AIRPORT EQUIPMENT SERVICES PTE. LTD.
41 Kallang Pudding Road, #03-10 Golden Wheel Building,
Singapore 349316 Phone: (65) 65421160 Fax: (65) 65421160
Email: aessg@singnet.com.sg Website: www.aessg.com
(Business Registration No: 199400661M)

AES MP70-SP Maintenance Platform
Technical Specification

1. Vehicle Description:

The AES MP70 Series Maintenance Platform Vehicle is designed for aircraft ground support personnel and equipment use. It allows servicing of aircraft within its maximum working height limit. The maintenance vehicle consists of a diesel engine driven chassis, hydraulically actuated scissor lift mechanism, platform and stabilizers. Stabilizers provide increased stability with platform raised. Platform and stabilizer control is achieved using reliable solenoid operated valves. All functions, except stabilizer retraction, may be operated from platform mounted control panel.

2. Specifications

Overall dimensions (L×W×H)	6970mm×2400mm×2900mm
Platform height:	1800mm – 7600mm
Platform (L×W)	4350mm×2100mm
Platform extended	1300mm
Unladen weight	8500kg
Lifting capacity	1800kg (evenly distributed load)
The height of the platform railings	1100mm

3. Chassis

1) Engine	
Model	Deutz F4L2011
Type	4 cycle, in line, Diesel, integrated oil-cooled
Max. rated output	47KW @ 2600 rpm
2) Transmission	
Model	Oerlikon Graziano PST2
Type	Power shift with torque converter, 1 forward/1 reverse
3) Front Axle	
Type	Steering axle, disk brake.
Suspension	Rigid mounted
Capacity	4700 kg
4) Rear Axle,	
Type	Drive axle, drum brake.
Suspension	Rigid mounted
Capacity	5,000 kg
5) Parking Brake	Spring brake actuators acting on drive shaft.
6) Tires	8.25-15

4. Cab

Cab is equipped with two seats for a driver and a passenger. Air-conditioning is optional.

5. Lifting scissors

a) Two scissors lift with two single-stage cylinders.
b) The scissors arms are fabricated from heavy-duty rectangular steel tubes with reinforced scab plates welded on both top and bottom.
c) Pilot operated check valves are installed on the lifting cylinders for maximum safety.

6. Platform

a) Maximum platform deck height of 7.6 meter.
b) Maximum lifting capacity of 1800Kg evenly distributed on platform.
c) Sleeves are installed at all pivot points, cylinder attachment points and roller shaft.
d) Galvanized anti-skid plate platform deck.
e) Platform deck perimeter safety handrails in stainless steel, and can be easily removable.

7. Electric system

a) The electric system is 24VDC, negative ground, relay control only.
b) The platform control panel is located at the side of chassis. The fixed platform control panel installed on the deck consists of push buttons controlling the platform only.
c) The toggle switches are water-proof.
d) A “pressure hold” button installed on both control panels.
e) 2 directional working lights mounted on the rails of the platform.
f) Emergency engine stop push buttons are installed on the cab control panel as well as on the platform pendant control. Pressing down any one of these push buttons will kill the engine.
g) Engine can be re-started by control panel on platform.

8. Hydraulic system

a) The system pressure is 14Mpa, adjustable by relief valve.
b) All hydraulic control components are located on the side of the chassis. This allows easy access for steam cleaning and maintenance.
c) Hydraulic pump directly installed on the engine, eliminate PTO (Power take off) unit
d) Solenoid operated valves for selecting and controlling lift platform movement.
e) Four stabilizers are installed at the front and rear of scissors.
f) There are two additional sources that can provide the system with hydraulic pressure in case of an engine failure. One is a battery powered, push button controlled DC pump with an internal relief valve. The other one is a hand pump. These two pressure sources are designed for emergency evacuation only. In an emergency, retracting and lowering the platform, and retracting the stabilizers can be operated by the emergency pressure source for evacuation of the maintenance platform.

9. Interlocks

a) Prevent vehicle being driven with platform raised.
b) Prevent vehicle being driven with stabilizers lowered.
c) Prevent platform lowering while extended.
d) Prevent platform rising too high without using stabilizers.
e) In the event of an accident, there are remote engine stop switches located on control panels.
f) A warning buzzer sounds when either the platform is lowering or the vehicle is reversing.