SOLUTIONS FOR AIRPORT LOGISTICS

Air Cargo Terminal Equipment

WWW.LODIGE.COM
With Lódige terminal equipment you can handle air freight with efficiency and flexibility. Typical benefits:

- Modular design
- Variable arrangement
- Quick installation
- Time saving

Our range of proven terminal equipment offers scalable and flexible solutions for highest efficiency. Lead the way in speed, cost-efficiency and safety.
AUTOMATED GUIDED VEHICLE

Intelligent ULD transportation

The Lödige AGV provides the missing link between different functional areas of your air cargo system. Reduce stationary equipment with flexible and intelligent transportation.

5 ft AGV

Dimensions LxWxH: 3,080 x 1,780 x 745 mm
Conveying height: 508 mm
Load capacity: 1,588 kg
Deadweight: 1,500 kg
Drive system: Omnidirectional

Drive unit
Drive technology: 2 x 2.5kW 48V AC Motor
Max. speed: 1.5 (3.0) m/s
Max. acceleration: 0.6 m/s²

Roller conveyor
Drive technology: 0.44kW 48V DC Roller Drive
Max. speed: 0.3 m/s
Max. acceleration: 0.3 m/s²

Power supply
Type of battery: up to 16 x 48V Li-Ion
Battery capacity: up to 400 Ah
Battery runtime: 12 h

Additional information
Guidance system: Natural navigation
Network connection: WiFi
Stop precision: ± 10mm
Obstacle sensor: laser technology
Safety: According to all relevant standards (EN 1525, EN13849), bumper, indicator lights, 2 x emergency stop, 2 x plate stops (conveyor), 360° PTZ cameras

10 ft AGV

Dimensions LxWxH: 4,800 x 2,700 x 508 mm
Transfer height: 203 - 508 mm
Load capacity: 6,800 kg
Deadweight: 4,350 kg
Deadweight incl. battery: 5,290 kg

Drive unit
Drive technology: 8kW 48V AC Motor
Max. speed: 3 m/s
Max. acceleration: 0.3 m/s²

Fork arms
Number of fork arms: 3
Fork arm size LxW: 2,400 x 320 mm
Fork arm spacing: 700 mm

Power supply
Type of battery: 48V lead-acid rechargeable battery
Battery capacity: 560 Ah
Battery runtime: 10 h

Additional information
Guidance system: Natural navigation
Network connection: WiFi
Stop precision: ± 10mm
Obstacle sensor: laser technology
Safety: According to all relevant standards (EN 1525, EN13849), bumper, indicator lights, emergency stop, 360° PTZ cameras

WORKSTATION | ADVANTAGES

• Safe handling, loading and buffering of ULDs
• Modular and scalable technology
• Movement in any direction possible
• Directional change possible at any location
• Manual or automated use
• Very low maintenance requirements

OPTIONS AVAILABLE

• Pneumatic activated stops lift ULD off conveyor to secure its position during loading
• Manual stops to lock ULDs in position during loading
• Advanced power drive version to facilitate manual pushing
• Galvanised versions for outdoor installation

BALL DECK & CASTOR DECK

ULD loading, handling & buffering

Hard-wearing and reliable conveyancing to link terminal operations. Transport, load or store ULDs with ease and safety.
**LODIGE FLEXLOADER**

The mobile all-rounder for ULD handling

The Lódige FlexLoader combines the advantages of a pallet transporter and a truck dock. Transport, raise, lower and rotate ULDs with ease.

**FLEXLOADER | ADVANTAGES**

- Attractive benefit-cost ratio
- Mobile – build & break anywhere within the warehouse
- Battery powered and operated from a remote control panel, ensuring a clear view of transported and transferred ULDs at any time
- Pallet transfer to slave pallets, workstations, lorries, powered conveyors or storage positions
- High manoeuvrability due to integrated steerable drive
- Steering ability in all directions during travel
- Environment-friendly battery operated
- Easy to use – joy-stick operated

**FLEXLOADER | TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>6,800 kg</td>
</tr>
<tr>
<td>Lifting height</td>
<td></td>
</tr>
<tr>
<td>FlexLoader L</td>
<td>209 - 1,500 mm</td>
</tr>
<tr>
<td>FlexLoader XL</td>
<td>209 - 2,800 mm</td>
</tr>
<tr>
<td>ULD: category max.</td>
<td>15 ft</td>
</tr>
<tr>
<td>(baseplate size:</td>
<td>max. 3,175 x 2,440 mm</td>
</tr>
<tr>
<td>Lifting speed</td>
<td>max. 0.05 m/s</td>
</tr>
<tr>
<td>Driving speed</td>
<td>max. 1 m/s</td>
</tr>
<tr>
<td>Conveying speed</td>
<td>max. 0.3 m/s</td>
</tr>
<tr>
<td>Vehicle dimensions</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>3,500 mm</td>
</tr>
<tr>
<td>Width</td>
<td>4,430 mm</td>
</tr>
<tr>
<td>Height: FlexLoader L</td>
<td>2,200 mm</td>
</tr>
<tr>
<td>FlexLoader XL</td>
<td>3,480 mm</td>
</tr>
</tbody>
</table>

**WORKSTATION (EWS)**

Build-up/Break-down stations

Ergonomic working procedures are achieved using the Lódige Elevating Workstation (EWS). The EWS lifts or lowers the ULD to the optimum loading height.

