



## Handling system for diesel engines MAN B&W DIESEL A/S, FREDERIKSHAVN

A I R F I L M T E C H N O L O G Y



### Operation

The 400-tonne air film based handling system is used for moving two- and four-stroke diesel engines in the assembly hall and outside along a specially built transport route to the test cells in a separate building, a distance of approximately 80 m.

After the test run the diesel engine is transported again on air bearings to preservation and despatch stations.

### Construction

- A modular system consisting of support beams on air bearings for engine assembly and testing, and external removable drive units, which are connected to the beams during transportation.
- Radio-controlled drive units providing total manoeuvrability and maximum safety when transporting heavy loads in narrow gangways.
- Automatic regulation of air bearings minimising air consumption for varying loads and weight distribution.

S O L V I N G



# Handling system for diesel engines

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The Solving team of designers are continually developing ergonomic and economic air film material handling solutions. With the customer's handling and logistics programme in mind, their main objectives are to:

- minimise installation requirements
- reduce capital expenditure
- reduce the environmental impact

## MAN B&W DIESEL A/S, FREDERIKSHAVN, DENMARK

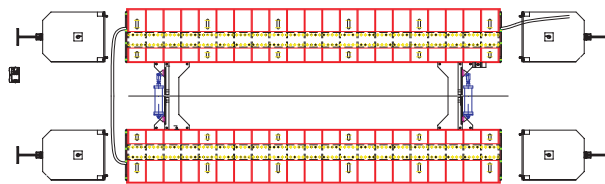
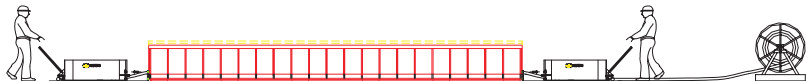
Part of the MAN B&W DIESEL-group, manufacturing large diesel engines in Germany, France and Denmark.

Products: two- and four stroke propulsion systems  
Employees: approximately 700

### Technical data

Capacity: 400 t  
Air bearings: ME48H-40  
Quantity: 10  
Drive unit: SPD 30 XYR  
Quantity: 2

### AIR FILM SYSTEM



### Objective

To be able to use the same beams to support the diesel engines during assembly, test and finishing prior to delivery.

To be able to move engines between the assembly hall and test cells without having to use cranes or external transport vehicles.

### Result

Support beams with built-in air bearings requiring an area no larger than the diesel engine and allowing optimal use of the floor surface and layout in the assembly hall.

For testing of the diesel engine the beams can be positioned very precisely on air bearings and attached to the floor of the test cell, once the air bearings have been switched off.



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