

**25TON**

**TR**

# ROUGH TERRAIN CRANE



**일진크레인**

TEL : 02) 830-7000

FAX : 02) 830-7003

**TR-250M**

*JAPANESE SPECIFICATIONS*



OUTLINE	SPEC. NO.
4-section Boom, 2-stage Power Tilt Jib	TR-250M-5-00107

Control No. JA-03

## TR-250M

### CRANE SPECIFICATIONS

#### CRANE CAPACITY

9.5m Boom	25,000kg	at 3.5m	( 8 part-line)
16.5m Boom	19,000kg	at 4.0m	( 6 part-line)
23.5m Boom	12,500kg	at 5.0m	( 4 part-line)
30.5m Boom	7,000kg	at 8.0m	( 4 part-line)
8.0m Jib	3,000kg	at 72°	( 1 part-line)
13.0m Jib	2,000kg	at 76°	( 1 part-line)
single top	3,000kg		( 1 part-line)

#### MAX. LIFTING HEIGHT

Boom	31.3m
Jib	44.2m

#### MAX. WORKING RADIUS

Boom	28.0m
Jib	35.0m

#### BOOM LENGTH

9.5m - 30.5m

#### BOOM EXTENSION

21.0m

#### BOOM EXTENSION SPEED

21.0m / 90s

#### JIB LENGTH

8.0m, 13.0m

#### MAIN WINCH SINGLE LINE SPEED

120m/min (4th layer)

#### MAIN WINCH HOOK SPEED

15.0 m/min (8 part-line)

#### AUXILIARY WINCH SINGLE LINE SPEED

120m/min (4th layer)

#### AUXILIARY WINCH HOOK SPEED

120m/min (1 part-line)

#### BOOM ELEVATION ANGLE

0° - 83°

#### BOOM ELEVATION SPEED

0° - 83° / 43s

#### SWING ANGLE

360° continue

#### SWING SPEED

3.0 rpm

#### WIRE ROPE

Main Winch	16mm X 170m (Diameter X Length)
	Spin-resistant wire rope
Auxiliary Winch	16mm X 95m (Diameter X Length)
	Spin-resistant wire rope

#### BOOM

4-section hydraulically telescoping boom of box construction.  
(stage 2: sequential; stages 3,4: synchronized)

#### BOOM EXTENSION

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

#### JIB

Quick-turn type (2-staged type which stores alongside below the base boom section and extendible from under the boom (with 2nd stage being a pull-out type))  
Hydraulic non-stage offset (5°-45°) type

#### SINGLE TOP

Single sheave. Mounted to main boom head for single line work.

#### HOIST

Driven by hydraulic motor and via spur gear speed reducer. With free-fall device.

(with operation lever lock device for prevention of misoperation)

Automatic brake (with foot brake for free-fall device)

2 single winches

With flow regulator valve with pressure compensation

#### BOOM ELEVATION

1 double-acting hydraulic cylinders

With flow regulator valve with pressure compensation

#### SWING

Hydraulic motor driven planetary gear reducer

Swing bearing

Swing free/lock changeover type

Hand brake

#### OUTRIGGERS

Fully hydraulic H-type (floats mounted integrally)

Slices and jacks each provided with independent operation device.

Full extended width 6.3m

Middle extended width 5.0m, 3.6m

Minimum extended width 2.2m

#### OPERATION METHOD

Hydraulic pilot valve operation

#### MAX. OUTRIGGER LOAD

26.7t

#### HYDRAULIC PUMPS

2 variable piston pumps

2 gear pumps

#### HYDRAULIC OIL TANK CAPACITY

380 liters

#### SAFETY DEVICES

Automatic moment limiter (AML)

Multi-display indication

Over-winding cutout

Working area control device

Outrigger extension width detector

Winch drum lock

Level gauge

Hook safety latch

Hydraulic safety valve

Telescopic counterbalance valve

Elevation counterbalance valve

Power tilt counterbalance valve

Jack pilot check valve

Swing lock

#### EQUIPMENTS

Heat pump type air-conditioner

Hydraulic oil temperature indication lamp

Radio

Oil cooler

Tactile-type winch drum rotation indicator

Operation pedal for elevating operation

Centralized oiling device (carrier)

Television (option)



## CARRIER SPECIFICATIONS

### ENGINE

Model MITSUBISHI 6D16 (with turbo charger)  
 Type 4-cycle, 6-cylinder, direct-injection, water-cooled diesel engine  
 Piston displacement 7,545cc  
 Max. output 220PS at 2,800rpm  
 Max. torque 65.0kg·m at 1,600rpm

### TORQUE CONVERTER

3-element, 1-stage unit (with automatic lock-up mechanism)

