

TRUCK CRANE

TS-55MS

JAPANESE SPECIFICATIONS

TS

OUTLINE	SPEC. NO.
Max. total rated load 2.9 ton	TS-55M-1-00001

Control No. JA-02

TS-55MS

CRANE SPECIFICATIONS

CRANE CAPACITY

5.6m Boom	2,900kg	at 3.5m	(2 part-line)
9.6m Boom	2,900kg	at 3.5m	(2 part-line)
13.6m Boom	2,900kg	at 3.5m	(2 part-line)
17.6m Boom	1,700kg	at 4.5m	(2 part-line)
Tilt head	1,400kg	at 6,0m	(1 part-line)

MAX. LIFTING HEIGHT

Boom	17.8m
Tilt head	18.1m

MAX. WORKING RADIUS

Boom	17.0m
Tilt head	17.4m

BOOM LENGTH

5.6m – 17.6m

BOOM EXTENSION

12m

BOOM EXTENSION SPEED

12m / 29s

MAIN WINCH SINGLE LINE SPEED

High range:	60m/min	(3rd layer)
Low range:	26m/min	(3rd layer)

MAIN WINCH HOOK SPEED

High range:	30m/min	(2 part-line)
Low range:	13m/min	(2 part-line)
High range:	60m/min	(1 part-line)
Low range:	26m/min	(1 part-line)

BOOM ELEVATION ANGLE

-3° - 80°

BOOM ELEVATION SPEED

-3° - 80° / 25s

SWING ANGLE

360° continue

SWING SPEED

2.5rpm

WIRE ROPE

10mm × 65m (Diameter × Length)
Spin-resistant wire rope

BOOM

4-section fully hydraulically synchronized telescoping boom of box construction.

BOOM EXTENSION

1 double-acting hydraulic cylinder
2 wire rope type telescoping device

HOIST

Hydraulic motor driven planetary gear reducer
With free-fall device.
Automatic brake (with foot brake for free-fall device)
1 single winch

BOOM ELEVATION

1 double-acting hydraulic cylinders

SWING

Hydraulic motor driven planetary gear reducer
Swing bearing
Automatic brake

OUTRIGGERS

Fully hydraulic H type
Full extended width 3.62m
Middle extended width 2.8m

MAX. OUTRIGGER LOAD

5.7t

HYDRAULIC PUMPS

3 gear pumps

HYDRAULIC OIL TANK CAPACITY

91 liters

SAFETY DEVICES

Automatic moment limiter (AML)
With working range limiting function
Working area control device
Over-winding cutout
Level gauge
Hook safety latch
Hydraulic safety valve
Telescopic counterbalance valve
Elevation counterbalance valve
Jack pilot check valve

EQUIPMENTS

Crane cab heater
Radio
Fan
Boom angle indicator

GENERAL DATA

MOUNTING CARRIERS

(representative examples)

MITSUBISHI	FE335BHZ
ISUZU	NKR58E2N

DIMENSIONS

(may differ according to type of mounting carrier)

Overall length	6,580mm
Overall width	1,885mm
Overall height	Approx. 2,660mm

WEIGHT

Gross vehicle weight Approx. 6,250kg

TOTAL RATED LOADS

Unit:ton

· Outriggers fully extended (Over the Rear · Over the Sides)					
A B	5.6 m	9.6 m	13.6 m	17.6 m	Tilt head (6.0m~ 18.0m)
2.0 m	2.90	2.90	2.90		
2.5 m	2.90	2.90	2.90		
3.0 m	2.90	2.90	2.90	1.70	1.40
3.5 m	2.90	2.90	2.90	1.70	1.40
4.0 m	2.65	2.70	2.70	1.70	1.40
4.5 m	2.15	2.30	2.30	1.70	1.40
5.0 m	1.80	1.95	1.95	1.60	1.40
5.5 m		1.65	1.70	1.50	1.40
6.0 m		1.45	1.45	1.45	1.40
7.0 m		1.10	1.15	1.15	1.10
8.0 m		0.90	0.90	0.92	0.90
9.0 m		0.70	0.75	0.76	0.70
10.0 m			0.60	0.62	0.60
11.0 m			0.50	0.52	0.50
12.0 m			0.40	0.43	0.40
13.0 m			0.35	0.36	0.35
14.0 m				0.30	0.30
15.0 m				0.25	0.25
16.0 m				0.20	0.20
17.0 m				0.15	0.15
17.4 m					0.13

