HATZIS ENGINEERING DESIGN



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MRO TOWER







Atlas Box Storage





It is specially designed in order to serve the storage of the inflight catering food containers.

Aluminum block of empty boxes constructed to be stored in the cargo area.





Capacity: 36
Atlas Boxes.

 Total construction weight: 95Kg (lighter configuration upon request).





Various Steps



- Aluminum structure makes them light weight, so they can easily move around.
- Anti-slip & Lyquid drain surface, for any kind of worthor conditions

weather conditions.

• Certified welding techniques for maximum durability.







Custom Storage Solutions





Custom storage solutions are engineered on demand.

Modular shelves and custom made boxes improve storage capabilities, by providing easiness of storage and safer positioning for equipment.





Engine Turbine Washer





This tool is specifically designed for washing the turbine engine. Thoughtfully engineered to improve quality of the engine maintenance and reduce overall time of the proccess.











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Exhaust Lifter







Tool that hosts the exhaust of the aircraft facilitating the maintenance process.

The body of the tool is a ferrous construction and the jig in which the exhaust is placed is made of wood.

The height of the jig is adjustable due to the wire rope mechanism that is incorporated in the tool. The inclination of the jig can also be adjusted to different angles.









Custom Tool Trolleys



Custom troleys & Toolbox set up for any application.









Wheel Trolley

Single wheel trolley managment becomes easy and safe for everyone.



Aluminum structure reduces the weight, while increases usability by the user.





Wheel & Brake Changer





Specially designed ferrous tool that facilitate the removal and replacement of aircraft wheels and brakes.

Compatible with the



following types of aircraft: AIRBUS A318, A319, A320, A321 & BOEING 737NG, 737CLASSIC 737MAX, 717.



- Foldable towbar.
- Easily transported due to its steering wheels.
- Pressure relief valve ensuring that the lowering of the wheel/brake is smooth and fully controllable.

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Propeller Stand











Pylon Stand











Panel Stand





Panel Stand has five leyers in each side.

Has a slight angle upwards in order to be secure for the items.









Aircraft Wheel Base Stand & Trailer



Stands made specifically to store aircraft wheels.

Modular design that provides high adjustability. Makes it ideal to fit in any place with any layout.



Trailer variant available on demand. Wheel trailer can tranfer two aircraft wheels as close as possible to the aircraft for replacement. Has special compartment to carry tooling. Can always be ready to go.







Turbine Stand





Engineered so it can host ATR turbine engines.

Protective halo around every wheel in each corner so to prevent foot accident.





Brakes around every wheel in all four corners to improve stability of the stand & prevent any kind of unwanted situations like a collision.







Custom Jigs for Repairs













Wing Platform



Wing platform specifically designed for service/maintenance purposes on the Airbus Wings.

Platform has stabilizers on the four corners of the structrure in order to quarantee stability & safety when personnel is

operating.

Platform is inclinde so it can parallelize 100% with the ankle of the airplane's wing. That gives the personnel ease of use and improves efficiency when working.



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Oxygen & Nitrogen Carts



Carts are specifically made for safe operation of oxygen/ nitrogen bottles, as they are designed with all safety standarts in mind.

Can store up to 2 nitrogen/oxygen bottles.





Top part is made out from aluminum to reduce overall weight and lower the COG. Foldable towbar for smaller footprint when storred, but increased maneuverability when movement is required.

Enginnered for heavy duty use.







Wheel & Bottles Transfer Carts



- Larger storage compartment.
- Thoughtful engineering for safer driving.



- Designed with respect to EN regulations.
- Heavy Duty construction.





Aircraft Maintenance Narrow Ladder- 1.5M







Aluminum narrow body ladder with movable guard rails.

An ideal solution for maintenance and repair activities close to the body of

the aircraft.



<u>Special Features</u>

- Movable guard rails upside down.
- Anti- slip steps and platform.

• Protection rubbers around the working platform.

