



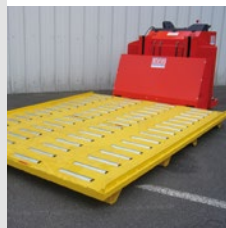
AIRPORT
LOGISTICS



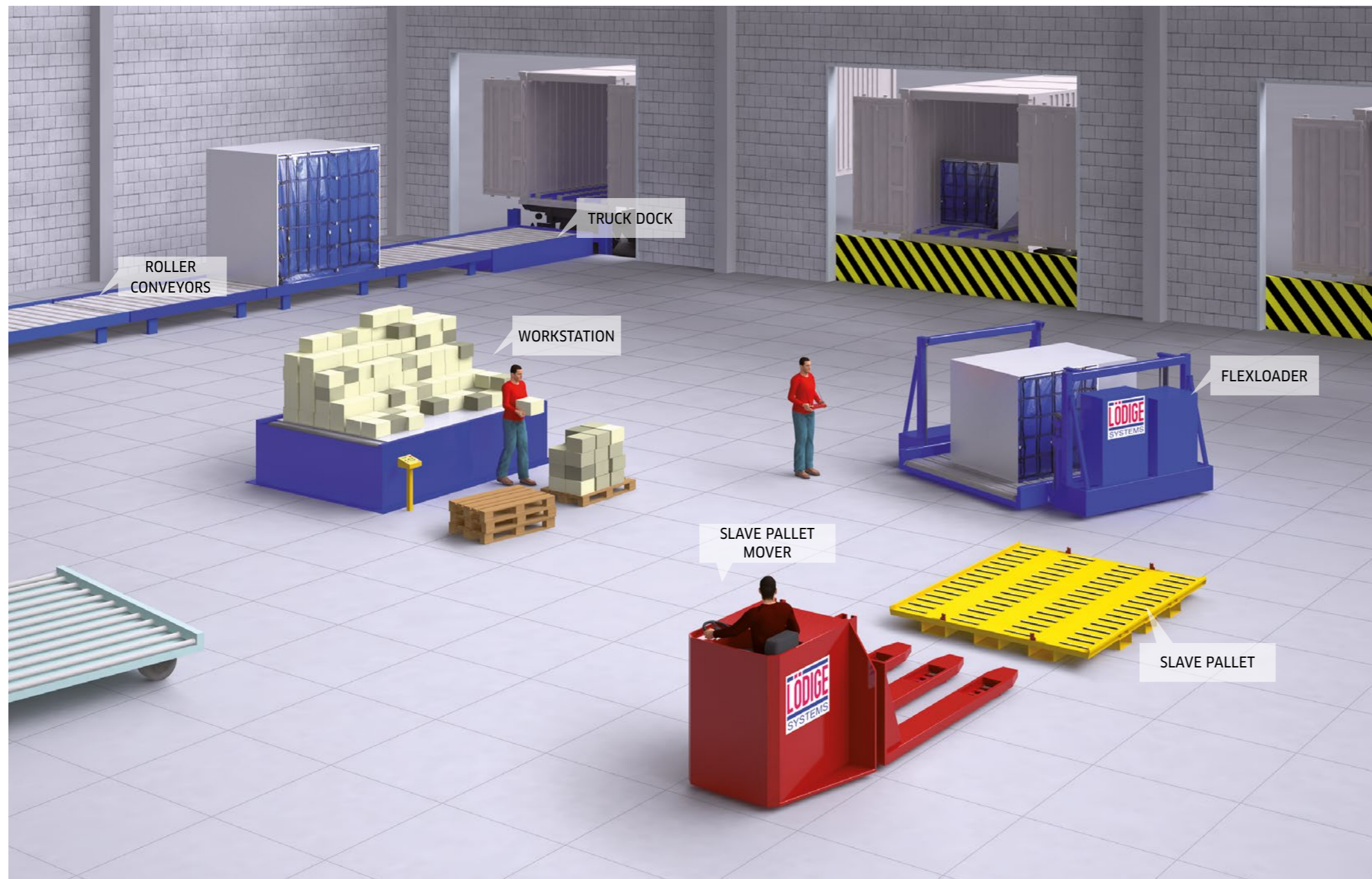
SOLUTIONS FOR AIRPORT LOGISTICS

Air Cargo Terminal Equipment

WWW.LODIGE.COM



LODIGE
INDUSTRIES



FLEXIBLE AIR FREIGHT HANDLING

With Lödige 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.



