

TADANO CARGO CRANE

# MODEL: TM-ZE554SLH

## CRANE SPECIFICATIONS

CRANE CAPACITY	5,050 kg at 2.5 m (5-part lines)							
BOOM	Four-sectioned, fully powered partly synchronized telescoping boom							
	of heptagonal box construction.							
	Retracted length 3.55 m							
	Extended length 10.8 m							
	Extending speed 7.25 m / 21 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 82 m							
	Breaking strength 50.1 kN{5.1 tf}							
	Construction7 x 7 + 6 x WS(26)							
	Hook block 2 sheaves							
HOOK STOWING DEVICE	Mechanically stowed beneath boom top portion							
<u>SLEWING</u>	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 <sup>-1</sup> {rpm}							

OUTRIGGERS	Hydraulically extended sliders and hydraulically extended jacks Integral with crane frame Power up and down Extension width Min. 2,170 mm
	Mid. 2,650 mm
	Max. 3,400 mm
<u>HYDRAULICS</u>	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. 2,120 kg (includes standardized mounting parts)
<u>OPTIONAL EQUIPMENT</u>	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

Load Radius	3.55 m Boom	Load Radius	5.99 m Boom	Load Radius	8.39 m Boom	Load Radius	10.8 m Boom
2.5 m and below	5,050	2.5 m and below	4,050	2.5 m and below	3,130	3.5 m and below	2,130
2.9 m	4,050	2.9 m	4,050	3.0 m	3,130	4.5 m	2,130
3.33 m	3,550	3.7 m	3,130	3.7 m	3,130	5.0 m	2,030
		4.0 m	2,930	4.0 m	2,930	6.0 m	1,780
		4.5 m	2,580	4.5 m	2,580	7.0 m	1,530
		5.0 m	2,330	5.0 m	2,330	8.0 m	1,380
		5.77 m	2,030	5.5 m	2,080	9.0 m	1,200
				6.0 m	1,930	10.0 m	1,050
				6.5 m	1,780	10.58m	1,000
				7.0 m	1,630		
				7.5 m	1,480		
				8.17m	1,380		

#### Crane Strength Rated Capacities

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

Tab	le A			-							
	3.55 m	Boom		5.99 m Boom			8.39 m Boom			10.8 m l	Boom
Load Radius		on width iggers	Load Radius	Extension width of outriggers		Load Radius		Extension width of outriggers			on width iggers
	Maximum	Minimum		Maximum	Minimum		Maximum	Minimum		Maximum	Minimum
2.5 m and below	5,050	2,480	2.6 m and below	4,050	2,480	2.6m and below	3,130	2,480	3.5 m and below	2,130	1,480
2.8 m	4,050	2,130	2.8 m	4,050	2,130	3.0 m	3,130	1,880	4.0 m	2,130	1,180
3.33m	3,150	1,630	3.6 m	2,730	1,430	3.6 m	2,730	1,430	4.5 m	1,830	930
			4.0 m	2,130	1,180	4.0 m	2,130	1,180	5.0 m	1,530	780
			4.5 m	1,830	930	4.5 m	1,830	930	6.0 m	1,130	580
			5.0 m	1,530	830	5.0 m	1,530	830	7.0 m	930	450
			5.77m	1,230	630	5.5 m	1,330	680	8.0 m	730	380
						6.0 m	1,130	580	9.0 m	630	330
						6.5 m	1,080	550	10.0 m	530	280
						7.0 m	930	480	10.58m	480	250
						7.5 m	830	430			
						8.17m	730	380			

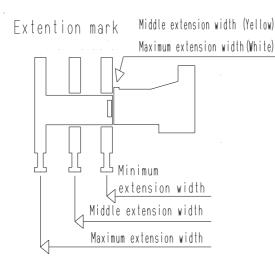
#### **Empty Chassis Rated Capacities**

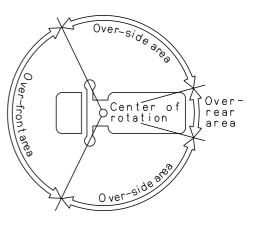
Tabl	le B										
	3.55 m	Boom	5.99 m Boom			8.39 m Boom			10.8 m Boom		
Load	Extensio	on width	Load Extension width			Load	Extension width		Load	Extension width	
Radius	of outr	iggers	Radius	of outr	iggers	Radius	of outriggers		Radius	of outr	iggers
	Maximum	Minimum		Maximum	Minimum		Maximum	Minimum		Maximum	Minimum
2.5 m		0 700	2.3 m	4.050	0.400	2.3m	0.400	0.400	3.5 m	0.400	4 700
and below	5,050	2,730	and below	4,050	3,130	and below	3,130	3,130	and below	2,130	1,730
2.9 m	4,050	2,380	2.9 m	4,050	2,380	3.0 m	3,130	2,280	4.0 m	2,130	1,430
3.33m	3,550	1,930	3.7 m	3,130	1,580	3.7 m	2,930	1,580	4.5 m	2,130	1,180
0.0011	0,000	1,300	4.0 m	2,680	1,430	4.0 m	2,680	1,300	5.0 m	1,780	930
					-	4.0 m 4.5 m	2,080		6.0 m	1,780	730
			4.5 m	2,230	1,180		-	1,180		,	
			5.0 m	1,880	930	5.0 m	1,880	980	7.0 m	1,130	580
			5.77m	1,480	780	5.5 m	1,580	830	8.0 m	900	480
						6.0 m	1,430	730	9.0 m	780	430
						6.5 m	1,280	680	10.0 m	680	350
						7.0 m	1,130	630	10.58m	630	330
						7.5 m	1,030	530			
						8.17m	880	480			

