


EFFICIENT AND SAFE TRANSPORT OF AIR FREIGHT

System partner
in the air cargo sector



DIMOS

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EDITORIAL!

As a system provider in the air cargo sector, it is crucial to identify customer requirements and translate them into a functional, coordinated system. During the process, customers can receive expert advice from a single contact rather than liaising with multiple organizations.



System providers optimally coordinate all project steps from the planning process through implementation to after-sales service, providing long-term support for the customer. This ensures direct and efficient communication between the customer and the provider.

International manufacturers of special vehicles for the air cargo sector are also aware that the customer's strategic direction and planned growth must be an integral part of the planning and implementation.

Happy reading!

Pascal Schütz,
Managing Director

A full-service expert with decades of experience does not deliver combined components, but rather an integral solution that takes into account the process, function and customer-specific internal procedures.



CHALLENGES ARE OUR PASSION

WHO IS DIMOS

DIMOS supplies customers with a large number of industrial trucks and equipment for the transport and storage of goods.



The family-owned company based in Petersberg near Fulda has been successfully producing and selling industrial trucks for the most demanding loads and storage environments worldwide for more than 30 years. In 2000, **DIMOS** expanded its portfolio and has since been equipping airports and airlines all over the world with industrial trucks and conveyor technology for the air cargo sector.

In 2004, **DIMOS** developed the X-Way Mover for major international airports. The multifunctional vehicle is designed according to IATA standards and is employed by many users, including the top four of the ten largest air cargo companies in the world.

All **DIMOS** products are optimally designed for every application and individually adapted to the customer's requirements. **DIMOS** aims to provide the highest quality, reliability and competent service. In the field of custom-made products, **DIMOS** is one of the global market leaders.

DIMOS is certified according to various international standards. These certifications guarantee that our products and services meet the highest standards of quality, environmental management and occupational safety. As a result, our customers benefit from sustainable, safe and future-proof solutions that meet global standards.

PROJECTS & SYSTEMS

Everything from a single source – flexible, individual and process-oriented!

DIMOS is an established supplier of logistics vehicles. This also includes very innovative vehicles for the air cargo sector. In order to assist customers at the airport, these vehicles must be integrated into the existing processes and operational requirements.

Advantages of intelligent system solutions in the airport sector

- + Individual product solutions
- + Stand-alone, efficient systems
- + Knowledge of every process step
- + Flexible adaptation of the technology for brown-field projects
- + One expert who coordinates all interfaces
- + Continuous support before, during and after implementation


Vision

Translating air freight processes into efficient and innovative products and thus developing future-proof systems. Creating sustainable and resource-saving air freight logistics.

By using energy-efficient drives and advanced control systems, we help reduce our customers' energy consumption and CO₂ emissions. By establishing local partners and resource-efficient production, we are making an active contribution to greener logistics.



Preparing for take-off – **DIMOS** is your partner every step of the way



Consulting and planning

The customer's objectives and desires in terms of environment, sales, throughput and investment are translated into reliable, ergonomic and efficient systems that grow with the customer.

Static and dynamic simulation

Throughput figures are verified using the layout, component properties and performance are checked and system quantities are adjusted. The static simulation is the basis, the dynamic simulation is the benchmark.

Design

Components are combined to create a reliable structure. **DIMOS** designs and manufactures its products in-house.

In-house production and final assembly

Mechanics, electrics and controls are designed and completed in-house. Component selection and testing, circuit planning and programming are prepared and verified in-house through simulation and emulation.

Project and construction site management

The commissioning and acceptance of the system takes place according to a procedure agreed upon with the customer. The aim is not only to determine whether all functions of the system are operating as expected, but also to explain to the customer the system-related connections to ensure optimal use and error prevention.

The customer is also involved in training the operating and maintenance personnel during the installation of the system.

Support and service

The cooperation between suppliers and users of systems or components does not end once the system is in place, but continues for years. **DIMOS** offers its own first level support as well as service, documentation for maintenance (preventive and planned) and servicing.