A = Boom length B = Working radius

Unit:ton

· Outriggers middle extended (360°) · Outriggers fully extended (Over the Front)					
A \ B	5.6 m	9.6 m	13.6 m	17.6 m	Tilt head (6.0m~ 18.0m)
2.0 m	2.90	2.90	2.90		
2.5 m	2.90	2.90	2.90		
3.0 m	2.90	2.90	2.90	1.70	1.40
3.5 m	2.55	2.60	2.70	1.70	1.40
4.0 m	1.95	2.00	2.10	1.60	1.40
4.5 m	1.55	1.60	1.70	1.50	1.40
5.0 m	1.25	1.30	1.40	1.40	1.25
5.5 m		1.10	1.15	1.20	1.10
6.0 m		0.90	0.95	1.00	0.90
7.0 m		0.60	0.70	0.70	0.60
8.0 m		0.45	0.50	0.50	0.45
9.0 m		0.30	0.35	0.40	0.30
10.0 m			0.25	0.30	0.25
11.0 m			0.20	0.20	0.20
12.0 m			0.15	0.15	0.15
13.0 m				0.10	0.10

A = Boom length B = Working radius

NOTES:

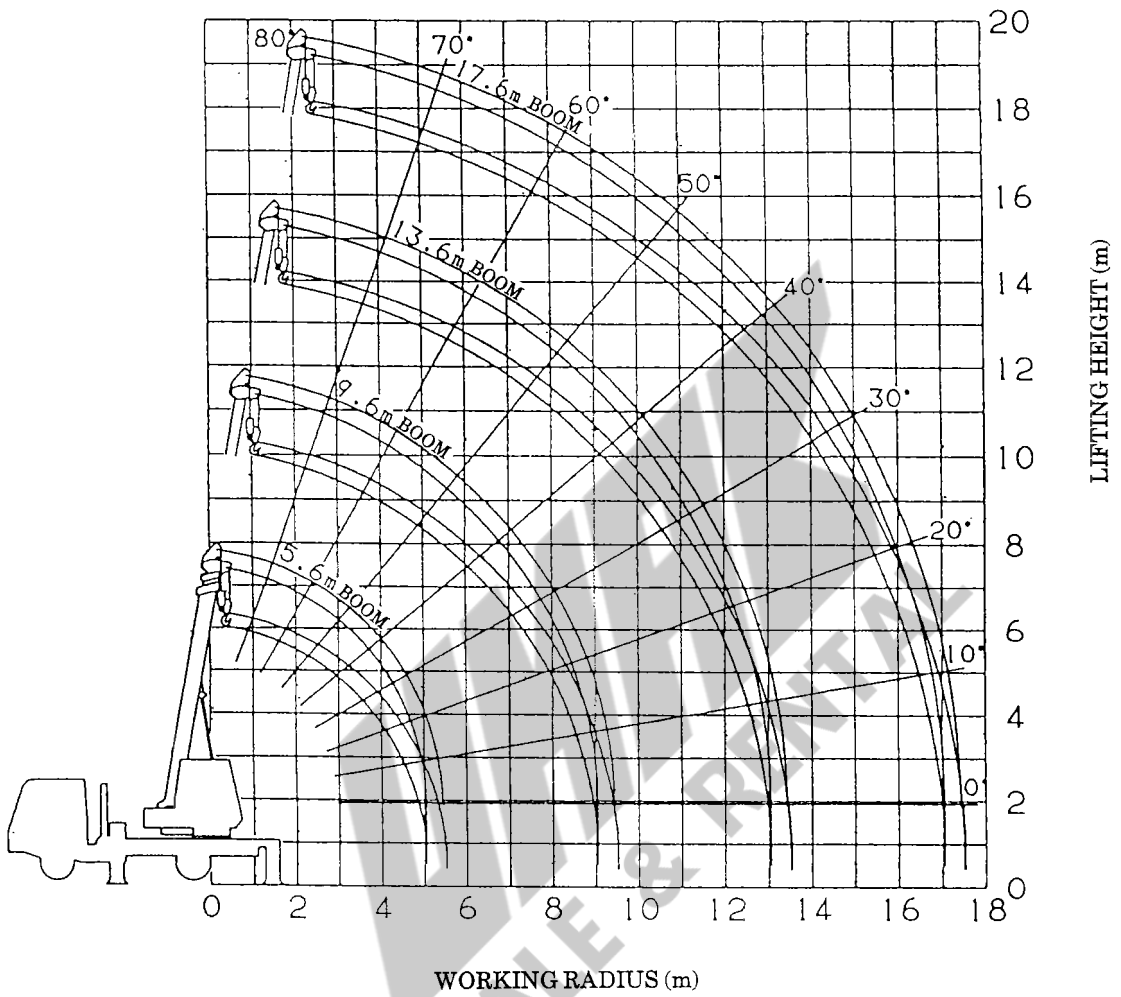
1. The total rated loads shown are for the case when the outriggers are set horizontally on firm ground. The values above the bold lines are based on the crane strength while those below are based on the crane stability.
2. The weights of slings and hooks (main winch hook :55kg, auxiliary winch hook: 20kg) are included in the total rated loads shown.
3. The total rated load is based on the actual working radius including the deflection of the boom.
4. Always use the auxiliary winding hook (1 part-line) in the tilt head condition.
5. The chart below shows the standard number of part lines for each boom length. The load per line should not exceed 1.45t.

