



The MANTIS SHH aircraft handler

A state-of-the-art manoeuvring system offering fast, precise control for high density aircraft parking on-board ship or in land based hangars.

- Sophisticated control
- Permits optimised parking density
- Increased endurance between charges
- Highly stable in all conditions
- No need for embedded deck tracks

**CURTISS
WRIGHT**
Flow Control Company
INDAL Technologies

INDAL Technologies' MANTIS SHH is a state-of-the-art aircraft handler for use on board ship or in land based environments.

Using advanced design and manufacturing technologies, the MANTIS SHH combines light weight with an extremely rugged construction, purpose designed for use in the harshest conditions, including marine flight decks.

The MANTIS SHH has been designed with all current and future aircraft types ranging from low ground clearance helicopters such as the Sikorsky MH60-R to rear wheel interfaced aircraft such as the Apache's and even the latest F-35B STOVL JSF and other aircraft proposals with AUM in excess of 30,000 Kgs.

The handler operates within the footprint of the aircraft and with its 'turn on the spot' capability permits aircraft to be parked at very high density in confined hangar spaces and close to hangar bulk heads and deck edges. Being completely emission free and explosion proof to CATA Zone 2, it is suitable for prolonged use indoors or below deck.

From the operator viewpoint the MANTIS SHH is steered by a remote chest pack mounted console connected to the handler via a 6 metre, military shielded cable. This enables the operator to view and control the aircraft movement from the safest position, especially when interfacing with the aircraft.



Costs:

The MANTIS SHH is powered by SLAB traction batteries, rechargeable from mains power in a range of voltages and frequencies for all ship types.

The handler is designed with a 30 year life expectancy with minimal maintenance. MANTIS SHH is a completely self contained system - only one pedestrian operator is required.

Operation:

Superior manoeuvrability enables precise aircraft 'spotting' enabling the aircraft to be stowed with much higher density. Aircraft can be parked right up to bulkheads or other aircraft without the need to allow space to remove the handling system or tractor. Precise steering and accurate, controlled acceleration and braking minimise risk of air frame damage. Simple instructions and training minimise the level of operator skill required.

Weight:

The handler uses the weight of the aircraft over the driving wheels to generate tractive effort. Its weight – up to 50% lighter than a conventional tractor - renders it particularly suitable for embarked aviation operations by minimising mass above the waterline.

Safety:

Computerised inter-actions and internal protocols ensure that the operator carries out actions in logical progression and safely. Fail safe electro-magnetic brakes are automatically applied when the power is off and there are in-built systems to prevent the aircraft being released if the undercarriage wheel is off the deck.

Environment:

Pollution from exhaust fumes with attendant health hazards are avoided – permitting safe use within enclosed areas. Batteries have Sealed Valve Regulated Lead Acid GEL (SLA/VRLA), completely eliminating charging emissions.

The MANTIS SHH

INDAL Technologies

On-deck aircraft securing and traversing systems



Indal Technologies combines a high level of expertise in the management of large and complex defense programs to produce unmatched solutions to the world's navies.

Since incorporation in 1951 the company has developed its engineering design and manufacturing capabilities and today is heavily involved in systems integration and testing.

This blend of engineering design and manufacturing has enabled the company to become a world leader in the design and development of ship borne helicopter handling systems and other sophisticated systems for international navies and commercial aviation industries.

For details or a demonstration call toll free in the US or Canada: **800-263-7340**



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