air marrel

LAM 3500 DP/8

loader for pallet and containers up to 7800 lbs capacity (3500 kg)

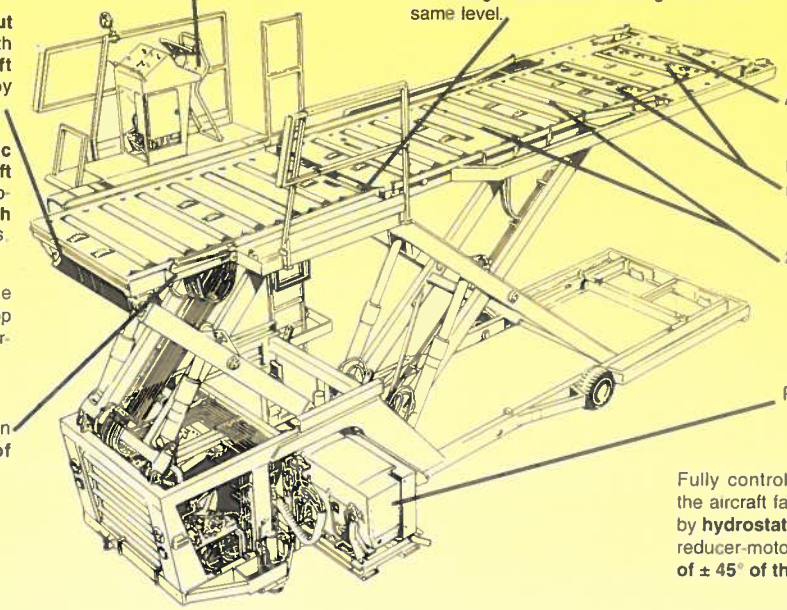
Conforms to european regulations CE

Congestion on airports and limited space on ramp as well as the need to reduce operation costs at a minimum called for the USE OF A NARROW LOADER WHENEVER POSSIBLE.

The new generation of loader, chainless for easier maintenance and faster operation.
The arrival on airports of the new Airbus A320 called for the creation of a new loader : The AIR MARREL LAM 3500. In its research for trouble free maintenance and comfort for the operator AIR MARREL has developed a special version of the LAM 3500 model, called LAM 3500 DP/M8. In addition to all features of the standard model DP/M7, this new version DP/8 offers **powered side loading and container rotation in option.**
Other innovative design to be found on the AIR MARREL LAM 3500 DP/8 is **the chain-less load transfer system** (all powered rollers are directly driven by individual hydraulic motors).

The LAM 3500 DP/8 can:

- Transfer baggage and cargo containers of pallets (max. 60.4" wide) to **the front and rear lower deck compartments** of B767 and Airbus A 319, A 320, A 321 aircraft.
- Transfer baggage and cargo containers/pallets to the rear lower deck compartments of DC10, MD11, L1011, A300, A310, A330, A 340 aircraft.
- Receive independantly on the front platform 1 **AKH container** or LD1, LD2, LD3.
- Receive on the rear platform 2 **special AKH containers** or 2 standard containers LD1, LD2 and LD3 or one container LD4, LD6, LD8, or **standard aircraft pallets up to 60.4" x 125"** (1540 x 3175 mm).
- Transfer containers or pallets to the aircraft at **transfer heights** from approximatively 1895 to 3365 mm (74.6 to 132.5").
- Load and unload cargo **from ground vehicles** with a minimum height of 480 mm (19") and maximum possible height (on the rear) of 1600 mm (63").



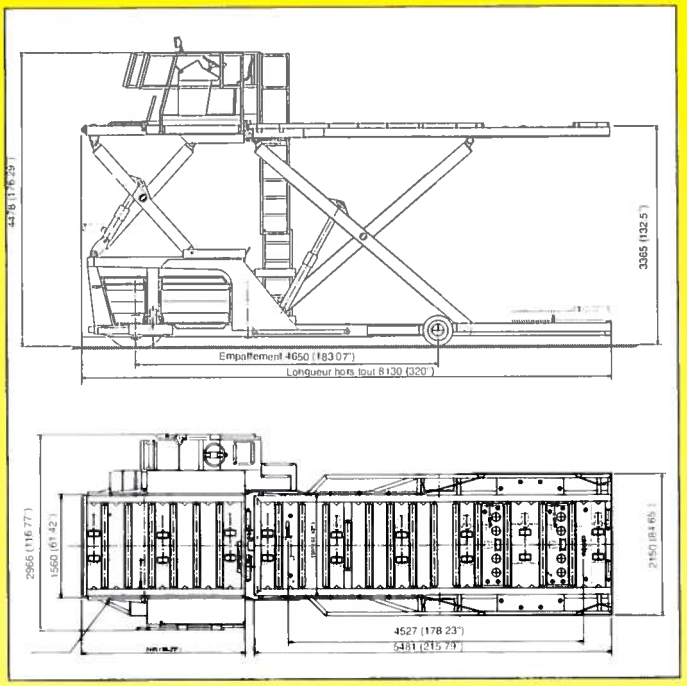
EASY POSITIONING AND AUTOMATIC ADJUSTMENT
Bridge **tilting capability** to adjust the lateral slope (changes in aircraft pitch). **Hydraulic adjustment** of right and left bridge guides for perfect transfer of containers.