### TRANSMISSION

Automatic and manual transmission  
 Power shift type (wet multi-plate clutch)  
 3 forward and 1 reverse speeds (with Hi/Low settings)

### REDUCER

Axle dual-ratio reduction

### DRIVE

2-wheel drive (4×2) / 4-wheel drive (4×4) selection

### FRONT AXLE

Full floating type

### REAR AXLE

Full floating type (with no-spin differential)

### SUSPENSION

Front Parallel leafspring type  
 Rear Parallel leafspring type

### STEERING

Fully hydraulic power steering  
 With reverse steering correction mechanism

### BRAKE SYSTEM

#### Service Brake

Hydro-pneumatic brake  
 Disk brake

#### Parking Brake

Mechanically operated, internal expanding duo-servo shoe type acting on drum at transmission case rear.

#### Auxiliary Brake

Hydrodynamic retarder  
 Electro-pneumatic operated exhaust brake.  
 Auxiliary braking device for operations

### FRAME

Welded box-shaped structure

### ELECTRIC SYSTEM

24V DC, 2 batteries of 12V (120Ah)

### FUEL TANK CAPACITY

300 liters

### TIRES

Front 16.00R25☆☆(OR)  
 Rear 16.00R25☆☆(OR)

### CAB

Two-man type  
 With sun visor and trim  
 Rubber mounted type  
 Fully adjustable foldable seat  
 (with headrest, armrest, seat belt)  
 Adjustable handle (tilt, telescoping)  
 Roof windshield lock warning  
 Intermittent type roof wiper (with washer)

### SAFETY DEVICES

Emergency steering device  
 Spring lock device  
 Rear wheel steering lock device  
 Engine over-run alarm  
 Overshift prevention device  
 Parking brake alarm  
 Powered mirror for right side of boom  
 Monitor TV for left side of boom

## GENERAL DATA

### DIMENSIONS

Overall length	11,120mm
Overall width	2,620mm
Overall height	3,495mm
Wheel base	3,450mm
Tread Front	2,120mm
Tread Rear	2,120mm

### WEIGHTS

Gross vehicle weight	
Total	26,400kg
Front	13,200kg
Rear	13,200kg

### PERFORMANCE

Max. traveling speed	49km/h
Gradeability (tan θ)	0.6
Min. turning radius	5.3m (4-wheel steering) 9.0m (2-wheel steering)



TR-250M-5-00107

## TOTAL RATED LOADS

(1) With outriggers set  
(i)

Unit:ton

Outriggers fully extended ( 6.3 m )											
-360°-											
A B	9.5 m	16.5 m	23.5 m	30.5 m	C D E	8.0 m			13.0 m		
						5°	25°	45°	5°	25°	45°
2.5 m	25.0	19.0	12.5		83°	3.0	2.1	1.6	2.0	1.2	0.8
3.0 m	25.0	19.0	12.5	7.0	76°	3.0	2.1	1.6	2.0	1.2	0.8
3.5 m	25.0	19.0	12.5	7.0	72°	3.0	2.1	1.6	1.75	1.1	0.8
4.0 m	23.0	19.0	12.5	7.0	70°	2.8	2.1	1.6	1.65	1.05	0.8
4.5 m	21.2	18.0	12.5	7.0	65°	2.35	1.8	1.5	1.4	0.95	0.78
5.0 m	19.4	16.7	12.5	7.0	60°	2.0	1.55	1.35	1.2	0.9	0.75
5.5 m	17.8	15.6	11.75	7.0	55°	1.45	1.35	1.2	1.05	0.85	0.74
6.0 m	16.3	14.6	11.1	7.0	50°	1.05	1.0	0.95	0.85	0.75	0.7
6.5 m	15.1	13.8	10.5	7.0	45°	0.75	0.7	0.7	0.6	0.55	0.55
7.0 m	13.7	13.0	10.0	7.0	40°	0.55	0.5		0.4	0.4	
8.0 m		10.55	9.0	7.0	35°	0.38	0.35				
9.0 m		8.5	8.2	6.3							
10.0 m		7.05	7.3	5.8							
11.0 m		5.85	6.4	5.3							
12.0 m		4.95	5.5	4.9							
13.0 m		4.2	4.75	4.5							
14.0 m		3.6	4.1	4.15							
15.0 m			3.6	3.8							
16.0 m			3.15	3.45							
17.0 m			2.8	3.05							
18.0 m			2.45	2.7							
19.0 m			2.15	2.45							
20.0 m			1.9	2.2							
21.0 m			1.7	1.95							
22.0 m				1.75							
24.0 m				1.4							
26.0 m				1.15							
28.0 m				0.95							

A = Boom length  
B = Working radius  
C = Jib length  
D = Jib offset  
E = Boom angle

## DIMENSIONS (1/100)

