

DOCKING SYSTEM

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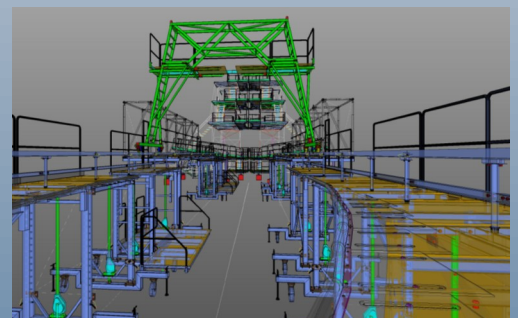
BOEING B737NG | AIRBUS A320

JAT TEHNIKA—REPUBLIC OF SERBIA



Narrowbody Docking System for Maintenance Works on Various Aircraft.

A complete docking system which shall cover all maintenance relevant areas of several Narrowbodies was the challenge for MERO Airport-Technik. The solution contains various dock elements which cover the complete fuselage-, upper fuselage, wing- and upper wing as well as complete tail area. Access to PAX doors, Cargo compartment and APU is provided also. All installed Dock elements consist of light weight MERO KK-Structure where possible—all other modules were built by means of welded and bolted light weight steel structures. Except the Tail Dock, all modules are manually moveable on the hangar floor. The Tail Dock—according to customer requirements—is equipped with electrical height adjustment and drives. Fuselage- and Wing Docks are equipped with a manual operated height adjustment. All types of Boeing B737 NG and Airbus A320 Aircraft can be maintained on wheels as well as on jacks within the Docking System. Antiskid plywood decking forms the base of all our modules to secure safe working conditions. Every edge touching the Aircraft surface is protected with a MERO hose-type padding to prevent damages on the Aircraft. The developed MERO padding is designed to avoid stripes and scratches on the Aircraft surface and is skydrol as well as kerosine resistant. Electrical and compressed-air installations are evenly distributed across the complete Docking System according to customer needs. All media such as sockets, lamps are executed as non ex-proof installations [EX-proof installations are optional available]. This applies also to the tank ventilation systems. Safety devices for example railings, kickboards and decking are all designed in accordance to all necessary and relevant EC standards, regulations and guidelines. Access is provided by means of height adjustable access stairs located on Nose Dock, each Wing Dock module (depending on Aircraft position) and Tail Dock module. Flap and Rudder testing in docked position is possible after prior preparations.



This project combined the customer requirements and the MERO experience of more than 50 years of building Aircraft Docking Systems. Final result of these two elements is a fully customized and customer oriented Narrowbody Docking System which allows *faster maintenance, higher efficiency and lower costs!*





Technical data:

Lifting range:

Fuselage Modules | 1600 mm; manually operated

Wing Docks | 1500 mm; manually operated

Tail Dock | 1100 mm; electrical operated

Movement:

Fuselage and Wing Docks are manually moveable on single castor wheels. Tail Dock is electrical driven wheel blocks.

Weights per element:

ND | approx. 1.9 to

FFD 1 | approx. 1.7 to

FFD 2 | approx. 1.1 to

FFD 3 | approx. 0.9 to

FFD 4 | approx. 0.8 to

WB | approx. 0.7 to

RFD 1 | approx. 1.6 to

RFD 2 | approx. 1.0 to

RFD 3 | approx. 1.3 to

RFD 4 | approx. 1.1 to

FB | approx. 0.5 to

WDC | approx. 2.2 to

WDO | approx. 1.9 to

TD | approx. 9.0 to

Dimensions:

ND | 5.8 m x 6.4 m x 1.3 / 1.6 / 2.6 m (Level 1 / 2 / 3)

FFD 1 | 4.5 m x 3.0 m x 0.5 / 2.6 m (Level 1 / 2)

FFD 2 | 3.3 m x 2.6 m x 2.6 m

FFD 3 | 3.8 m x 2.6 m x 2.6 m

FFD 4 | 2.1 m x 2.6 m x 2.6 m

WB | 10.5 m x 2.2 m x 2.0 m

RFD 1 | 3.9 m x 3.0 m x 0.5 / 2.6 m (Level 1 / 2)

RFD 2 | 4.0 m x 2.6 m x 2.6 m

RFD 3 | 5.0 m x 2.6 m x 2.6 m

RFD 4 | 5.0 m x 2.6 m x 2.6 m

FB | 4.5 m x 2.2 m x 2.5 m

WDC | 7.2 m x 4.7 m x 0.8 / 1.2 m

WDO | 7.0 m x 6.0 m x 1.5 m

TD | 11.25 m x 8.2 m x 10.0 m

Installations:

All Dock modules are equipped with following media:

→ Lamps | 2 x 58 watts IP 54

→ Sockets | 24 volts IP 44

→ Sockets | 220 volts IP 44

→ Compressed air | Y-Couplings

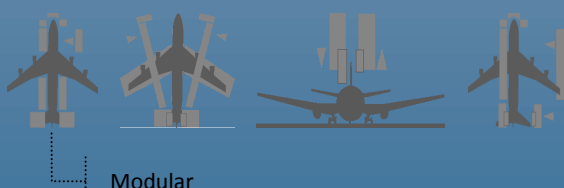
In addition only the Tail Dock is equipped with an electrical height adjustment and electrical undercarriages.

A tank ventilation system is also included.

Completion:

2014

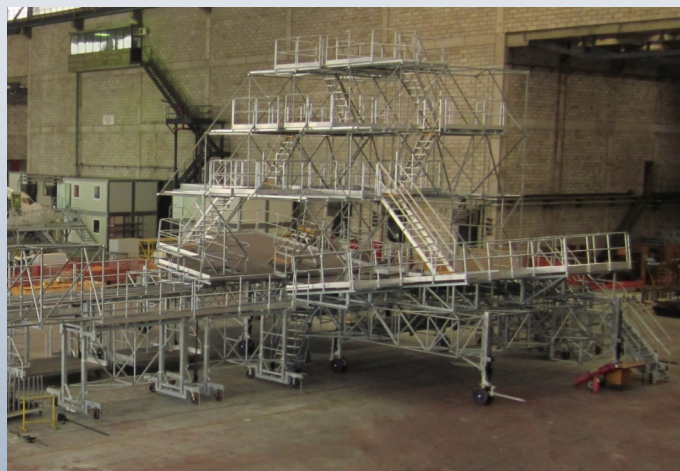
Design :



Modular

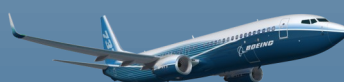


Forward Fuselage Section



Rear Fuselage Section

Suitable for following type of Aircraft:



BOEING B737-600 /-700 /-800 /-900



AIRBUS A320

For more and detailed information please visit our website www.mero.de

