH

CRANE SPECIFICATIONS

CRANE CAPACITY — 5,050 kg at 2.5 m (5-part line)

BOOM — Five-sectioned, fully powered partly synchronized telescoping boom of heptagonal box construction

- Retracted length ----------3.77 m
- Extended length ----------13.34 m
- Extending speed --------- 9.57 m / 25 s
- Elevation ---------- Elevated by a double-acting hydraulic cylinder
- Elevating speed ---------- 1° to 78° / 12 s
- Boom point ---------- 3 sheaves

WINCH — Hydraulic motor driven Spur gear speed reduction, provided with mechanical brake and cable follower

- Single line pull ---------- 9.90 kN {1,010 kgf}
- Single line speed --------- 66 m/min (at 4th layer)
- Wire rope
  - Diameter x length --- 8 mm x 97 m
  - Breaking strength --- 50.1 kN {5.1 tf}
  - Construction ---------- 7 x 7 + 6 x WS(26)
- Hook block ---------- 2 sheaves

HOOK STOWING DEVICE — Mechanically stowed beneath boom top portion

SLEWING — Hydraulic motor driven Worm gear speed reduction
Continuous 360° full circle slewing on ball bearing slew ring
Automatic slewing lock

- Slewing 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. 2,170 mm
Mid. 2,650 mm
Max.3,400 mm

HYDRAULICS
Hydraulic pump ---------- Single gear pump
Hydraulic motors ---------- Axial piston type for winch
Axial piston type for slewing
Control valves ---------- Multiple control valves with integral safety valve
Oil tank capacity ---------- approx. 48 L

SAFETY DEVICES
Load meter
Load indicator
Over-winding alarm
Anti-two-block device
Hook safety latch
Hydraulic safety valves, check valves and holding valves
Level gauge
Outrigger float lowering preventer
Outrigger extention coordinator for leveling

CRANE MASS — Approx. 2,300 kg (includes standardized mounting parts)

OPTIONAL EQUIPMENT — Loading winch (provided with 4,000kg/ 8,000kg hooks)
Single line pull ---------- 39.2kN{4,000 kgf}
Single line speed ---------- 7.7 m/min (at 1st layer)
Wire rope
Diameter x length -------- 14 mm x 30 m
Breaking strength -------- 103.9 kN{10.6 tf}
Construction ---------- 6 x 37
Hook block ---------- Single sheave (8,000kg hook)

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

RATED LIFTING CAPACITIES IN KILOGRAMS

Crane Strength Rated Capacities

Load Radius	3.77m Boom	Load Radius	6.21 m Boom	Load Radius	8.59 m Boom	Load Radius	10.97 m Boom	Load Radius	13.34 m Boom
2.5 m and below	5,050	2.5 m and below	4,050	2.5 m and below	3,130	4.0 m and below	2,230	5.0 m and below	1,430
2.8 m	4,050	2.8 m	4,050	3.0 m	3,130	4.5 m	2,180	6.0 m	1,330
3.55m	3,150	3.6 m	3,130	3.6 m	3,130	5.0 m	2,030	7.0 m	1,230
		3.9 m	2,930	3.9 m	2,930	6.0 m	1,730	8.0 m	1,080
		4.5 m	2,530	4.5 m	2,530	7.0 m	1,430	9.0 m	980
		5.0 m	2,230	5.0 m	2,230	8.0 m	1,230	10.0 m	880
		5.5 m	1,980	5.5 m	1,980	9.0 m	1,080	11.0 m	800
		5.99m	1,780	6.0 m	1,780	10.0 m	980	12.0 m	730
				6.5 m	1,630	10.75m	900	13.12m	650
				7.0 m	1,480				
				7.5 m	1,380				
				8.37m	1,180				

NOTES : 1. The mass of hook block (45kg), slings and all similarly used load lifting devices must be added to the mass of the load.

2. The above numerical values of total rated loads are based on crane strength only. The total rated loads based on stability may lower than those in the above table depending on the loading conditions and the types of the chassis.

