



---

# GSE

**EQUIPMENT AND  
TRAINING DEVICES**



**AESC**

Tel

**(84)-24-38185930**

Email

**info@aesc.com.vn**

Address

**Lot 43A, Quang Minh Industrial Zone,  
Me Linh, Hanoi, Vietnam.**



# GSE

**EQUIPMENT AND  
TRAINING DEVICES**

---



**A true  
aviation  
partner**

about AESC GSE

# about AESC GSE

---

GSE design and manufacturing has been one of AESC's top business focus since its establishment. The solution with local products at an affordable price and quick delivery time have satisfied its most difficult customers. During the whole process, coordination between design team and manufacturing team while respecting and complying with the standards for the later certification process is critical to ensure a high-quality level of our products, which includes passenger stair, maintenance stair & docking system, nitrogen & oxygen cart, conveyor belt, wheel trailer cart, potable water cart, lavatory cart.

Apart from design and manufacturing, AESC provides maintenance service to GSE at airports nationwide and in neighbouring countries.

AESC designs, manufactures, maintains and repairs ground support equipments. We ensure every step from design to construction of creating a new product meet the stringent standards of the technical inspection process. Our engineers also have developed an innovative concept of gravity distribution in the design, increasing the overall structural strength of GSE.

AESC also carries out GSE maintenance service at customer's facility to ensure the functionality and operation ability of their GSE fleet, which includes GPU, ASU, ACU, tractor, hi-loader, baggage conveyor belt, passenger stair, potable water vehicle, lavatory vehicle...



*AESC designs, manufactures, maintains and repairs ground support equipments. We ensure every step from design to construction of creating a new product meet the stringent standards of the technical inspection process.*

# D1

**Stair & Platform**

# Technical Stair 1.1m



**Model No: TS11A**

## Standard Features

- Sturdy weld steel construction
- **Dimensions L x W x H (mm):** 1040x1030x1350
- **Max load capacity (kg):** 150
- **Net weight (kg):** 32
- Rubber aircraft protection bumper

# Technical Stair 1.1m



**Model No: TS11B**

## Standard Features

- Sturdy weld steel construction
- Non-slip grating on stair steps and platform
- **Dimensions L x W x H (mm):** 970x1000x1690
- **Max load capacity (kg):** 150
- **Net weight (kg):** 32

# Technical Stair 1.5m



**Model No: TS15C**

## Standard Features

- Sturdy weld steel construction
- Non-slip grating on stair steps and platform
- **Dimensions L x W x H (mm):** 1670x1160x1970
- **Max load capacity (kg):** 150
- **Net weight (kg):** 35
- Rubber aircraft protection bumper

# Technical Stair 1.5m



**Model No: TS15M**

## Standard Features

- Sturdy weld steel construction
- **Dimensions L x W x H (mm):** 2410x1290x1750
- **Max load capacity (kg):** 150
- **Net weight (kg):** 80
- Tug towable or hand pushed

# Technical Stair 2.1m



**Model No: TS25**

## Standard Features

- Sturdy weld steel construction
- Non-slip grating on stair steps and platform
- **Dimensions L x W x H (mm):** 2600x2960x1370
- **Max load capacity (kg):** 150
- **Net weight (kg):** 150
- Rubber aircraft protection bumper
- Tug towable or hand pushed
- Stabilize

# Technical Stair 3.5m



**Model No: TS35**

## Standard Features

- Sturdy weld steel construction
- Non-slip grating on stair steps and platform
- **Dimensions L x W x H (mm):** 4330x2200x4265
- **Max load capacity (kg):** 150
- **Net weight (kg):** 270
- Rubber aircraft protection bumper
- Tug towable or hand pushed
- Stabilize

# Fueling Stair

## Description

The Fueling stair, in which technician is standing on, is used to support the refueling process of wide-body aircraft.



**Model No: TS35R**

### Standard Features

- **Dimensions LxWxH (mm):** 4903x2192x4750
- **Max load capacity (Kg):** 150kg
- **Net weight (Kg):** 300kg
- **Platform Height:** 3400mm and 3650mm

## ADJUSTABLE WHEEL WELL ACCESS STAND

### Description

The adjustable wheel well access stand is used for servicing the landing gear of the Boeing 787 aircraft.



**Model No: AWW23**

### Standard Features

- **Dimensions LxWxH (mm):** 3230x1625x2900
- **Max load capacity (Kg):** 250
- **Net weight (Kg):** 210
- **Platform Height (mm):** 2300 to 1800

# Maintenance Platform 2.2m



## Description

Maintenance stair is able to extend up to 2.2m, height adjustable. All railings are fully mobilized, so it can be wheeled into the most suitable position for the most convenient aircraft access possible.

