AIRCRAFT DOCKING

→ Custom-built Docking Systems
→ Standardized Docking Modules
Custom-built Aircraft Docking Systems

Whatever the demands and challenges, we can advise and design tailor-made solutions. Our comprehensive approach of aircraft maintenance activities and 30 years of experience in the field of docking equipment allow us to meet the highest demanding needs of our worldwide customers.
DOCKING SYSTEMS – NOSE-TO-TAIL DOCKING SYSTEMS FOR CIVIL AND MILITARY AIRCRAFT...

WHETHER YOU REQUIRE:

→ Light or heavy maintenance system
→ Nose-in or tail-in aircraft configuration
→ Grounded or suspended equipment
→ Several small modules or a single large system
→ Multi or single aircraft, narrow or wide-bodied
→ To dock an aircraft on jacks and/or on wheels, combining the use of elevation system and sliding panels
→ All aluminium or mixed steel-aluminium structures
→ A system fitted with related services such as electrical, pneumatic and lighting devices explosion proof; and hosting system for painting and degassing
→ Specific standards (EU, UK, US, Australian, ...)

Type of A/C: A320/B737
Type of A/C: A330/340
Type of A/C: B777

Type of A/C: A300/A310
Type of A/C: A319/320
Type of A/C: A330/A340/B767
Standardized Aircraft Docking Modules

Through a close relationship with our clients, we have designed and provided all types of systems for access to just about every spot of all types of aircraft: Airbus, Boeing, Lockheed Martin, Dassault Aviation, CASA, Embraer, ATR, Bombardier, ... and engine types: CFM, Rolls-Royce, IAE, General Electric, Pratt and Whitney. Based on that experience, we can offer user-friendly products.
DOCKING MODULES – GET A COMPLETE DOCKING SYSTEM BY COMBINING SEVERAL MODULES ...

WHETHER YOU REQUIRE:

- One-piece or two-piece nose docks for access to the windshield, radome, pax doors, nose wheel well and electronic bays
- One-level or two-level fuselage docks for access to the windows and cargo bays
- Outboard wing docks for access to the leading and trailing edges, extrados and intrados as well as wing tips
- Inboard wing docks for access to the main wheel well, flaps and leading edge
- Engine docks for access to the fan and core zones, engine pylon and cone, when cowlings are opened, closed or removed
- One single or two-piece tail docks for access to the horizontal and vertical stabilizers, rudder, rear pax doors, ...

Type of A/C: A320
Type of A/C: CRJ 700/900
Type of A/C: A340
Type of A/C: A300
Type of A/C: B757
REFERENCE PROJECTS

By serving major worldwide customers, ALBRET POURTEAU and ZACHER have performed several docking projects for: civil and military, narrow and wide-bodied, multi or single aircraft through the last decades. Some are presented below and result from a close and long term relationship with our partners among which: DHL, EADS Military Aircraft, Sabena Technics and IBERIA Maintenance.

DHL - EUROPEAN AIR TRANSPORT GMBH (GERMANY)
MANUFACTURER: ZACHER GMBH

➔ Aircrafts served:
   A300, B757 – on wheels, aircraft “tail-in”

➔ Modularity:
The system includes Engine Dock, MLG Dock, Wing Dock, Tail Dock, APU modules and Stabilizer Dock, all grounded

➔ Structure technology:
Supporting structures of aluminium (mill finish), stairway and handrails bolted, floors covered with checkered plate

➔ Services:
Compressed air, electric plugs distribution, lighting

➔ Safety regulations:
The docks are compliant to European safety regulations EN ISO 14122 and EN 12312-8

EADS MILITARY AIRCRAFT (GERMANY)
MANUFACTURER: ZACHER GMBH

➔ Aircrafts served:
   Eurofighter Typhoon, on wheels and on jacks

➔ Modularity:
The system includes
   - 1 Forward fuselage dock left
   - 1 Forward fuselage dock right (mirrored view)
   - 1 Rear fuselage dock left
   - 1 Rear fuselage dock right (mirrored view)
   - 1 Horizontal stabilizer dock
   (use on starboard and port side)
   - 2 Wing bridges
   - 1 Nose platform

➔ Structure technology:
Supporting structures of aluminium (mill finish), stairway and handrails bolted, floors in ZACHER standard sections

➔ Height-adjustment:
Hydraulically operated

➔ Services:
Compressed air, electric plugs distribution, IT

➔ Safety regulations:
The docks are compliant to European safety regulations EN ISO 14122 and EN 12312-8
IBERIA L.A.E. (SPAIN)
MANUFACTURER: ALBRET POURTEAU

- **Aircrafts served:**
  B747-300, A330-300 and -200, A340-300, both on wheels and on jacks, aircraft "tail-in"

- **Modularity:**
  The system includes 2 nose docks, 14 wing docks, 8 engine docks, 2 cargo docks, 2 pax door docks and 2 tail docks, all grounded

- **Structure technology:**
  Supporting structures in painted steel, except the vertical stabiliser docks in anodized bolted aluminium, floors in plywood covered with acrylic anti-slip resin

- **Services:**
  Compressed air, electric plugs distribution and lighting, all electric equipment in the wing and APU zones explosion proof