Empty Chassis Rated Capacities

Table A

Load Radius	3.77 m Boom		Load Radius	6.21 m Boom		Load Radius	8.59 m Boom		Load Radius	10.97 m Boom	Load Radius	13.34 m Boom
	Extension width of outriggers			Extension width of outriggers			Extension width of outriggers			Extension width of outriggers		Extension width of outriggers
	Maximum	Minimum		Maximum	Minimum		Maximum	Minimum		Maximum		Maximum
2.5 m and below	5,050	2,430	2.6 m and below	4,050	2,430	2.6 m and below	3,130	2,430	4.0 m and below	2,080	5.0 m and below	1,430
2.8 m	4,050	2,130	2.8 m	4,050	2,130	3.4 m	3,030	1,530	4.5 m	1,730	6.0 m	1,080
3.55m	2,830	1,380	3.6 m	2,730	1,380	3.6 m	2,730	1,380	5.0 m	1,480	7.0 m	830
			3.9 m	2,180	1,180	3.9 m	2,180	1,180	6.0 m	1,080	8.0 m	630
			4.5 m	1,730	930	4.5 m	1,730	930	7.0 m	830	9.0 m	550
			5.0 m	1,480	730	5.0 m	1,480	730	8.0 m	630	10.0m	480
			5.5 m	1,280	630	5.5 m	1,280	630	9.0 m	550	11.0m	400
			5.99m	1,080	500	6.0 m	1,080	500	10.0m	480	12.0m	380
						6.5 m	980	480	10.75m	430	13.12m	300
						7.0 m	830	400				
						7.5 m	730	350				
						8.37m	600	250				

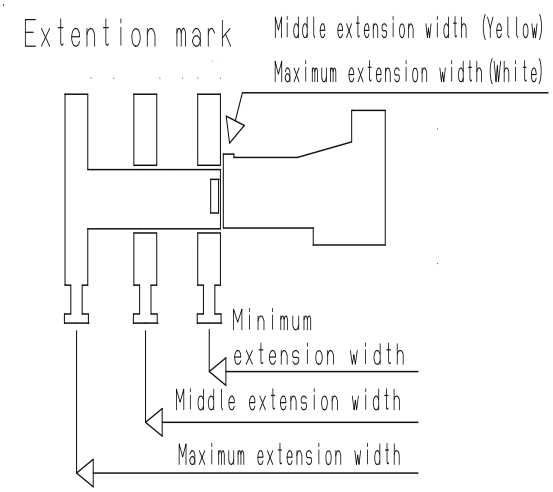
Table B

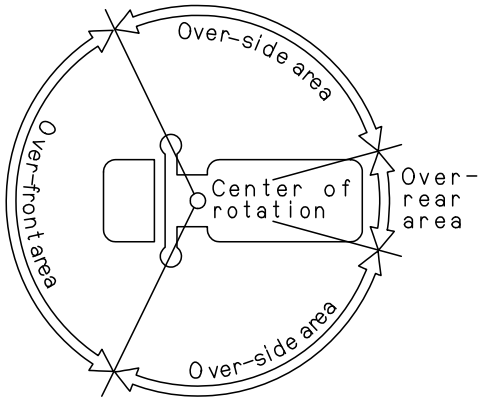
Load Radius	3.77m Boom		Load Radius	6.21 m Boom		Load Radius	8.59 m Boom		Load Radius	10.97 m Boom	Load Radius	13.34 m Boom
	Extension width of outriggers			Extension width of outriggers			Extension width of outriggers			Extension width of outriggers		Extension width of outriggers
	Maximum	Minimum		Maximum	Minimum		Maximum	Minimum		Maximum		Maximum
2.5 m and below	5,050	3,130	2.5 m and below	4,050	3,130	2.5 m and below	3,130	3,130	4.0 m and below	2,230	5.0 m and below	1,430
2.8 m	4,050	2,530	2.8 m	4,050	2,530	3.0 m	3,130	2,280	4.5 m	2,130	6.0 m	1,280
3.55m	3,150	1,680	3.6 m	3,130	1,680	3.6 m	3,130	1,680	5.0 m	1,780	7.0 m	1,030
			3.9 m	2,730	1,430	3.9 m	2,730	1,430	6.0 m	1,280	8.0 m	780
			4.5 m	2,130	1,130	4.5 m	2,130	1,130	7.0 m	1,030	9.0 m	730
			5.0 m	1,780	930	5.0 m	1,780	930	8.0 m	780	10.0m	630
			5.5 m	1,530	780	5.5 m	1,530	780	9.0 m	730	11.0m	500
			5.99m	1,350	650	6.0 m	1,280	650	10.0m	630	12.0m	480
						6.5 m	1,180	630	10.75m	550	13.12m	400
						7.0 m	1,030	530				
						7.5 m	930	480				
						8.37m	780	350				