**Model No: MP22**

## Standard Features

- Sturdy weld steel construction
- Non-slip grating on stair steps and platform
- **Dimensions L x W x H (mm):** 3540x1540x2920
- **Max load capacity (kg):** 300
- **Net weight (kg):** 300
- Rubber aircraft protection bumper
- Tug towable or hand pushed
- Stabilize
- Hydraulic height adjustment via hand pump

# Maintenance Platform 3.6m



## Description

The Maintenance platform MP36 can be used for technician to stand and work on the platform.

**Model No: MP36**

### Standard Features

- **Dimensions LxWxH (mm):** DxRxC 6200x1725x4700
- **Max load capacity (Kg):** 250kg
- **Net weight (Kg):** 600kg
- **Platform Height:** 910mm to 3660mm

# Maintenance Platform 4.5m



## Description

*Maintenance stair is able to extend up to 4.5m, height adjustable. All railings are fully mobilized, so it can be wheeled into the most suitable position for the most convenient aircraft access possible.*

**Model No: MP45**

## Standard Features

- Sturdy weld steel construction
- Non-slip grating on stair steps and platform
- **Dimensions L x W x H (mm):** 4440x2790x5160
- **Max load capacity (kg):** 300
- **Net weight (kg):** 500
- Rubber aircraft protection bumper
- Tug towable or hand pushed
- Stabilize
- Hydraulic height adjustment via hand pump

# Maintenance Platform 5.5m



**Model No: MP55**

## Standard Features

- Sturdy weld steel construction
- Non-slip grating on stair steps and platform
- **Dimensions L x W x H (mm):** 7410x2870x6475
- **Max load capacity (kg):** 150
- **Net weight (kg):** 1000
- Rubber aircraft protection bumper
- Tug towable or hand pushed
- Stabilize
- Hydraulic height adjustment via hand pump

# ATR - Tail Dock



## Description

Made to measure ATR72 tail docking system from AESC proves instrumental in the implementation equalised maintenance programme.

In addition the ATR72 tail dock has improved safety for aircraft engineering staff working at heights.

Model No: **DOCK-T-LH/RH-ATR**

### Standard Features

- Sturdy weld steel construction
- Non-slip grating on stair steps and platform
- Rubber is equipped to avoid collision with the Aircraft
- **Dimensions LxWxH (mm):** 5350x4950x6660
- **Max load capacity (Kg):** 500
- **Net weight (Kg):** 2000

# ATR - Wing Dock

## Description

*Made to measure ATR72 tail docking system from AESC proves instrumental in the implementation equalised maintenance programme.*

*In addition the ATR72 wing dock has improved safety for aircraft engineering staff working at heights.*



Model No: **DOCK-W-LH/RH-ATR**

### Standard Features

- Sturdy weld steel construction
- Rubber is equipped to avoid collision with the Aircraft
- **Dimensions LxWxH (mm):** 12700x4220x2900
- **Max load capacity (Kg):** 500
- **Net weight (Kg):** 3000

# Towable Passenger Stairs



**Hydraulic motor**



**Max height 3800mm**



**Control console**



**Solar panels**

**Model No: TPS3800P1**

## Standard Features

- **General dimensions – LxWxH (mm):** 8300x2200x6370
- Hydraulic & electric control system
- Sturdy welded steel construction
- Non-slip grating on stair steps and platform
- Full canopy
- **Net weight (Kg):** 2200
- Maximum loading per step: 3 people or 240kg
- **Min/max operating height (mm):** 2500/3800
- Max speed: 18 m/min



## Hydraulic system

Max pressure (bar): 250  
Hydraulic pump: 12V-DC; 1.2Kw; 2500rpm; 1,1cc/r  
Hydraulic hand pump: 40cc/cycle  
Hydraulic engine: 80cc/r  
Two lift cylinder dxDxL (mm): 60x73x1112

## Electric system

Two rechargeable: 12V-100Ah  
Two solar panels (wp): 100  
Single-phase network charge equipment  
LED lighting (10W): 02 pcs  
LED lighting (3W): 12 pcs  
Rotaring light: 01 pcs

## Aircraft safe access system, anti-collided device

Aircraft access sensor on platform: 02 pcs  
Rubber pumber on platform  
Contact blade on platform can be rotated:  $\pm 3$  degree  
Two shoring with lock & sensor  
Two aircraft access led lighting (W): 10