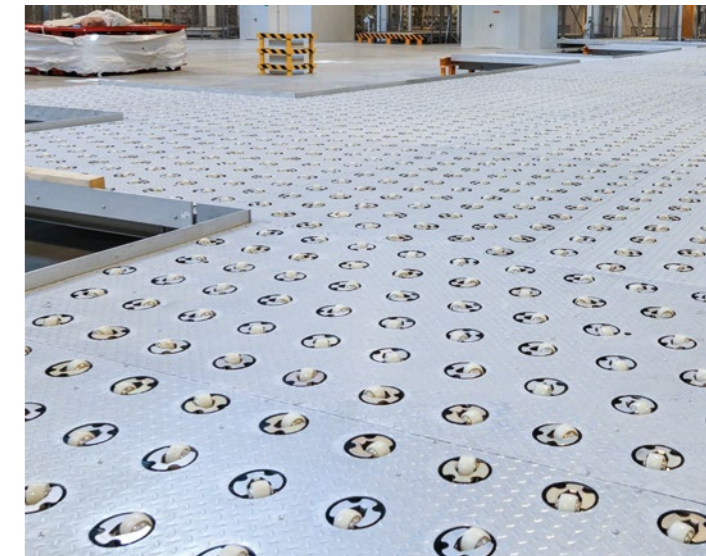
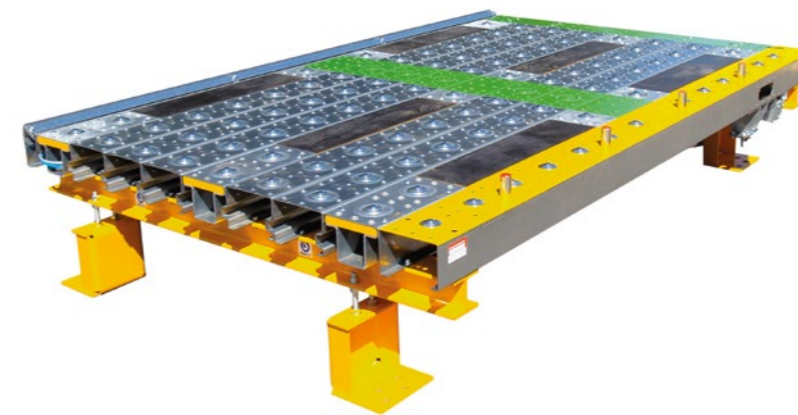
BALL DECK & CASTOR DECK

ULD loading, handling & buffering

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

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/s ²
Roller conveyor	
Drive technology	0.44kW 48V DC Roller Drive
Max. speed	0.3 m/s
Max. acceleration	0.3 m/s ²
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/s ²
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



Pneumatic stops prevent the ULD from moving for safer loading processes

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

LÖDIGE FLEXLOADER

The mobile all-rounder for ULD handling

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



WORKSTATION (EWS)

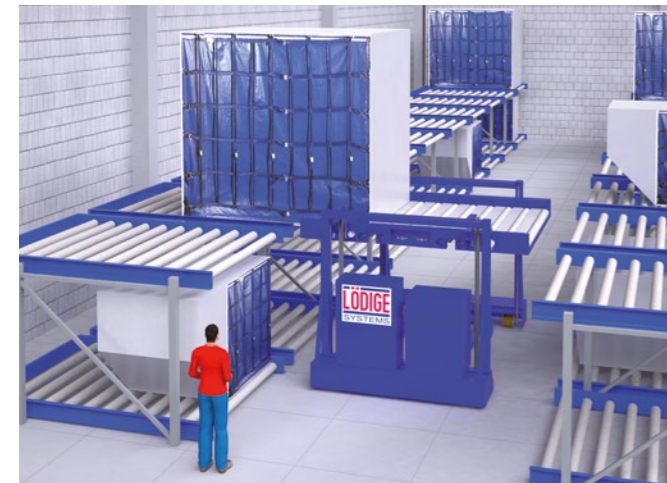
Build-up/Break-down stations

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



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
- Environmentally-friendly battery operated
- Easy to use – joy-stick operated



The FlexLoader XL raises to 2,800 mm high to enable access to racks with two levels.