Table D

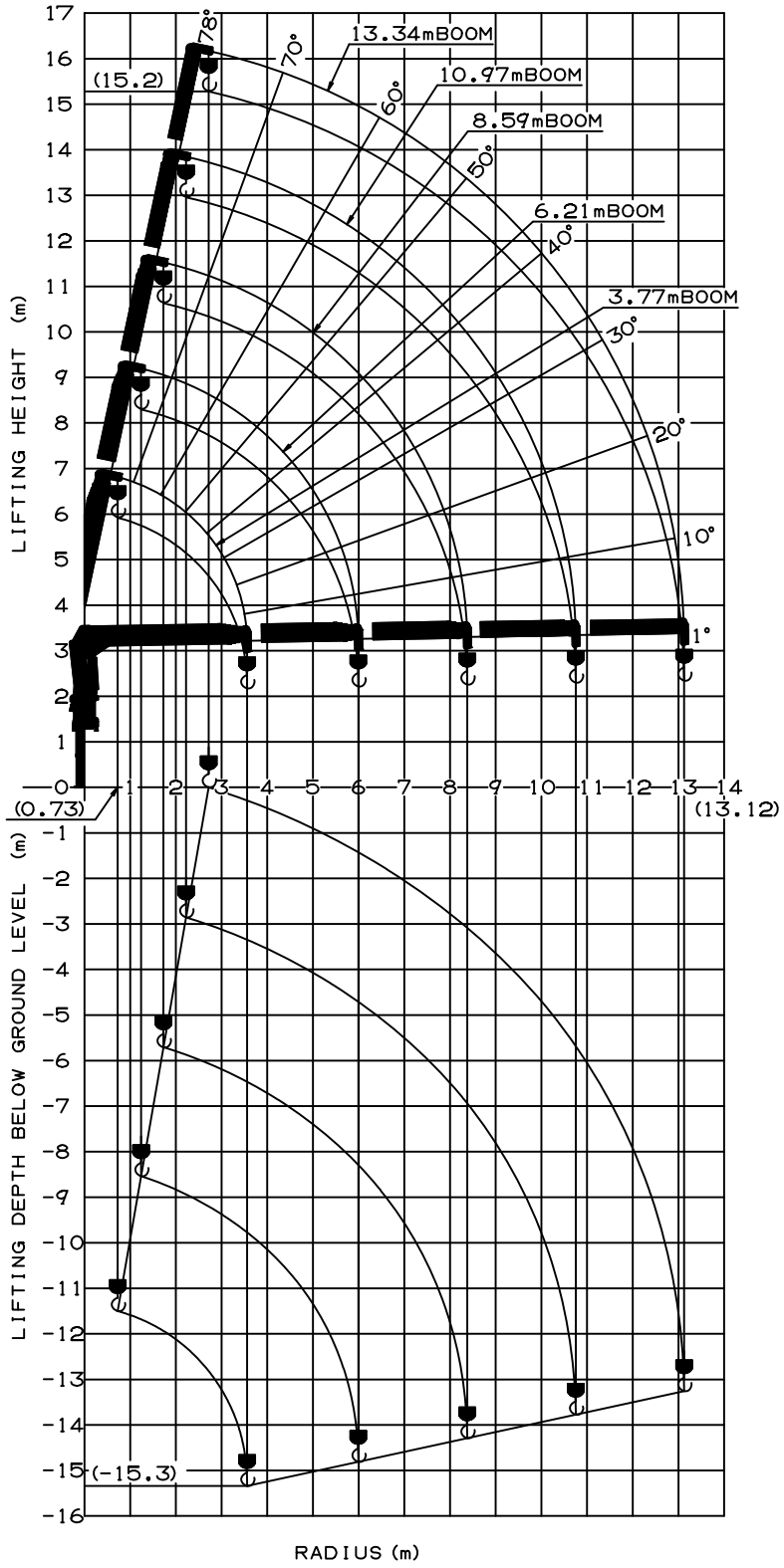
Load Radius	3.77 m Boom		Load Radius	6.21 m Boom		Load Radius	8.59 m Boom		Load Radius	10.97 m Boom	Load Radius	13.34 m Boom
	Extension width of outriggers			Extension width of outriggers			Extension width of outriggers			Extension width of outriggers		Extension width of outriggers
	Maximum	Minimum		Maximum	Minimum		Maximum	Minimum		Maximum		Maximum
2.5 m and below	5,050	3,380	2.5 m and below	4,050	3,380	2.5 m and below	3,130	3,130	4.0 m and below	2,230	5.0 m and below	1,430
2.8 m	4,050	2,730	2.8 m	4,050	2,730	3.0 m	3,130	2,580	4.5 m	2,180	6.0 m	1,330
3.55m	3,150	1,880	3.6 m	3,130	1,880	3.6 m	3,130	1,880	5.0 m	2,030	7.0 m	1,230
			3.9 m	2,930	1,630	3.9 m	2,930	1,630	6.0 m	1,730	8.0 m	1,080
			4.5 m	2,530	1,330	4.5 m	2,530	1,330	7.0 m	1,430	9.0 m	980
			5.0 m	2,230	1,080	5.0 m	2,230	1,080	8.0 m	1,230	10.0m	880
			5.5 m	1,980	930	5.5 m	1,980	930	9.0 m	1,080	11.0m	800
			5.99 m	1,780	780	6.0 m	1,780	780	10.0m	980	12.0m	730
						6.5 m	1,630	700	10.75m	900	13.12m	650
						7.0 m	1,480	630				
						7.5 m	1,380	550				
						8.37m	1,180	430				