As an option, our new aircraft door-sill levelling system allows **instant automatic height compensation** whilst maintening the TIP DOWN/HILL UP ADJUSTMENT to aircraft roll FOR A 320 OPERATIONS (tilting capability).

TROUBLE FREE LOADING/UNLOADING OPERATIONS
The **auto levelling** between bridge and platform offers a perfectly mated transfer surface, **at any time.**

MANŒUVRABILITY
The LAM 3500 DP/8 is **fast,** flexible and smooth in its movements. The hydraulic steering system ensures the loader a very short **turning radius.**

HIGHER SAFETY AND LOWER MAINTENANCE
The LAM 3500 DP/8 complies with international safety regulations. Electrical components are selected and tested for **extreme weather conditions** and maximum humidity.
A chainless direct drive load transfer system ensures accurate control and **reduced maintenance costs.**
3 configurations in one. Because of its modular design LAM 3500 DP/8 can be offered in 3 versions DP/M8 for rear loading only, DP/RF-8 for rear loading with container rotation capability. DP/R8 for rear and side loading with container rotation capabiliy.



BASIC DATA AND DIMENSIONS

Transfer capacity
- Bridge : 3500 kg (7800 lbs).

Elevation range
- Front platform : 1895 mm to 3365 mm (74.6" to 132.5").
- Main platform : 480 mm to 3365 mm (19" to 132.5").

Speeds
- Main platform raising : 18 sec
- Main platform lowering : 16 sec

} with a 3.5 T load.

- Conveying loads : 30 cm/s - (60 ft/m).
- Driving 10 km/h (6.2 Mph).

Maximum admissible slope : 7.5% - When driving.
Turning radius overall : 7.8 m (307").
Steering angle (mono front wheel) ±45° (hydrostatic orbitrol system).
Stopping distance at full speed : less than 5 m (197").
Vehicle weight : 7.4 T (16300 lbs).

Fuel tank capacity 90 L (24 US gallon) - minimum 8 hours autonomy.

Emergency procedure
- To raise the stabilizers.
- To lower the platform.

Safety brake : Emergency disk brake by pressure drop.

Overall dimensions
- Length : 8130 mm (320") with attachment bar in position.
- Width : 2950 mm (116").
- Height : 2965 mm (116.7") including handrails.
- Wheelbase : 4650 mm (183").

Shipping
- Length : 8130 mm (320").
- Width : 2300 mm (90.5") left handrails and control station removed.
- Height : 2450 mm (96.5").
- Volume : 46 m³ (1932 ft³).

POWER SYSTEM

Prime Mover
Mounted on a pull-out craddle

HATZ 4M 31 L	or	DEUTZ 4 FL 1011
Aircooled - 4 cylinders		Aircooled - 4 cylinders
Continuous rating		Continuous rating
50 HP at 2500 rpm		50 HP at 2500 rpm

Engine safety monitoring system (automatic shut down if low oil pressure or engine overheat) cold start facility, **demand throttle system.**

Hydraulic system
1) Main hydraulic pump : gear pump type with two bodies (stages) 25 and 8 cm3/rv, 200 and 150 bar. Directly driven by the diesel engine through flexible coupling.
2) The 8 cm³ body (stage) is used for hydrostatic steering.

Electric system
24 V DC - Electronic module switch board (single replaceable module). Radio screened alternator 2 batteries 12 V (lead acid type) in series 115 Ah.
The LAM 3500 DP/-8 is equipped with all necessary lights to enable its operation on an international airport.
All limit switches are **proximity switches.**

MAIN SAFETY FEATURES

Flow control valves regulate the rate of lowering of the platform and bridge under all conditions. The **non-return piloted valves** prevent any rapid uncontrolled descent. (In case of rupture of hydraulic lines or engine breakdown the rams remain in position).

The hydraulic translation motor is controlled by a solenoid valve. **The extension of the stabilizers stops loader travel**. All hydraulic circuits are protected by **pressure limitation valves.**

All control valves are **solenoid-operated.**

All fuses have been replaced by **circuit-breakers.**

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