

### TADANO AERIAL PLATFORM

MODEL: AW-250TG

# GENERAL DATA

MAXIMUM PLATFORM FLOOR HEIGHT 25.0 m

MAXIMUM PLATFORM LOADING CAPACITY 450 kg or two (2) persons

BOOM 3-section

9.8 m - 24.2 m

# **DIMENSIONS**

Overall length approx. 11,510 mm

Overall width approx. 2,490 mm (axles retracted)

approx. 3,590 mm (axles extended)

Overall height approx. 2,710 mm

MASS approx. 17,000 kg

# TRAVEL PERFORMANCE

Max. traveling speed approx. 4.5 km/h Gradeability (tan  $\theta$ ) computed 23%

#### AERIAL PLATFORM SPECIFICATIONS

MODEL AW-250TG

MAX. PLATFORM FLOOR HEIGHT 25.0 m

MAX. PLATFORM WORKING RADIUS 23.5 m (Load 150 kg)

PLATFORM EQUIPMENT Made of steel tube

Platform inside dimensions (length x width x height) ---

1.5 x 0.75 x 1.1 m

Platform swing

By a hydraulic cylinder. 120 degrees swing range ---

Left 60°, right 60°

(OPTIONAL)

By a hydraulic motor. 180 degrees swing range ---

Left 90°, right 90°

Automatic leveling

Dual hydraulic cylinders

BOOM Three-section, fully powered synchronized telescoping

boom of box construction. The synchronization system consists of a double-acting hydraulic cylinder, extension

and retraction cables.

Fully retracted length ---- 9.8 m Fully extended length ---- 24.2 m

Extension speed ----- Approx. 62s / 14.4 m

BOOM ELEVATION By a double-acting hydraulic cylinder fitted with a holding

valve.

Elevation speed ----- From -12 to +70 degrees in

approx. 50s

ROTATION Rotation of superstructure made by a hydraulic piston

motor through worm reduction gear. 360 degrees continuous rotation in either direction on ball bearing

rotating ring.

Rotation speed, Maximum -- Approx. 0.8 min<sup>-1</sup>

Tail swing radius ----- Approx. 2.640 m

#### HYDRAULIC SYSTEM

System is powered by tandem pump driven by a diesel engine mounted on rotating frame.

Hydraulic pump ---- Gear type

Control valves ----- Multiple servo-control valves with integral relief valves. Mounted on rotating frame. Controlled electrically from platform

operation console.

Hydraulic oil reservoir -----

Approx. 155 liters

Filter ----- Fitted in return line.

CONTROLS AND MONITORS Controls of the machine is made either on platform or on rotating frame (lower section).

### On platform

Control levers for superstructure rotation, boom telescoping, boom elevation and traveling.

Switches for steering, platform swing, emergency pump, emergency stop, traveling speed mode select, engine throttle, engine start/stop and warning horn.

Monitor lamps for AMC indicator, emergency stop and engine revolution.

### On rotating frame

Switches for superstructure rotation, boom telescoping, boom elevation, lower section control, engine throttle, emergency pump, emergency stop and starter switch.

Hour meter and fuel gauge for engine.

Valves for platform leveling adjustment.

Monitor lamps for AMC indicator, engine oil pressure/cooling water temperature/chassis inclination, axle retracted, emergency stop, battery charging and engine preheat.

#### At chassis

A lever for axle extension/retraction.

AUTOMATIC CONTROL SYSTEM Gradual speed-up and gradual stop system

Superstructure rotation speed regulator

Elevating speed regulator Automatic accelerator

<u>SAFETY DEVICES</u> AMC (Automatic Moment and Motion Controller)

**Emergency pump** 

Emergency stop system

Hydraulic cylinder lock valves

Hydraulic safety valves
Traveling warning buzzer

Superstructure rotation warning buzzer

Foot switch (in platform)

Lower section control switch (on rotating frame)

Automatic travel speed restriction system

Superstructure rotation lock pin Chassis inclination warning Extended axle lock pins