A	5.6m	9.6m	13.6m	17.6m	Tilt head
H	2	2	2	2	1

A = Boom length H = No. of part-line

6. As a rule, free-fall operations should be performed only when lowering the hook alone. If a hoisted load must be lowered by free-fall operation, the load must be kept below 1/5th of the total rated load per line must be 0.29t or less and sudden braking operations must be avoided.

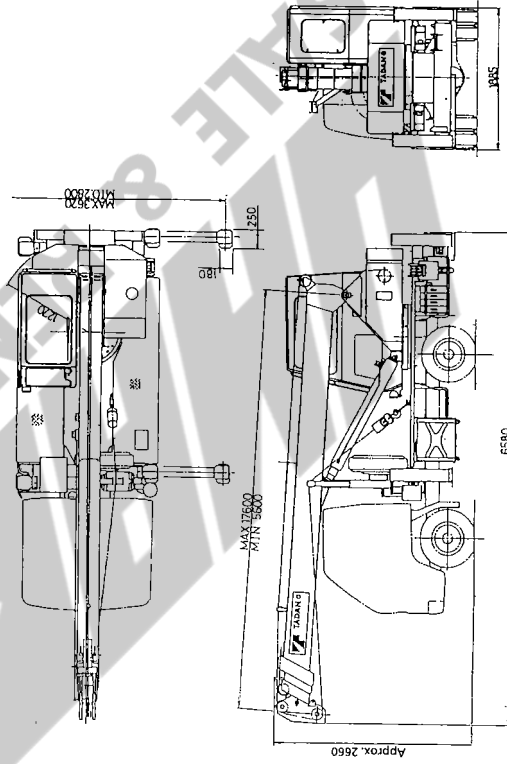
WORKING RADIUS - LIFTING HEIGHT



NOTES:

1. The deflection of the boom is not incorporated in the figure above.
2. The above chart is for when the outrigger is fully extended (over the rear and over the side).

DIMENSIONS (1/100)



(NOTE) May differ according to type of mounting carrier.