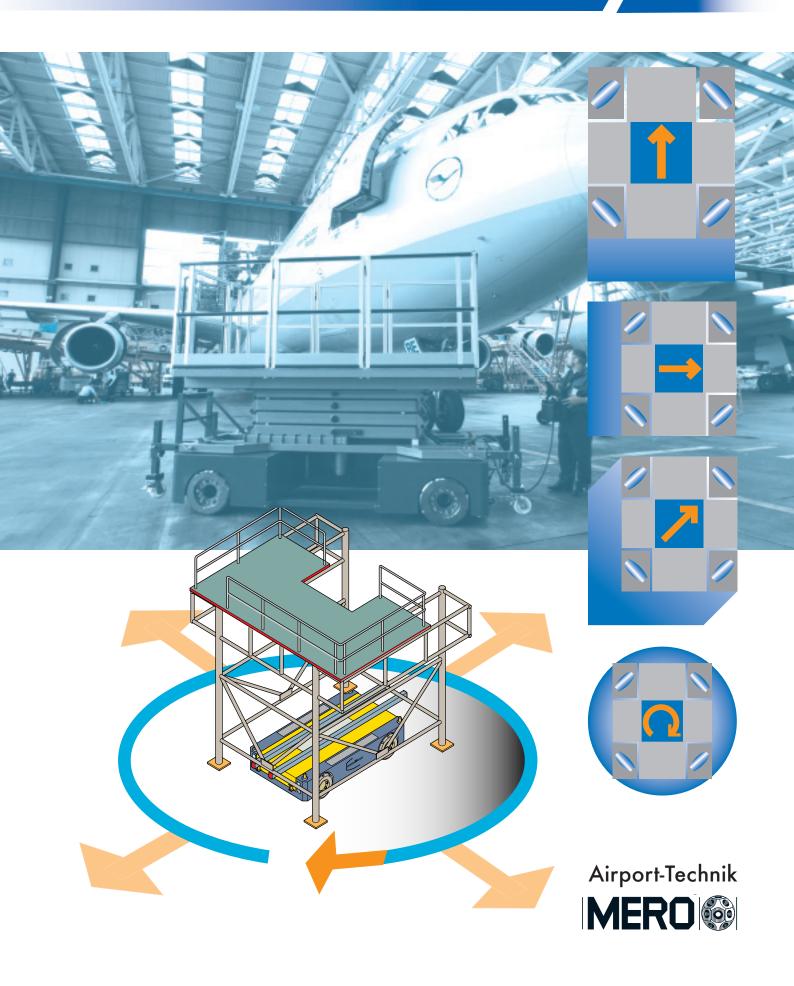
# **The Dock Positioner System**

# MERO*move*



# **MERO** *move* ... and its additional applications

#### The system

The MEROmove Dock Positioner System comprises:

- → MERO docking system modules
- The highly innovative omni Move chassis, for quick, safe, positioning of access equipment anywhere around the aircraft

#### **Smooth operation**

The omni*Move* chassis provides totally omnidirectional smooth operation guaranteeing absolutely shock free manoeuvring independent of its heading throughout the full range of operations.

### Single system - multi task

Developed specifically to meet the demanding requirements of the aviation industry. The equipment uses a multi-jig system, on the omnimove chassis, to provide a variety of additional applications that can be offered:

- Dock Positioner:
   Smoothest and safest positioning of docks during aircraft docking procedures
- → Z-Lift-Positioner: Special lifts for maintenance and painting tasks
- Triple Lift Positioner:
   Providing extremely stable work platforms
- Engine Positioner:
   Designed for engine-on-ground changes, for all aircraft types, including the Airbus A 380
- → Landing Gear Positioner: Compatible with the entire range of Airbus and Boeing aircraft, for handling the main landing gear, tyres and brakes
- Platform Positioner:Fitted to any individual scissor-lift type platform

The range of components, and options that can be fitted, will ensure that all types of aircraft maintenance tasks are catered for.

## Single drive - multi applications

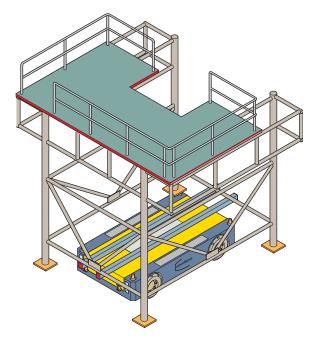
The universal drive system not only actuates the chassis for manoeuvring but also controls any additional component integrated functions: lifting, raising, fixings, etc..

One single system for multi applications.

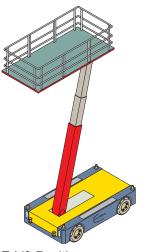
## Highest cost efficiency

Using the omni*Move* system can realise enormous cost savings by reducing the number of assets required to move these specialist items into position. There is no need to have an omni*Move* for each equipment that you need to position.

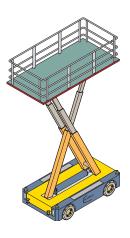
When not in-use the specialist equipment can be removed, from the omni*Move*, and replaced with different types of specialist equipment thereby providing maximum utilisation.



