

CALDER

MultiJet

High Pressure Water Jetting

Mobile units up to 4,000 bar



Overview

MultiJet

From major construction and civil engineering projects, the decommissioning and decontamination of nuclear installations, the surface preparation of ships' hulls, to the removal of product contamination in chemical plant, vessels and reactors, our MultiJet high pressure machines have led the water jetting industry for over 30 years.

From major construction and civil engineering projects

These diesel powered units feature the latest in diesel engine technology with the introduction of the Stage V, ultra-low emissions power unit.

The list of uses for high pressure water jetting pumps and systems continues to grow. Through innovation in our MultiJet range and collaboration with specialist equipment manufacturers, we are able to offer the complete solution to your water jetting requirements. Our MultiJet units can be used in conjunction with a range of ancillary equipment for:

- **Cleaning** – of food conveyors, castings, tanks, reactors, vessels, pipes, tubes, tube bundles, heat exchangers, condensers, filter press, sewers, fish nets
- **Removal** – of concrete, paint, coatings, marine growth, scale, burrs, rubber, elastomeric, urethane, road markings
- **Preparation** – of metal surfaces prior to painting, road surfaces, runways
- **Cold cutting** – of steel, plastic, foodstuff, tanks, pipes

Reliability and ease of maintenance

Reliability and ease of maintenance have been designed into the MultiJet range for over thirty years. Sound principles of design, coupled with improved component selection and monitoring has been fundamental in the reliability of our water jetting equipment.

At the heart of our high and ultra-high pressure waterjet units is the Hammelmann reciprocating plunger pump. The Hammelmann pump is known throughout industry for its quality and reliability - whatever the operating pressure.



STAGE
emissions compliant



Features

- **Water Filter Monitoring**
Continuous water filter monitoring with on-screen alarm and shutdown facility.
- **Spark Arrester**
Exhaust spark arrester fitted as standard.
- **Boost Pump**
Fitted as standard, eliminates cavitation and guarantees inlet water feed pressure.
- **Overspeed Valve**
Optional Chalwyn-type overspeed valve available.
- **Direct Drive**
Direct drive through flex coupling. No Belts. No Side Loads.
- **Inlet Water Filter**
Bag type inlet water filter, stainless steel construction, protects the HP pump from damage due to dirt/abrasive contamination from feed water supply. Our 'fast clamp' system allows quick and simple filter replacements.
- **Fuel Tank**
Integrated into baseframe giving a low centre of gravity.
- **Stage V Engine**
Ultra-low emissions diesel engine - complies with non-road mobile machinery directive EU2016/1628.
- **Optional Bypass Regulator Control Valve**
Minimise water use. Locally or remotely operated pressure control.
- **Electronic Throttle Control**
Engine speed increases only when pressure is demanded. Saves fuel, saves water without needing hoses and cables for actuation.
- **Protective Hood**
Lightweight, GRP hood protects components from damage and offers excellent weather protection.
- **Lifting Lugs**
Optional lifting lugs for crane lift.
- **Trailer**
This road-going unit is mounted onto high quality running gear, with adjustable height tow hitch and LED lighting.
- **Water Buffer Tank**
150-litre capacity, stainless steel water tank to allow dwell time.



MultiJet

STAGE
emissions compliant



THE **HAMMELMANN** PUMP

Ultra Low Friction Seal System

Totally unique, our patented HP plunger pump seal system has helped us achieve the single most important advance in pump reliability, giving significant service life and uptime advantages over traditional packing seal technology used by other manufacturers.

Reduced Pump Maintenance

Repair when you want to, not when you have to... With our seal system design, emergency repairs to the high pressure pump whilst 'on the job' are eliminated. As wear is gradual, over many thousands of hours, you will experience that scheduled repairs and maintenance are all that is necessary.

Robust Pump Gearend

Our HP pump gearend incorporates critical standard features which are not included by many competitors. The gearend pressure lubrication system includes an oil filter and oil cooler. A built-in lubrication pump ensures that oil is delivered to all bearing surfaces and that the oil is circulated through the onboard 25-micron oil filters to ensure maximum oil cleanliness: this, combined with our gearend oil cooler, protects your high pressure pump power end even when operating on continuous duty, resulting in long-term reliability.