We offer 24/7 remote support. Regular software updates are also carried out via remote access to ensure that your systems are always up to date and as efficient as possible.

Advantages of our remote service: Fast response times to problems, less downtime and lower operating costs. Thanks to our remote maintenance services, your system will always remain in optimal condition without the need for physical intervention on site.

SOLUTIONS FOR ULD HANDLING AT THE AIRPORT

The handling of goods and products for transport by air at the air cargo terminal is complex.

Goods must be transported quickly and safely as part of airport logistics. A wide range of requirements in terms of weight, transport safety, speed and temperature sensitivity must be met.

In order to optimally load aircraft, the cargo is bundled in unit load devices (ULDs). ULDs are made up of pallets and containers, allowing for the easy transport of goods and products in large quantities.

In the airport logistics sector, numerous vehicles are in operation to carry out the handling, storage and transport of these ULDs and air freight in general.

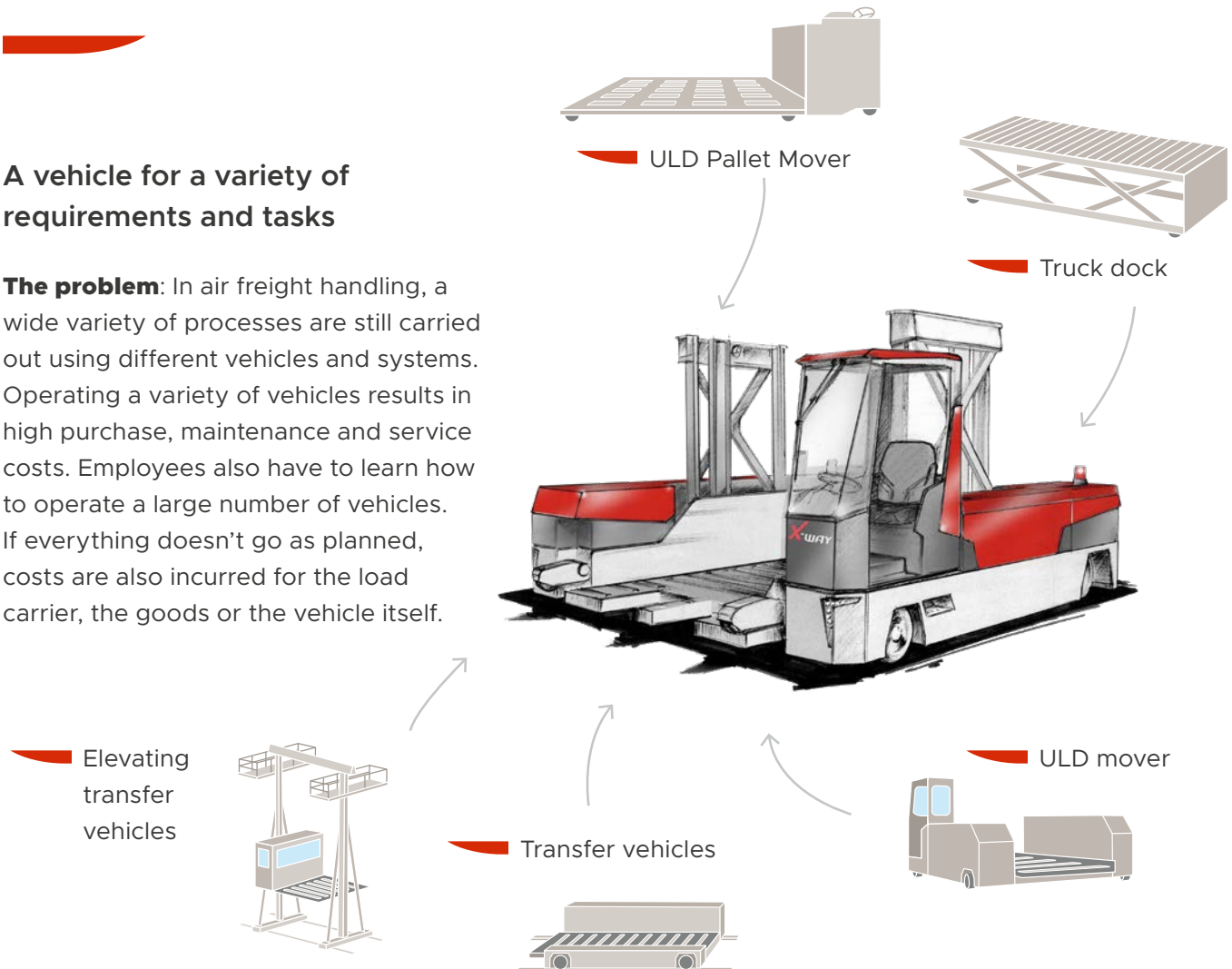


As a system supplier, **DIMOS** offers various solutions to optimize the ULD handling process at the airport.

Rapid and reliable air freight handling

A vehicle for a variety of requirements and tasks

The problem: In air freight handling, a wide variety of processes are still carried out using different vehicles and systems. Operating a variety of vehicles results in high purchase, maintenance and service costs. Employees also have to learn how to operate a large number of vehicles. If everything doesn't go as planned, costs are also incurred for the load carrier, the goods or the vehicle itself.



X-Way Mover from DIMOS

The solution: The X-Way Mover from **DIMOS** performs a variety of tasks, requiring only one vehicle. This significantly reduces costs and resource consumption. In addition, the vehicle's lift height allows additional storage capacity to be created using the same floor space.

For many customers, an important factor is the reduction in collision damage to ULDs, which is significantly lower when using our machines compared to conventional forklift trucks.

DIMOS takes particular care to eliminate all damage to ULDs.



COMPLETE LOGISTICS SOLUTION

replaces combination of individual components

Stationary equipment and other services

- Design and consultation