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Vario Maintenance Access Ladder



The working platform is hydraulically adjusted to different heights.

A heavy duty construction that can easily be pulled by car.

One-person working platform that can hold up to 200kg.

A narrow construction that can access most working areas of the aircraft Two-sided heavy duty telescopic probe that includes screw ground support.







Ultimate Aircraft Access Ladder





A single design (cantilever) that satisfies 80% of the service and maintenance needs of the most popular aircraft types.



Approaches even the hardest parts of the aircraft: Nose, gear, under the fuselage.



- Low aluminum construction weight.
- Holds up to 250kg including personnelparts-tooling.







APU Lacer



- Worldwide patent.
- A single design (cantilever) that satisfies 80% of the service and maintenance needs of the most popular aircraft types.

• Approaches APU area with safety and accuracy.







Engine Cowl Long Ladder



Aluminum ladder with 4 steps and long

working platform.

The construction is designed for optimum operation into the cowl engine area.

Special Features

- Low weight construction.
- Low center of gravity.
- Anti-slip steps and working platform Configuration
- Adjustable platform length upon request.









Aircraft Carbon Vario Folding 3-3.5M Ladder





The first carbon GSE worldwide.

Aluminum ladder with folding step made exclusively of carbon

fiber.

Carbon absorbs the damage ensuring that the aircraft remains unharmed.

It combines extremely low weight with high strength making it the material of the future GSE.









Aircraft Short Ladder- 1.5M





A single design that satisfies 80% of the service and maintenance needs of the most popular aircraft types, around the engine cowl area.









2.5M Ladder



Special Features

- Low weight construction.
- Low center of gravity.
- Anti-slip steps and working platform Configuration.
- Adjustable platform length upon request.







Carbon Access 2M Ladder







Production Line Carbon Access Ladder for universal aviation use.

Carbon barriers reduce overall weight & lowers the Center Of Gravity (COG).







Outdoor Vario Folding Ladder 3-3.5M



A multi-purpose outdoor ladder that can be adjusted.

<u>Special Features</u>

- Ferrous main frame to guarantee side wind resistance and stability while pulled by a vehicle.
- Light weight 3-steps frame that can be easily rotated by the user.
- Protection bars inox or aluminum depending on customer's choice – that keep the user safe at any application needed.
- Hydraulic side support system, ensuring that the ladder will not tip over while working in maximum height.







Cargo Ladder



- Designed to fit perfectly in the cargo area.
- Can be used as a multi purpose ladders for any other service/maintenance work needed



• Lightweight aluminum structure reduces the weight, while increases usability by the user.



Certified welding techniques and construction standards in order to maximize operational security.

A two-part construction design that unmounts for easier:

- Storage
- Transportation
- Expansion & connection with an extra platform





Passenger Door Vario Ladder



A specially designed vario ladder to easily access the passenger door plus higher heights.

A ferrous construction that holds up to 400kg including

personnel, parts & tooling.





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Jet A-1 Fuel Buzzer



Custom made engeneered fuel buzzer for optimum refuelling operations.

Design & production of professional equipment for any kind

of vechicle.









Small Fuel Ladder

Small fuel ladder provides advatages to the user as:

- Small footprint
- Foldable design
- Light-weight aluminum structure







Certified welding techniques and standards during construction in order to maximize operational security.







Fuel Supply Aircraft Maintenance Ladder



Aluminum ladder that is exclusively designed in order to meet the needs of the fueling process.

The ladder incorporates mechanism for lifting the fuel supply hose up to the level of the working platform.

The user is free to consentrate on his task free of lifting any weight.









MRO Tower









MRO Tower



- Unique Lifting Patent. Tower can lift up to 100cm with one button in under 3 minutes.
- Ability for changes and modifications at will 24/7, according to customer's requirements.
- Movement & Displacement. Maximum Safety Standards.

• Designed with Human factor in mind.

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