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COMPONENT/SPECIAL TEST  
**TESTING SOLUTIONS**

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HEATED INTAKE SYSTEM  
(ROLLS-ROYCE)

## *CUSTOMER*

Rolls-Royce  
Bristol, UK

## *FACILITY TYPE*

Heated Intake System for Marine  
Gas Turbine Engine Test Facility

## *FEATURES:*

Facility inlet air temperature heated up to 40°C  
from ambient, for flow rates up to 180 kg/s.



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## DESCRIPTION

The turnkey supply of an inlet air heating system for a Marine Gas Turbine Engine Test Facility. The system recycles heat dissipated by the facility loadbank system and extracts hot air from the loadbanks without creating any additional backpressure that could reduce performance.

MDS was responsible for the development of a system specification and a trade-off analysis of several solution options.

## SCOPE OF WORK

- ▶ Aerodynamics and Acoustics elements;
- ▶ Flow Conditioning and Mixing elements;
- ▶ Air Supply Fans;
- ▶ Control valves and dampers;
- ▶ Silencing components; and
- ▶ Control System.



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