NOTES : 1. Empty Chassis Rated Capacities in these tables depend on condition that crane is set level on firm level ground.
2. The mass of the hook (45 kg), slings and all similarly used load lifting devices must be added to the mass of the load.
3. For boom lengths not shown, use the rated lifting capacity of next longer boom.
4. When outriggers are extended to middle extension width, use the rated lifting capacities for outriggers are extended to minimum extension width.
5. For boom lengths longer than 8.59m, extend outriggers to maximum.
6. 10.97m boom means ▱ mark on 4th boom section side plate is half seen.
7. Empty Chassis Rated Capacities table A, B and D depend on the types of chassis.
8. Empty Chassis Rated Capacities are shown for over - side areas and over-rear area. These capacities for over - front area may lowered depending on the types of chassis.
9. Never operate the crane and set up the outriggers, if the carrier inclines.





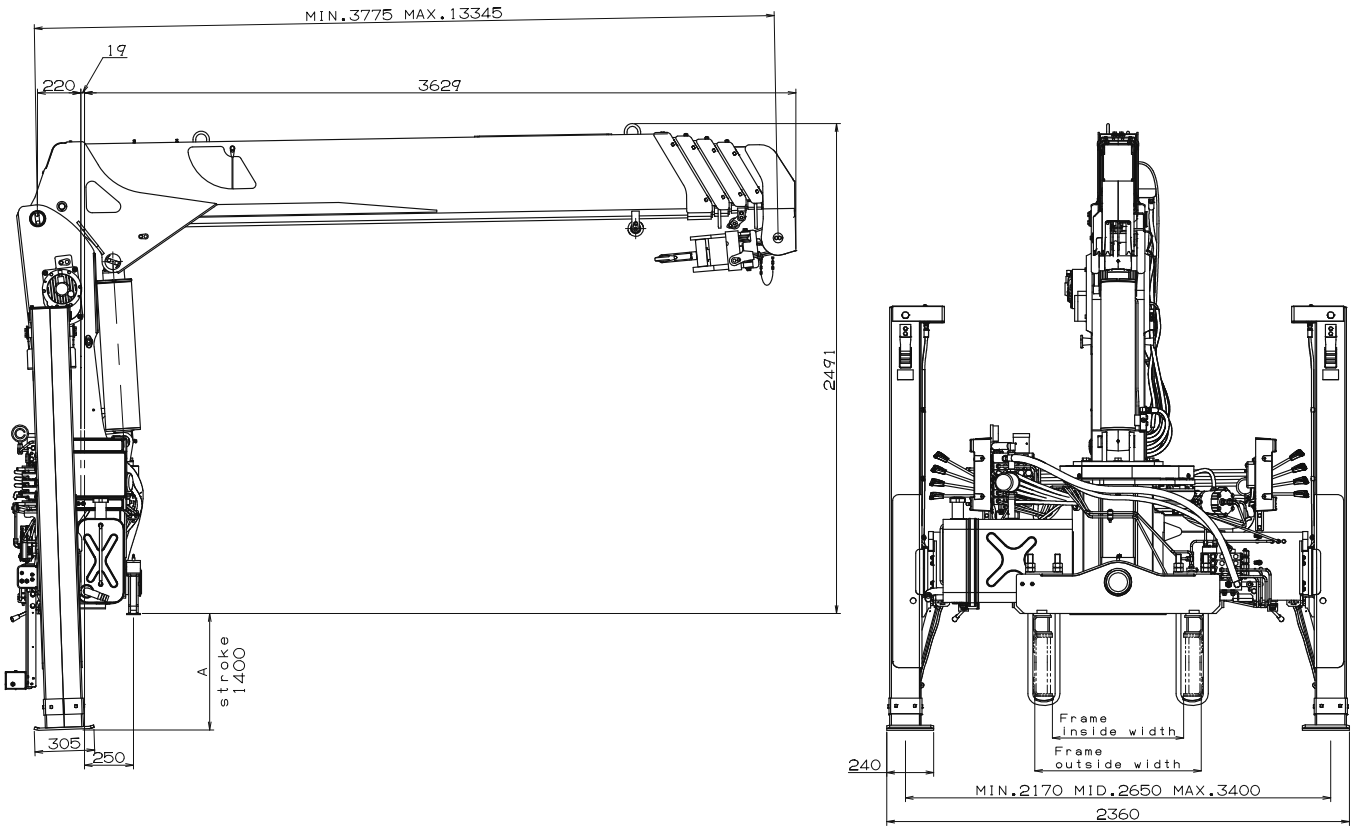
WORKING RANGE



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

[TM-ZE555SLH]



A= 590mm or 750mm
(This dimension depends on jack floats applied.)

GENERAL DATA FOR SUITABLE TRUCKS

Gross vehicle mass (including crane mass) -------- 15,000 to 25,000 kg
P.T.O. torque ---------- 157 N-m{16 kgf-m} min.
P.T.O. revolution ---------- Approx. 270 to 2,800 min^{-1}{rpm}
Width for crane mounting ---------- Approx. 750 mm min.
Frame ---------- Weight distribution and frame strength should be calculated for each truck
Frame width range (inside to outside) ---------- Approx. 610 to 960 mm
Frame height (ground to frame top) ---------- Approx. 1,235 mm max.
(Height of crane mounting base can be changed by combination of jack floats and crane bases)