**WORKSTATION | ADVANTAGES**

- Robust construction
- Various transfer deck models available
- Back-up functions (emergency lowering, manual deck transfer)
- Proven hydraulic lifting technology
- Ram protection option
- Weighing facility option
- Drive-over capability option

**DESIGNS AVAILABLE**

- Roller deck (NEP or WEP)
- Ball deck
- Steel plate (for use with slave pallets)

**EWS | TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifting capacity</td>
<td>6,800 kg</td>
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<tr>
<td>Collapsed height</td>
<td>800 mm</td>
</tr>
<tr>
<td>Lifting stroke</td>
<td>max. 2,000 mm</td>
</tr>
<tr>
<td>Lifting speed</td>
<td>0.05 m/s</td>
</tr>
<tr>
<td>Drive rating</td>
<td>8 kW</td>
</tr>
<tr>
<td>Tare weight</td>
<td>5,000 kg</td>
</tr>
<tr>
<td>Length</td>
<td>3,600 mm</td>
</tr>
<tr>
<td>Width</td>
<td>2,700 mm</td>
</tr>
</tbody>
</table>

The FlexLoader XL raises to 2,800 mm high to enable access to racks with two levels.
The modular Lodige Truck Dock satisfies the growing demand for a versatile, adaptable, economical scissor lift to load and unload ULD trucks and dollies.

**TRUCK DOCK | ADVANTAGES**
- Assemble your perfect unit from standard “off-the-shelf” modules
- Quick and easy future upgrading and retrofitting of modules

**BASIC MODEL**
- Scissor lift assembly, hydraulic power pack and base frame (without side shift)
- Transfer deck (powered rollers)
- Control Panel
- Safety equipment (chain skirt, trip bar etc.) as required

**TRANSFER DECKS (OPTIONAL):**
- Ball deck
- Castor deck
- Non-powered roller decks

**OPTIONAL MODULES:**
- “Side shift” module (+/- 150 mm)
- Moving ram protection with powered roller (vertical guide columns set in, or on the floor)
- Operator platform(s) - 600 mm wide
- Stop, front / rear
- Weighing scales with read-out display
- Electric or hydraulic winch (500 daN pulling force)

**TRUCK DOCK | TECHNICAL DATA**
- Capacity: 7,000 kg
- Collapsed height: 508 mm
- Stroke: 1,100 mm
- Deck width: 2,700 mm
- Deck length:
  - TDM-10: 3,600 mm
  - TDM-15: 5,120 mm

**SLAVE PALLET MOVER | TECHNICAL DATA**
- Payload: 7,500 kg
- ULD (incl. wing container): max. 10 ft
- Max. lifting speed: 0.025 m/s
- Transfer height: 203 – 508 mm
- Drive power: 15 kW
- Overall size (l x w): 4,130 x 1,720 mm
- Turning radius: 3,700 mm
- Number of fork arms: 3
- Fork arm size (l x w): 2,400 x 320 mm
- Fork arm spacing: 700 mm
- Battery operation time: 8 to 10 h
- Battery recharging time: Ca. 8 h

**EXAMPLES OF APPLICATIONS**
- Build & break activities anywhere in the warehouse
- Import/export ULD staging
- Loading/unloading of ULDs into mechanised systems
- Flexible organisation of build & break positions
- Additional build & break positions to overcome peaks

**OPTIONAL FEATURES**
- Safety canopy
- Warning horn & light
- Battery changing cradle
- Electrical steering
- Panoramic mirror
- Working lights
LÖDIGE SLAVE PALLETS (10 FT)

- The pallet can be picked up from all four sides and is stackable.
- In accordance with IATA A4M 911.
- Manual stops to retain container on the pallet (raised position: 50 mm above the pallet height).
- Fixed side guides on the long sides provide ULD guidance.
- The 25 mm height above the roll plane holds the ULDs safely without any hindrance during forklift assisted build & break operations.
- Available with rollers or balls.
- Capacity: 6,800 kg.
- Length: 3,600 mm, width: 2,600 mm.
- Height of transfer plane: 203.2 mm.

REFERENCES TERMINAL EQUIPMENT
- Aeroporti Roma
- Aviapartner
- British Airways
- Cargo Centre Sweden
- Swissport
- CSC
- D.Logistics
- Finnair
- Flightcare
- Huffer
- KLM
- Lufthansa
- Malaysia Airlines
- Menzies
- Moscow Cargo
- Polar Air
- Port Ground
- Skylink