FLEXLOADER TECHNICAL DATA	
Capacity:	6,800 kg
Lifting height	
FlexLoader L :	209 - 1,500 mm
FlexLoader XL :	209 - 2,800 mm
ULD: category max.	15 ft
(baseplate size: max. 3,175 x 2,440 mm)	
Lifting speed:	max. 0.05 m/s
Driving speed:	max. 1 m/s
Conveying speed:	max. 0.3 m/s
Vehicle dimensions	
Length:	3,500 mm
Width:	4,430 mm
Height: FlexLoader L	2,200 mm
FlexLoader XL	3,480 mm



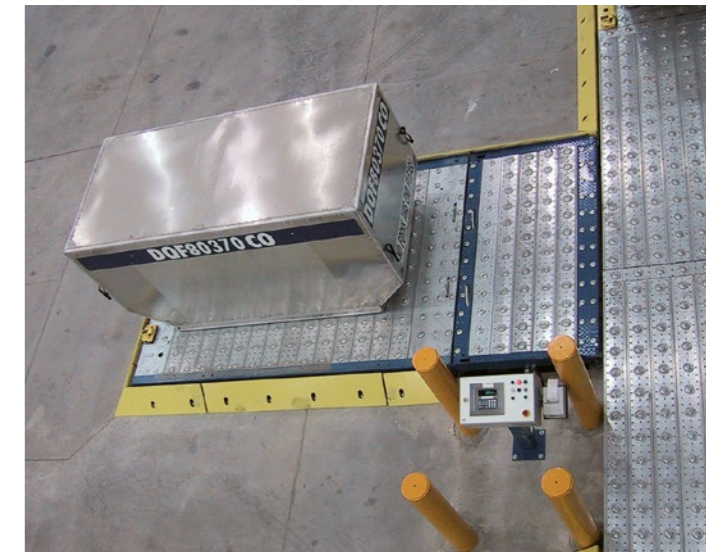
WORKSTATION | ADVANTAGES

- 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	
Lifting capacity:	6,800 kg
Collapsed height:	800 mm
Lifting stroke:	max. 2,000 mm
Lifting speed:	0.05 m/s
Drive rating:	8 kW
Tare weight:	5,000 kg
Length:	3,600 mm
Width:	2,700 mm



LÖDIGE TRUCK DOCK

Modular truck dock

The modular Lödige 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



Pallet Mover with electrically steering (optional)

SLAVE PALLET MOVER

ULD transporter

The Slave Pallet Mover combined with slave pallets is the flexible and versatile system for air cargo handling needs.

EXAMPLES OF APPLICATIONS

- Build & break activities anywhere in the warehouse
- Import/export ULD staging
- Loading/unloading of ULDs into mechanised systems
- Loading/unloading of ULDs to and from dollies
- 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



Battery changing cradle for the quickest changing of an empty battery for a fully charged one. The unit consists of the base frame with height adjustable feet and a sliding battery tray. The battery charger is located at one end of the base frame.

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



SLAVE PALLETS & MANUAL HANDLING AREAS

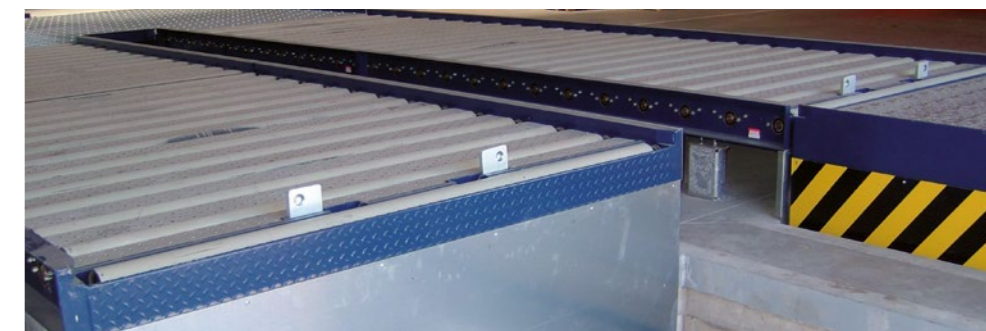
Slave pallets and manual handling areas support the safe and simple handling of ULDs.



Slave Pallet with rollers

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



LÖDIGE SLAVE PALLETS (10 FT)

- The pallet can be picked up from all four sides and is stackable
- In accordance with IATA AHM 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