2017 12 21

**OUR  
PRODUCT**

**02**

**Cart & Dolly**

# Towable Baggage Conveyer Belt

## Description

*The Baggage Conveyer shall be suitable for loading/off-loading luggage and cargo to/from A320 or B737 aircraft cargo holds. The equipment shall be Towable and easily maneuverable on tarmac with towing handle hook.*



**Model No: BL800**

### Standard Features

- **Dimensions LxWxH (mm):** 7840x1040x3090
- **Max load capacity (Kg):** 600
- Min/max height of side plane (mm): 1150/2580
- Length of belt loader (mm): 6850
- Continuous operation time – 08 hours

# Garbage Cart



**Model No: GAC5**

## Standard Features

- **Dimensions L x W x H (mm):** 2790x1940x1760
- **Net weight (kg):** 180

# Fuel Draining Cart



**Model No: FDC 300**

## Standard Features

- Sturdy weld steel construction
- **Dimensions LxWxH (mm):** 2820x860x1245
- **Fuel draining stainless steel tanks (lit):** 300
- **Net weight (Kg):** 185
- Fire Extinguisher

# Lavatory Cart

## Description

*LC1000 offers the solution to lavatory service with water tank and waste tank.*



**Model No: LC1000**

### Standard Features

- Sturdy weld steel construction
- **Dimensions LxWxH (mm):** 3804x1500x1800
- **Water Stainless steel tank (liter):** 200
- **Waste Stainless steel tank (liter):** 1000
- Centrifugal pump
- **Net weight (Kg):** 630
- Waste hose with straight 4'' GA Coupler (m): 3
- Hose with coupler: 4m
- Drain valve (inch): 4

# Potable Water Cart

## Description

*PWC500 offers a high-quality solution to potable water service capability.*



**Model No: PWC500**

### Standard Features

- Sturdy weld steel construction
- **Dimensions LxWxH (mm):** 3160x1090x1240
- **Water Stainless steel tank (liter):** 500
- Centrifugal pump with 75l/min
- **Net weight (Kg):** 500
- Hose with coupler: 5m
- Water filter

# Nitrogen Cart (2 bottle type)

## Description

*Nitrogen Cart with low and high Pressure regulator system, including 2 bottles of nitrogen.*



**Model No: NC02**

### Standard Features

- Sturdy weld steel construction
- **Dimensions LxWxH (mm):** 3160x1090x1240
- Two bottle PSI(bar): 3000(207)
- High pressure gauge PSI(bar): 4000(275)
- Low pressure gauge PSI(bar): 350(24)
- **Net weight (Kg):** 180

# Cart carrying Wheel, Nitrogen, Jack

## Description

*Cart able to carry Wheels, Nitrogen bottle, Jack for maintenance, wheel and brake dolly.*



**Model No: WNC1**

### Standard Features

- Sturdy weld steel construction
- **Dimensions LxWxH (mm):** 3100x2030x1250
- **Max load capacity (Kg):** 1100
- **Net weight (Kg):** 650
- Two nitrogen bottle (PSI): 3000
- Pressure regulator system
- High pressure (PSI): 0-3000
- Low pressure (PSI): 0-350

# Cart carrying Wheel, Jack

## Description

*Cart able to carry Wheels (02 main wheels, 02 nose wheels), Jack for maintenance.*



**Model No: WC-A3**

### Standard Features

- Sturdy weld steel construction
- **Dimensions LxWxH (mm):** 5320x1640x940
- **Net weight (Kg):** 620
- Brake and towbar system
- Type solid rubber tires 400-8

# Roller compactor cart

## Description

*Carrying cart is a device used for off-campus maintenance, in order to transport materials, heavy equipment and tools.*



**Model No: RCC 35**

### Standard Features

- Sturdy weld steel construction
- **Dimensions LxWxH (mm):** 5610x1700x1155
- **Max load capacity (Kg):** 3000
- **Net weight (Kg):** 900
- Brake and towbar system
- Type solid rubber tires 400-8

# ENGINE WASHER CART ECW250t



**Model No: ECW250**

## Standard Features

- Sturdy weld steel construction
- **Dimensions LxWxH (mm):** (2680,1780) x 1250 x 1180
- Loading capacity 01 nitrogen tank, 250 liters water
- **Net weight (Kg):** 250 (Water tank empty)
- Water flow (lpm):20
- Max.Head 70m