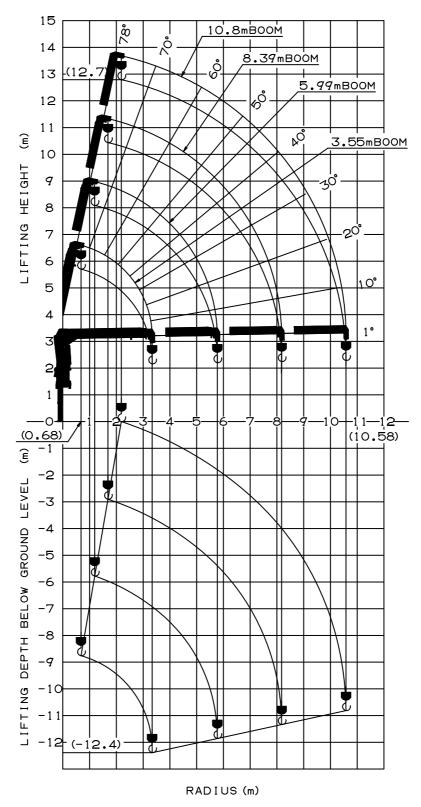
### Table D

	3.55 m	Boom	5.99 m Boom		Boom	8.39 m Boom			10.8 m Boom		
Load	Extension width		Load	Extension width		Load	Extension width		Load	Extension width	
Radius	of outr	iggers	Radius of out	iggers Radius		of outriggers		Radius	of outriggers		
	Maximum	Minimum		Maximum	Minimum		Maximum	Minimum		Maximum	Minimum
2.5 m and below	5,050	3,380	2.5 m and below	4,050	3,380	2.5m and below	3,130	3,130	3.5 m and below	2,130	1,930
2.9 m	4,050	2,680	2.9 m	4,050	2,680	3.0 m	3,130	2,630	4.5 m	2,130	1,330
3.33m	3,550	2,230	3.7 m	3,130	1,870	3.7 m	3,130	1,870	5.0 m	2,030	1,080
			4.0 m	2,930	1,630	4.0 m	2,930	1,630	6.0 m	1,780	780
			4.5 m	2,580	1,380	4.5 m	2,580	1,380	7.0 m	1,530	730
			5.0 m	2,330	1,130	5.0 m	2,330	1,130	8.0 m	1,380	550
			5.77m	2,030	930	5.5 m	2,080	930	9.0 m	1,200	500
						6.0 m	1,930	830	10.0m	1,050	430
						6.5 m	1,780	780	10.58m	1,000	380
						7.0 m	1,630	730			
						7.5 m	1,480	650			
						8.17m	1,380	550			

- 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. 8.39m boom means *mark* on 3rd boom section side plate is half seen.
  - 6. Empty Chassis Rated Capacities table A, B and D depend on the types of chassis.
  - 7. 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.
  - 8. Never operate the crane and set up the outriggers, if the carrier inclines.

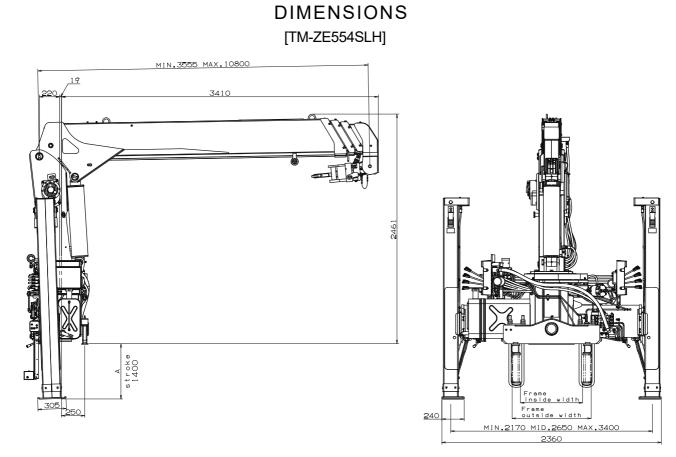






WORKING RANGE

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.



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 <sup>-1</sup> {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)