- **Safety regulations:**
  The docks are compliant to European safety regulations EN ISO 14122, ATEX and Iberia SH-401

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SABENA TECHNICS BOD (FRANCE)
MANUFACTURER: ALBRET POURTEAU

- **Aircrafts served:**
  B737 all versions, A320 series all versions, both on wheels and on jacks, aircraft "tail-in"

- **Modularity:**
  The system includes 2 nose docks, 6 wing docks, 4 engine docks, 2 cargo docks, 2 pax door docks and 2 tail docks, all docks grounded

- **Structure technology:**
  Supporting structures in painted steel, except the vertical stabiliser docks in anodized bolted aluminium for maximum lightness, floors in anti-slip aluminium

- **Services:**
  Compressed air, electric plugs distribution and lighting, all electric equipment in the wing and APU zones being explosion proof

- **Safety regulations:**
  The docks are compliant to European safety regulations EN ISO 14122 and ATEX

- **Other references for similar docks:**
  - Air France, Orly/France
  - Iberia, Madrid/Spain
A319/A320/A321 – COMPLETE DOCKING SYSTEM

This Docking System has been designed for maintenance and repair work on Airbus A319, A320 and A321 aircraft. For hangar use (tail in/on wheels). Scope of project: Project planning, engineering, manufacture and assembly on site, final inspection, commissioning, training of operating personnel, CE-marking, documentation, warranty. Time frame: 4 months.

A319 / A320 / A321 - Complete Docking System

<table>
<thead>
<tr>
<th>Dock</th>
<th>No.</th>
<th>A319</th>
<th>A320</th>
<th>A321</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nose Dock (LH + RH)</td>
<td>1 + 2</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Fuselage modules, front</td>
<td>3 + 4</td>
<td>x</td>
<td></td>
<td>x</td>
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<td>Fuselage modules, front</td>
<td>5 + 6</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Wing bridge</td>
<td>7 + 8</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Fuselage modules, rear</td>
<td>9 + 10</td>
<td></td>
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<td>x</td>
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<tr>
<td>Fuselage modules, rear</td>
<td>11 + 12</td>
<td>x</td>
<td></td>
<td>x</td>
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<tr>
<td>Fuselage modules, rear</td>
<td>13 + 14</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Tail Dock (LH + RH)</td>
<td>15 + 16</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Fuselage bridge</td>
<td>17</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Wing Dock (LH + RH)</td>
<td>18 + 19</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
REQUIREMENTS SPECIFICATIONS

At the time of commissioning, the product and all its components come up to latest engineering standards, and meet the requirements of any applicable codes and standards in their latest version as amended: EN 131, DIN EN ISO 14122, DIN 4113, DIN EN 1915, DIN EN 12312-8, BGV C10, DIN 18800

The incorporated materials comply with the respective material regulations and are being inspected in accordance with the current quality management system.

GENERAL PROVISIONS

- ZACHER aluminium system of work platforms and access stairs
- High strength, corrosion resistant structure
- Steel substructure: sand blasted, galvanized, powder coated yellow
- Platform, stair and railing superstructure: aluminium, mill finish
- Joint plates of aluminium, high-grade steel or galvanized steel
- Fasteners of high-grade steel or galvanized steel
- Powder coated safety platform railings and areas where applicable
- Standard components and purchase parts lacquered in standard colour of supplier
- Easy access between platforms
- Platform flooring of ZACHER standard alternating with XC sections to increase anti-skid effect
- Towable via tow bar and tractor with dock halves coupled at speed of $v_{\text{max}} = 3 \text{ km/hr}$
- Double heavy duty castor wheels ø 400 mm with direction lock 90° and brakes
- Support spindles, operated by hand crank to safe structure against unintentional moving and to adjust to uneven ground

ACCESS STAIRS

- Stair flooring of ZACHER standard sections
- First and last step powder coated yellow
- Flooring of landings of ZACHER standard sections
- Outer sides equipped with railing and handrail providing mid-rail, sections easy to handle, variably attachable, bolted, secured by safety pin, to slide down half-way or completely down to platform level
- Toe board and padding where applicable
- Joints of cast aluminium, self-locking nuts, components of steel galvanized
- Area load: 2.0 kN/m²
- Point load: 1.5 kN on 200 × 200 mm

DOCUMENTS REQUIRED

- Type plates, Declaration of Conformity, Acceptance Report, Technical drawings
- Operational Manual (General description of the docking system and procedures)

BENEFITS

- Contour adjustment and bridging by sliding platforms
- ZACHER Sigma Padding
- Railing System providing fixed and foldaway railing units
- Height-adjustment

A319/A320/A321 – COMPLETE DOCKING SYSTEM
Zarges Tubesca Division AIR

The DIVISION AIR of the Zarges Tubesca group is based on the international cooperation between the german company ZACHER GmbH and the french company ALBRET POURTEAU, two world-class market leaders in the field of aircraft maintenance docking industry for more than 30 years. By providing custom-built or standardized solutions, both companies combine their experience to recommend result-oriented products, answering any technical requirement and facing any economical constraint. Through their project management policy and high-skilled professional team, ZACHER and ALBRET POURTEAU are major players. They can run large-scale projects worth several millions of euros.

If you don’t know us – you might know our customers:

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