Hand guard

Control lever guards

Touch switch

Safety belt attachment

Warning device of engine cooling water temperature and engine

oil pressure

Remaining fuel warning device

Hydraulic oil temperature warning device

<u>EQUIPMENT</u> Elevating cylinder protector

Lower leveling cylinder protector

Platform guards (rubber)

ACCESSORIES Standard tools

Chocks

OPTIONAL Platform vertical and horizontal movement control system

Work light (On platform)

Head guard Safety belt Head light

Platform wide swing: 180° (left 90°, right 90°)

By a hydraulic motor

Jack up device for axle extension/retraction

Grease pump

#### CHASSIS SPECIFICATIONS

**CHASSIS** 

Welded box section construction, with 4 wheels. Two hydraulic cylinders and two hydraulic jack cylinders (Optional, float size 300mm dia.) provided for axle extension.

Drive ----- Rear two-wheel drive by hydraulic

motors.

Steering ----- By front two wheels via hydraulic

cylinder.

Wheel base ----- 3,500 mm

Tread(track)- front ----- 2,215 mm (axles retracted)

3,315 mm (axles extended)

- rear -----2,215 mm (axles retracted)

3,315 mm (axles extended)

Minimum ground clearance -----

Approx. 240 mm

Minimum turning radius -----

Approx. 6.8 m at center of extreme

outer tire (axles retracted)

Approx. 7.5 m at center of extreme

outer tire (axles extended)

ENGINE Make and model ----- MITSUBISHI S6S-T

Type ----- 4 cycle, water cooled diesel engine

Piston displacement ----- 4.996 L

Max. output (JIS) ----- 64 kW {87 PS} at 2,300 min<sup>-1</sup>

Max. torque (JIS) ----- 293 N-m {29.9 kgf-m} at 1,700 min<sup>-1</sup>

<u>TRAVELING SYSTEM</u> Hydraulic motors drive wheels through planetary reduction gears.

Parking brake ----- Disc type, spring applied hydraulically released, automatic brake with mechanical

release.

STEERING SYSTEM Power steering by means of a double-acting hydraulic cylinder,

electrically controlled from platform.

ELECTRIC SYSTEM 24 V DC

FUEL TANK CAPACITY 190 liters

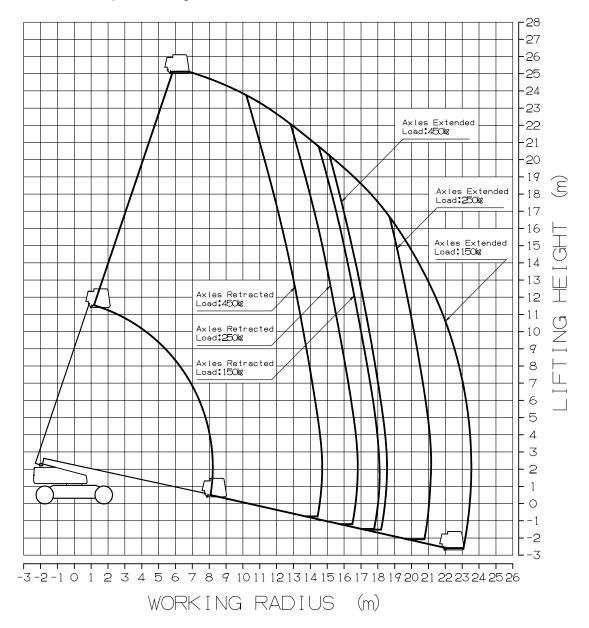
TIRES Puncture-free tires

Front ----- 10.00 - 20, Single x 2 Rear ----- 10.00 - 20, Single x 2

#### WORKING RANGE

# Platform loading capacity:

AMC (Automatic Moment and Motion Controller) makes stepless control for loads up to 450 kg maximum.



# NOTES:

- 1. The above working range depends on the condition that the machine is working on firm, level ground surface.
- 2. The above figure does not include the deflection of the boom and the sink of the tires when loaded.
- 3. The machine can serve with the same performance in all directions.

# **EXTERNAL VIEWS**