Direct Drive - Efficient and Maintenance Free

The integrated reduction gear installed in the high pressure pump gearend allows direct drive from the diesel engine, eliminating the need for large-ratio V-belt drives and additional guarding: this also eliminates bearing side load damage, and reduces weight and maintenance requirements whilst enabling an extremely compact unit design.

Controls

The latest in HMI touchscreen control and monitoring. The control panel is fitted as standard with both touchscreen and pushbuttons to give the operator choice and flexibility. An easy-to-use menu guides the operator through screen displays for; unit performance, pump monitoring, engine monitoring, and fault finding.

Comprehensive measuring, monitoring, alarm and shutdown functions ensure complete control over all processes, parameters and critical equipment. Operating parameters can be managed and restricted through a tiered approach to control panel settings access.

- Alarm and shutdown functions
- Adjustable operating parameters
- Built-in instructions and manual
- Fault-finding function
- Vertical capacitance fuel level sensor
- Wireless accessory compatible
- Datalogging options
- Touchscreen control
- Pushbutton control
- Engine speed control
- Auto idle
- Engine preheat
- Water pressure control
- Pressure preset function
- Comprehensive monitoring



Support



Pump Selection and Performance Conversion Kits

Starting with the initial pump selection, there is a large range of pump performance options. Additionally, performance conversion kits are available for every MultiJet unit. These kits are easily fitted and they maximize the potential of the unit by altering the operating pressure to suit varying applications.



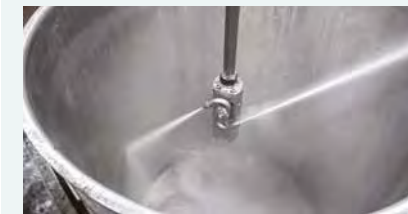
Spares

We have a large stockholding of spare parts for our MultiJet units at our UK manufacturing facility. We offer sameday despatch for stocked items. Tailored, consolidated operating spares lists can be prepared to suit your equipment portfolio.



Service

Our Service Department offers maintenance and service packages to suit your individual requirements - from basic, ad hoc service visits, to full maintenance packages. And our team are always on hand to offer advice and support - just a phone call away.



Jetting Accessories

Nozzles, lances, tank cleaning heads, floor cleaners, tube cleaners, surface prep devices, pipe and sewer cleaning equipment, hoses, hydrodemolition robots, and much more.



PPE

Personal protective equipment for all your high and ultra-high pressure waterjetting requirements. As UK agents for TST, the protective equipment we supply offers a high level of comfort and quality.



Training

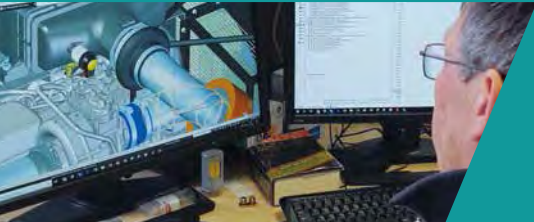
We conduct City & Guilds accredited water jet safety training in accordance with Water Jetting Association guidelines. We also offer training in the operation and maintenance of all our water jetting units.

THE VERY BEST IN HIGH PRESSURE WATER JETTING TECHNOLOGY



We are **Calder**

A team of skilled, dedicated people striving to build the best. From design to build, from despatch and beyond, we are here to support you.



We **Design**

In addition to our standard water jetting units and accessories, we have in-house design teams producing bespoke products to suit specialist applications.



We **Build**

Our pump units are built by our own engineers at our factory in Worcester, UK - and they have been for over 40 years.



We **Support**

For the lifetime of your high pressure water jetting equipment we are here for you - training, spares, and service.



CALDER

www.calderltd.com | sales@calder.co.uk | +44 1905 751790
Calder Ltd, Prescott Drive, Warndon, Worcester, WR4 9NE, United Kingdom.