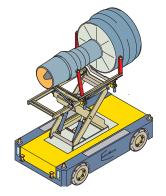
**Dock Positioner** 



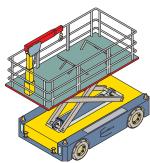
**Z-Lift Positioner** 



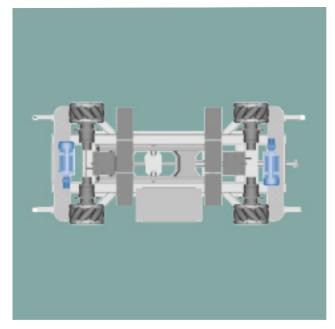
Triple-Lift Positioner

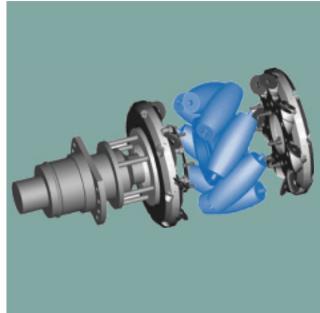


**Engine Positioner** 



Landing Gear Positioner





The omni*Move* drive gear consists of two identical drive units fitted with omni*Move* wheels. Each wheel comprises an hydraulic motor, a gear unit and brake.

The omni*Move* wheel drive gear by a joystick, connected by a CAN-bus to the electronic control, enabling the operator to navigate omni-directionally like a hovercraft.

This enables the omni*Move* to be positioned with millimetre position.

The basic omni*Move* Positioner can accept various types of specialist equipments to meet your specific requirements:

- → lift platforms
- → mobile test stands
- → positioning equipment
- → and many other possible applications

The onmi*Move* wheel consists of eight specially shaped non-driven rollers, which are mounted between two identical stable rims.

This grouping of the rollers - in the centre of the wheel at an angle of 45° - leads to the wheel replicating the form of a circle.

When the wheel is turning the surface of the roller in contact with the ground rotates, as it does so it transfers the load to the next roller without interruption ensuring smooth progress.

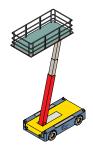
The omni*Move* wheel is based on a 25 year old proven technology. The design ensures that the omni*Move* has the following advantages when compared with other types of wheels:

- → The omni*Move* wheel is cost efficient
- The externally installed stable rims protect against damage
- → It is easy to maintain and repair

**Technical data** 8.7.10.01













| Items                   | Positioner | Triple- Lift-<br>Positioner | Z- Lift-<br>Positioner | Engine-<br>Positioner | Landing Gear<br>Positioner | Dock<br>Positioner |
|-------------------------|------------|-----------------------------|------------------------|-----------------------|----------------------------|--------------------|
| Platform-<br>Dimensions |            | 4.000x2.500 mm              | 4.000x2.500 mm         |                       | 4.000x2.500mm              |                    |
| Platform<br>Height down |            | 600 mm                      | 600 mm                 | 800 mm                | 600 mm                     |                    |
| Platform<br>Height up   |            | 8.000 mm                    | 8.000 mm               | 3.500 mm              | 3.500 mm                   |                    |
| Payload capacity        | 8.000 kg   | 1.000 kg                    | 500 kg                 | 8.000 kg              | 8.000 kg                   | 8.000 kg           |
| Total height            | 600 mm     | 9.100 mm                    | 9.100 mm               | 3.500 mm              | 3.500 mm                   |                    |
| Min. height             | 600 mm     | 1.700 mm                    | 1.700 mm               | 800 mm                | 600 mm                     | 800 mm             |
| Total length            | 4.000 mm   | 4.000 mm                    | 4.000 mm               | 4.000 mm              | 4.000 mm                   | 4.000 mm           |
| Total width             | 2.500 mm   | 2.500 mm                    | 2.500 mm               | 2.500 mm              | 2.500 mm                   | 2.500 mm           |
| Weight                  | 3.000 kg   | 8.000 kg                    | 7.000 kg               | 4.000 kg              | 7.000 kg                   | 4.000 kg           |
| Speed 1                 | 0-1m/sec   | 0-1m/sec                    | 0-1m/sec               | 0-1m/sec              | 0-1m/sec                   | 0-1m/sec           |
| Speed 2                 | 0-0.2m/sec | 0-0.2m/sec                  | 0-0.2m/sec             | 0-0.2m/sec            | 0-0.2m/sec                 | 0-0.2m/sec         |
| Lifter Speed            | 0.1m/sec   | 0.1m/sec                    | 0.1m/sec               | 0.1m/sec              | 0.1m/sec                   | 0.1m/sec           |

MERO GmbH & Co. KG Max-Mengeringhausen-Str. 5 97084 Wuerzburg Germany

Tel.: +49 (0) 931 66 70-0 Fax: +49 (0) 931 66 70-229 Internet: www.mero.de

#### Contact also:

IC Industrial Consulting GmbH E-mail: info@omni-move.com Internet: www.omni-move.com

