

HAZARDOUS AREA

# Hot Jet CALDER

THE VERY BEST IN HIGH PRESSURE WATER JETTING SYSTEMS



### Introduction

The Calder HotJet wash units are ideal for high temperature washdown in hazardous areas on offshore drill rigs, platforms and other facilities where high pressure hot water is required. Our HotJet units are designed

for use in ATEX Zone I or IECEx hazardous areas. All equipment is mounted into an enclosed DNV 2.7-3 certified crash frame which incorporates secure storage for high pressure hose, gun, nozzles and power cable.

### HotJet iL

The Inline Heater unit provides rapid water heat-up times and is suitable for all areas where there is a reliable and constant  $\Rightarrow$ 1 bar water supply.

**Performance: 15 lpm (4 gpm) at 210 bar (3000 psi)**  
**Operating temperature up to 70°C available**

### Inline Heater Unit Function

The HotJet unit incorporates a 38 kW water heater, and a high pressure pump driven by a 7.5 kW motor. Following a 2-minute start-up heating cycle, hot water is available at 45°C above ambient water temperature. When the jetting gun is not operating, the discharge flow is diverted back to the heater via an unloader valve. The heater automatically maintains the water at a temperature of 55°C. Should the pump unit operate on bypass for 15 minutes the unit will shut down. The control system manages all other shutdown events. Protection from overpressure is through a safety relief valve for the heater and a rupture disc for the pump and discharge line.

#### Weight & Dimensions:

- 970 kg (dry)
- 1060 mm tall x 1600 mm wide x 1760 mm long



### Key Features HotJet

- **Internal storage compartment:**  
Lances, hoses, and the power cable are stored inside the crash frame giving security and offering protection from the elements.
- **Power cable:**  
20 metres of heavy duty cable c/w storage bracket.
- **Lockable stainless steel doors**
- **Control panel:**  
Clear external view of the control panel and its indication lights.
- **Fork-truck slots for manoeuvrability**



- **Connection points:**  
Easy access to hose connections
- **Rugged Crash Frame:**  
The equipment is mounted into a DNV 2.7-3 certified crash frame which protects the unit during handling and transport and protects all the components from the elements.

## Hazardous Area

### For use in Hazardous Areas

Through design, and component selection and certification, our HotJet units are manufactured to suit your Hazardous Area requirements. Electrical equipment can, when required, be supplied to suit your specifications, e.g. NORSOK, IECEx etc.

## HotJet iL & HotJet iM

- **Pressure Gauges:**

Clear external view of the discharge and suction pressure gauges.

- **Easy connection to standard 63 amp socket:**

The HotJet units utilise the maximum power/amperage available through a standard (welding type) 63 amp socket to heat the input water to 45°C above the ambient input water temperature.

- **Wire sling set for overhead lifting**



- **Easy maintenance and access**

The unit is designed to give easy access to all components.

- **Unit Identification:**

Clear markings for easy unit identification.

- **Choice of colours**

## Performance Options

### Meeting customer requirements

In addition to our standard HotJet units, we also manufacture units to match our customers' specific project performance and process requirements.

## HotJet iM

The Immersion Heater unit is designed for use where the site water supply is less than 1 bar, or where the supply is intermittent.

**Performance: 15 lpm (4 gpm) at 210 bar (3000 psi)**

**Operating temperature up to 70°C available**

### Immersion Heater Unit Function

The 550-litre water tank with a 38 kW immersion heater feeds a 7.5 kW electric motor-driven high pressure pump. The tank water achieves maximum set temperature within 15 minutes. When the jetting gun is not in operation, an unloader valve bypasses the discharge flow back to the tank. The auto thermostat maintains a constant temperature within the water tank. Over temperature and high water level are controlled through the use of appropriate shutdowns. A full tank of water will allow jetting operations to continue for 20 minutes. A rupture disc protects the pump and discharge line from overpressure.

#### Weight & Dimensions:

- 980 kg (dry)
- 1060 mm tall x 1600 mm wide x 1760 mm long



# HotJet CALDER



## Control Panel

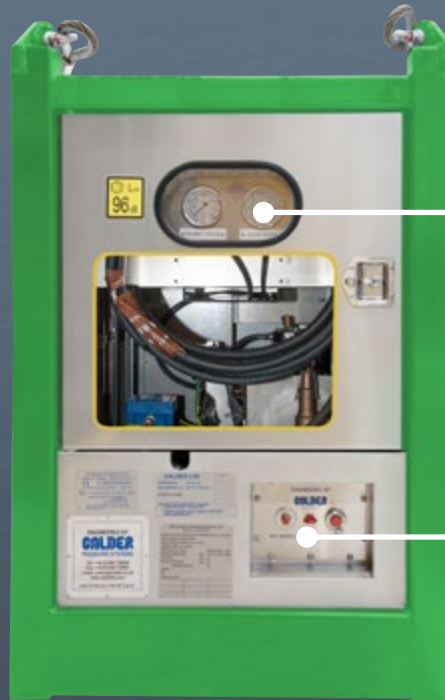
- The Exd enclosure is supplied complete with an Exe terminal enclosure and a main power input isolator.

### Controls:

- Pump start/stop
- Heater start/stop
- Emergency stop button

### Indicator lamps:

- Power On
- Water over temperature
- Pump On
- Motor overload
- Heater On
- Pump bearing temperature high



## Standards & Specifications:

Calder pump packages can comply with most international standards and specifications including:

**ATEX | IEC | GOST | EN | DNV | API | ANSI | PED | AS/NZ | Norsok | NACE | CE | PED**

ISO 9001 Quality standard has been practised by Calder since 1987 with award of certification in 1999. Our rigorous application of this highly respected International Quality Standard has ensured that we consistently meet and exceed our customers' most demanding expectations for both quality and reliability.

ISO 14001 Environmental Standard has been held by Calder since 1999. Careful and judicious management of our working environment with the application of sound and well informed design applications utilising the latest and most efficient technologies helps us to produce equipment which minimises the environmental footprint of our production facility and the operating equipment in the field.

OHSAS 18001 We at Calder pride ourselves on our safety record. As members of the British Safety Council we practise the strictest safety procedures within our factory and working environments, applying rigorous risk assessments to all activities and equipment which we design and build.



Calder Ltd reserve the right to alter specifications and data to incorporate improvements in design.

Calder Ltd  
Prescott Drive  
Warndon  
Worcester  
WR4 9NE  
United Kingdom

web : [www.calderltd.com](http://www.calderltd.com)  
email : [sales@calder.co.uk](mailto:sales@calder.co.uk)  
tel : +44 (0) 1905 751790