- Castor decks
- Workstations with elevating platforms
- Manual roller decks with and without scales and printer
- Truck dock
- Cold storage room with conveyor technology
- Electrical and control systems
- Maintenance and after-sales service
- Safety technology



Air cargo solutions from **DIMOS** generally involve the use of transport vehicles. However, this does not always have to be the case.

In a project involving a new facility spanning approximately 57,000 square meters and featuring the most advanced technologies, **DIMOS** took over both the planning and construction and supplied a large number of components.

These components included around 1,700 square meters of castor decks, workstations with elevating platforms, 19 manual roller decks with and without scales and with printers, truck docks and a cold storage room with conveyor technology.

The comprehensive package also included electrical and control systems, maintenance and after-sales service as well as all safety technology – but, in this case, no air cargo vehicles were provided.

Instead, the planning and construction of this huge new facility relied heavily on the system supplier's expertise.

Our modular system solutions enable flexible adaptation to different airport environments. Thanks to our scalable and expandable systems, existing systems can be easily modernized or upgraded, guaranteeing long-term investment security.

SUCCESS STORY

Paris Charles de Gaulle Airport



DIMOS provided a tailored logistics solution by introducing two multifunctional X-Way Movers.

These vehicles replaced conventional cargo handling equipment such as truck docks, transfer vehicles, pallet movers, and stacker cranes with a single, highly efficient system.

The X-Way Movers, with their patented 360° HX steering, ensured flexible and smooth movement even in confined spaces.

Additionally, **DIMOS** designed an open-air, covered ULD warehouse with 200 storage spaces that could accommodate both full and empty ULDs, adapting to the evolving needs of the customer.

Advantages for the customer:

- + Increased efficiency
- + Cost savings
- + Enhanced security



IMPRESSIVE PRODUCTS FROM DIMOS

DIMOS offers various vehicle types
specifically for the air cargo sector

INTRAC - the next generation of autonomous air cargo transport vehicles

INTRAC, the compact AGV pallet mover, enables dynamic warehouse planning and thus generates additional storage capacity.