# ENGINE WASHER CART

## Description

*The Engine washer is one type of cart that is used for aircraft maintenance; water can be carried to clean the aircraft engine.*

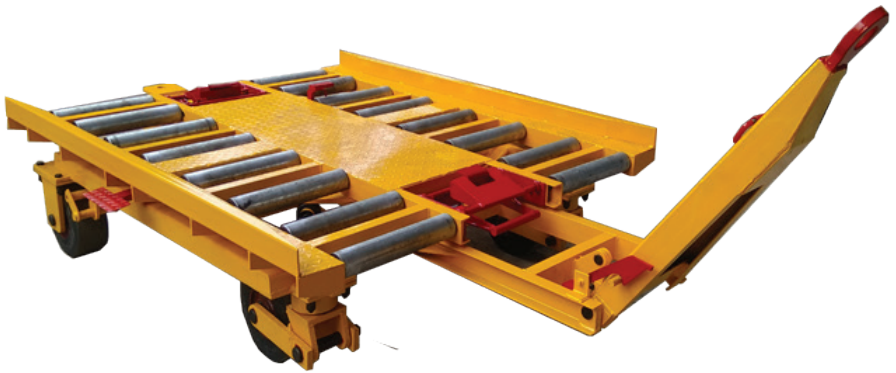


**Model No: EWC250**

### Standard Features

- The overall size L(max,min)xWxH, mm: (2960,2070)x1000x1210
- Ground clearance, mm: 203
- Weight, kg: 250
- Loading Capacity: 300 liters of water
- Pump: Gasoline engine
- Input power: 220V/AC/50Hz
- Electric water-heating bar: 3 bars, 3000W/bar
- Water temperature: 60 to 80 degree Celsius

# Turnable Dolly 5 feet



**Model No: DL-5**

## Standard Features

- Sturdy weld steel construction
- Type: Solid rubber tires and steel rims
- **Dimensions LxWxH (mm):**3800x1780x1158, platform 1960x1625x508
- **Max load capacity (Kg):** 2000
- **Net weight (Kg):** 746
- Service height of platform (mm): 508
- Brake capability at tow bar

# Flat Dolly 10 Feet



**Model No: DL-10I**

## Standard Features

- Sturdy weld steel construction
- Type: Solid rubber tires and steel rims
- **Dimensions LxWxH (mm):** 3400x2600x508
- **Max load capacity (Kg):** 6800
- **Net weight (Kg):** 1100
- Service height of platform (mm): 508
- Brake capability at towbar

# Roller Dolly 10 Feet



**Model No: DL-10**

## Standard Features

- Sturdy weld steel construction
- Type: Solid rubber tires and steel rims
- **Dimensions LxWxH (mm):** 3400x2600x508
- **Max load capacity (Kg):** 6800
- **Net weight (Kg):** 1185
- Service height of platform (mm): 508
- Brake capability at towbar

# Roller Dolly 20 Feet



**Model No: DL-20**

## Standard Features

- Sturdy weld steel construction
- Type: Solid rubber tires and steel rims
- **Dimensions LxWxH (mm):** 7885x2700x508
- **Max load capacity (Kg):** 27000
- **Net weight (Kg):** 3110
- Service height of platform (mm): 508
- Brake capability at towbar

# Roller Dolly 40 Feet



**Model No: DL-40**

## Standard Features

- Sturdy weld steel construction
- Type: Solid rubber tires and steel rims
- **Dimensions LxWxH (mm):** 14810x2700x508
- **Max load capacity (Kg):** 54000
- **Net weight (Kg):** 6190
- Service height of roller platform (mm): 508
- Brake capability at towbar
- Dolly 40 ft can separate to 2 Dolly 20 ft

# Cargo Trolley



**Model No: BC-10W**

## Standard Features

- Sturdy weld steel construction
- Type: Solid rubber tires and steel rims
- **Dimensions LxWxH (mm):** 4956x2290x2338
- **Max load capacity (Kg):** 3000
- **Net weight (Kg):** 1550
- Service height of platform (mm): 508
- Brake capability at towbar

# Wheel & Brake Dolly



## Description

*Wheel & Brake Dolly from AESC is a new ergonomically designed wheel changer for hanger and apron use, designed to be towed, incorporating a simple and efficient loading system for maneuvering brake pack units*

**Model No: WBD320-02**

### Standard Features

- Sturdy weld steel construction
- **Dimensions LxWxH (mm):** 1000x630x1130
- **Max load capacity (Kg):** 200
- **Net weight (Kg):** 50
- Accommodates tire sizes from 500 to 1300mm

