



Global leaders in effective protection  
from radiant heat and extreme weather

## Heat Shield Solutions

Proven protection tailored to different high hazard industries worldwide backed by an end to end service: design, fabrication, project management testing, supply and installation.



*White Rose FPSO turret heatshield*

### Typical applications

- Turret, derrick and stair tower heatshielding
- Heatshielding for bridge links between platforms
- Horizontal flare stack shielding
- Life boat muster points
- Winterisation
- Offshore wind farm substations

MTE Ltd is a technology company with a global reputation for the protection of people and equipment from blast, fire and radiant heat hazards in on-shore and off-shore oil & gas, renewable energy and petrochemical industries. We devote a unique wealth of specialist skills and over 40 years experience to deliver individual and dependable solutions.

Severe radiant heat and extreme weather are hazards which inevitably accompany the operation of complex facilities in exposed situations. Conditions may not change, but what has improved is the effectiveness of protection against them.

Building on knowledge and practice acquired from work on North Sea oil and gas installations, the MTE Heat Shield Solutions team has continuously developed its ventilated cladding systems. They are now proven to have the highest performance of any certified product on the global market.

**Design** MTE's ventilated cladding systems comprise perforated stainless steel sheets, profiled for increased strength with supports at each end to facilitate bolting into supporting steelwork. Panels are available in either a single skin or double skin configuration and typically utilise perforated sheets with differing percentage open area to suit a project's required performance.

This ventilation system allows natural daylight, ventilation and visibility through the panel. Its corrugated geometry is carefully selected to enhance its spanning capacity without detriment to its performance. Lightweight and rigidly structured, the cladding can span deck to deck without the need for secondary support steelwork.

**Performance** MTE's heat shield ventilated cladding systems can achieve an immediate percentage reduction in incident heat flux in excess of 90%. This has been verified by an extensive and onerous thermal, aerodynamic and acoustic testing programme at the Building Research Establishment (BRE) London, in Spring/Summer 2010, witnessed and approved by Lloyds Register.

Our wind wall products can achieve an immediate percentage reduction in incident wind velocity in excess of 75%. Their energy dissipating design is so effective that half a metre behind the panel this reduction in velocity rises to 86%.



*BP Valhall stair tower heatshields and deck wind wall systems*

**Fitting and Maintenance** Heat shields and wind walls are easy to install without the need for complex tooling. They are configured so that individual panels can be removed or replaced with ease. The system has been designed to be entirely maintenance free, manufactured from stainless steel thereby reducing the likelihood of corrosion within the system. All permanent fixings are corrosion resistant stainless steel.

**HSE** The MTE ventilated cladding system has an enviable health and safety record. Unlike woven wire mesh or expamet systems, there are no exposed unsafe edges.

**Fabrication and Delivery** Our heat shields and wind walls are manufactured to suit customers' individual requirements within MTE's 7200m<sup>2</sup> production facility at our Darlington base. This employs state of the art equipment to handle the widest variety of work possible. We have recently invested in a 7 metre press which allows the

manufacture of large size panels, thus reducing manufacture and on-site installation times.

Our 5000m<sup>2</sup> covered riverside facility with three overhead cranes by the River Tees in nearby Middlesbrough has the flexibility to assemble walls of any dimension. These units are then loaded out on to barges for shipping to their final destination to be simply installed on site.

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| Solutions

| Heat Shield  
| Solutions

| Fabrication