INTRAC in action
youtu.be/BucbMOQKELw



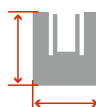
Load capacity
7,000 kg



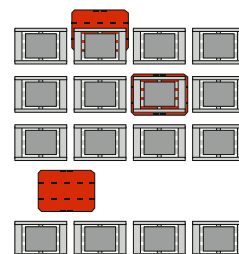
Battery*
Lithium-ion



Steering
**Electric multi-
directional steering**



Dimensions (LxWxH)
3,150 x 2,100 x 410 mm



Warehouse optimization
**Wide aisles are no longer required,
instead block storage creates more
storage space, resulting in cost savings**

* All our vehicles can be equipped with energy-efficient lithium-ion batteries, which offer longer running time and shorter charging times. This reduces energy consumption and running costs. DIMOS strives to provide energy-efficient solutions that pay for themselves quickly and at the same time contribute to environmental protection.

X-WAY MOVER

Innovative ULD handling equipment

The X-Way Mover combines the functions of a truck dock, transfer vehicle (TV), pallet mover, ULD mover and storage and retrieval machine (ETV). It incorporates all ULD handling processes and interfaces at the airport – from landside to airside.



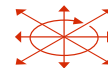
X-Way Mover in action
youtu.be/ZTOFFsTcfXs



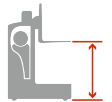
Load capacity
7,000 kg



Battery*
**Lithium-ion
or lead-acid**



Steering
**360° multi-
directional steering**



Lift height
7,500 mm

ETV

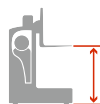
In contrast to conventional and bulky ETVs, **DIMOS** has redesigned its truck variant to make it lighter, more efficient and more sustainable. At the same time, the vehicle is able to store at high lift heights. This results in a significant gain in storage space for users.



Load capacity
**13.6 t per 20 ft
container**



Powered
by **AC-motor
with Power Bar /
Slotted Wave Guide**



Lift height
7,500 mm



Dead weight
**Weight reduction of
approx. 1/3 in total**

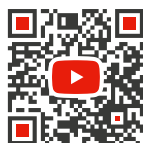


ETV in action
youtu.be/RhDF2gfhHGO

PALLET MOVER – ideal for transporting air freight units

PALLET MOVER Standard

The Pallet Mover is a standardized, logistical interface for ULD & pallet handling at ground level up to a height of 508 mm for transfer to a dolly or transfer deck.



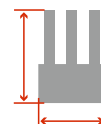
PALLET MOVER
Standard in action
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Load capacity
6,800 kg



Battery*
**Lithium-ion
or lead-acid**



Dimensions (LxW)
3,828 x 1,700 mm

PALLET MOVER Standard with weighing system

In its standard version, the Pallet Mover can also be equipped with a weighing system, i.e. calibrated scales (ready for commercial use).



The calculated weight of the load is then sent to a connected printer, which creates a label to be attached to the load carriers. Alternatively, the data can also be transferred to a WMS or similar.

PALLET MOVER with scissor lift and roller deck

The Pallet Mover is equipped with an elevating platform above a scissor table. The scissor lift can also be equipped with a roller deck (driven or non-driven rollers). This can be used for loading and unloading containers and trucks. The Pallet Mover can be used as a mobile workstation or mobile truck dock.

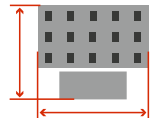
The Pallet Mover from **DIMOS** offers reliable, simple and flexible maneuverability. It also enables the transport of containers up to 10 feet in size with a maximum weight of 6.8 tons in confined spaces.



Load capacity
6,800 kg



Battery*
**Lithium-ion
or lead-acid**



Dimensions (L×W)
4,165 × 4,270 mm



PALLET MOVER
with scissor lift and
roller deck in action
youtu.be/_aJM1D4ZfTo





We're here to help.
Contact us!



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