**OUR  
PRODUCT**

**Cabin training devices**

**03**



## Door/ Cargo door training mockup

**Model: GSE-TM3**

### Standard Features

**Dimension LxWxH, m:**  
7100x2700x6270

**Door-sill Height, mm:**  
1715-4250

**Net Weight, kg:** 1800

**Usage:** A320, A321, B787

**Purpose:** Hiloader vehicle,  
passenger stairs for driving  
practice training

# Push-Back Training Device

## Description

*Aircraft model for push-back & towing*

**Model: ACM P&T-A321**

### Standard Features

**Dimension LxWxH, mm:**  
12930x3500x4215

Max steering angle of  
each side of the centre-  
line, degree: 95

**Nose clearance, mm:** 1750

**Net weight, kg:** 30000



## Refuelling Training Device



**Model No: AC FTM-1W**

### Standard Features

- Fueling points Height: 3300 to 5500
- **Dimensions LxWxH (mm):** 8000x12000x6300
- **Net weight (Kg):** 4000
- **Usage:** A321,A330,A350,B747,B777,B787&ATR72

# Cabin safety training device



## Cabin service mockup



**Cabin Mock up** is an important equipment in aviation training, which depends on the level of function and simulation. It can also be used in safety training for cockpit and cabin crew, or it can be used in in-flight service training for cabin crew, or else it can be used in deep cleaning training for the aircraft cleaning team.

**AESC** completed the final stage of installation of the Airbus 320 Cabin Mockup for Vietnam Airport Ground Services Company Limited (VIAGS) in June 2018



## Cabin crew fire trainer



**OUR  
PRODUCT**

**04**

**Others**

# Roller Conveyor

*Model: RL4D - TT*

## Standard Features

**Dimension (L x W x H):**

2200x1750x508 (mm)

**Max load capacity:**

1000kg

**Net weight:** 700 (Kg)

**Chassis: structural**

**steel: U150x75**

**Roller 76 mm thick 3mm**

**Chain drive system with**

**2-way motor, speed**

**18m/min.**

**Power supply:** 1/20 gear

motor, capacity 0.5Kw, 3

phase 380V/50Hz.





## Balancing Equipment

*Model: BE*

Standard Features

**Dimensions LxWxH (mm):**  
1315x570x695

**Net weight (kg):** 450



## Bearing Grease Filler

*Model: GE/FLL*

Standard Features

**Dimensions LxWxH (mm):**  
885x480x1075

**Purpose:** To fill the grease to the bearing cone of nose wheel and main wheel

## Wheel Assembling Device



**Model: WA**

### Standard Features

**Dimensions L x W x H (mm):**  
2625x2000x1660

**Wheel outside diameter (mm):** 1500

**Wheel width Max (mm):** 550

**Net weight (kg):** 1100

**Usage:** A320,A321,B737,B767..



## Light & Fan Tower 400

**Model: LFT 400**

### Standard Features

Sturdy weld steel construction

**Dimensions LxWxH (mm):**  
2680x1340x2600

**Light power:** 4x400W/pcs

**Fan power:** 180W/pcs

**Net weight (Kg):** 260



## Wheel Lift

**Model: WL**

### Standard Features

**Dimensions LxWxH (mm):**  
1855x800x1810

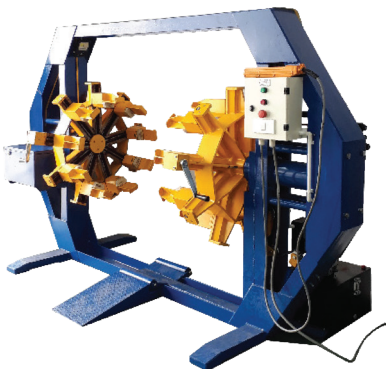
**Net weight (kg):** 450

**Wheel diameter (mm):**  
500-1300

**Lifting height (mm):**300

**Usage:** A320,  
A321,B737,B767..

## Bead Breaker



**Model: TBB**

### Standard Features

**Dimensions L x W x H  
(mm):** 2770x1360x1780

**Rim dimensions Min/max  
(mm):** 285/740

**Usage:** A320,  
A321,B737,B767..



**A true  
aviation  
partner**

**OUR  
PRODUCT**



**Aerospace Engineering Services  
Joint Stock Company (AESC)**

Tel  
**(84)-24-38185930**

Email  
**info@aesc.com.vn**

Address  
**Lot 43A, Quang Minh Industrial Zone,  
Me Linh, Hanoi, Vietnam.**