

sureclean

HIGH PRESSURE AND ULTRA HIGH
PRESSURE WATER JETTING

High pressure and ultra-high pressure water jetting services



By investing heavily in the latest technology in industrial cleaning and environmental waste management we ensure clients are provided with the most cost-effective and environmentally sensitive solutions.

Preparation for Surface Protection

The quality of the preparation is then matched by the quality of the techniques used to protect the surfaces. Using only the best paints and coatings and the latest application technologies, Sureclean staff ensure the surface is primed and protected to the highest standards, which benefits the client by prolonging their equipment's service life and reducing its maintenance needs.

In our surface preparation provision we offer a range of ultra-high pressure (UHP) water jetting solutions. The combination of equipment, skills and techniques we deploy can remove any coatings or descale any metal, restoring and preparing the surface to the highest specification.

Ultra-High Pressure Water Jetting

By removing existing coatings and corrosion with water alone, there are fewer waste products created and those that are created can be processed with Sureclean's accessory services. Using vacuum recovery, waste products are contained, then treated by filtration and/or separation processes.



Cold Cutting of Steel and Concrete

The diversity of the jetting units allows the flow and pressure outputs to be selected to achieve maximum efficiency over a range of applications. The power of the water can be harnessed to cold cut steel and concrete. This application can take place adjacent to 'live' plants in potentially hazardous areas and therefore offers a safe and convenient alternative to hot cutting.



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Technical Specification



Pre-mobilisation checks and function tests are completed as a routine part of our maintenance regime.

An extensive inventory of jetting accessories ensures that the power and versatility of the pump units is fully exploited across a diverse range of applications.

All hose assemblies are pressure tested and provided complete with appropriate certification cross referenced to their unique identification numbers.

Impressive performance and reliability in the field is achieved through adherence to a rigorous preventative maintenance programme.



General Description

Containerised, diesel driven, positive displacement pump units rated for manned operation in Zone II Hazardous Areas (BP 200 CAT A).

Wide Range of Flow and Pressure

Permutations from 383ltr/min (85 gpm) at 210 bar (3045 psi) to 20ltr/min (4.5 gpm) at 2500 bar (36000 psi).

Dimensions

Width 2.4m
Depth 3.2m
Height 2.7m

Weight

Gross 10.6t
Payload 7.5t
Tare 3.1t

Hook Up and Interface Requirements

Air supply to start engines
- Air flow of 240-300cfm at 7-10bar (100-145psi)

Fresh water supply
- Variable from 30ltr/min (6.7gpm) to 575ltr/min (128gpm) depending on application.

Recommended inlet water supply is 1.5 x delivery flow.

Yellow alert shutdown

- units fitted with switched 110 volts AC/24 volts DC solenoid options to accommodate rig/platform requirements

Electricity supply (optional)
- 110V supply for internal light

Container Details

Container designed and certified to DNV 2.7-1 specification. Single door at rear with air outlet vents. Two solid side access doors. Double front door with inlet vents. Service points front left and back right.

Engine Details

CAT 3306T diesel engine, performance 250 HP @ 2150 rpm. Fitted with Pyroban Safety Kit, incorporating inlet, exhaust, cooling and control systems. Certified for manned operation in Zone II Hazardous Areas (BP 200 CAT A).

Pump Details

Hammelman Series HDP 110 and HDP 160 positive displacement, three plunger pumps. The pump head housing is machined from a single block of high grade stainless steel and features inline valve sets. Various high grade stainless steel and ceramic plunger options are available to suit different output requirements. Routine build changes enable a diverse range of flow and pressure outputs to be achieved from a given pump unit. The tables opposite identify the permutations available from the HDP 110 and HDP 160 pumps.

Other Features

1. Sealed stainless steel header tank for minimal water contamination fitted with high flow ball valve (capacity 750 litres / 167 gallons).
2. Inlet water strainer (100 micron perforated stainless steel) and bag filters (5 micron / 1 micron) are fitted in line.
3. Sealed stainless steel fuel tank integral to base frame capacity 200 litres (45 gallons).
4. Integral CAT compressor capable of producing 16.5 cfm @ 2200 rpm feeds 110 litre capacity air receiver to drive rotary stripper guns and other pneumatic tools without the requirement for an external air supply.

All figures and dimensions shown are approximate.

Technical data, series HDP 110

Assuming 110kw (150hp)
available power

| L/min | WP | D | rpm | |
|-------|------|----|-----------|-----|
| | | | n1 | n2 |
| 20 | 2500 | 15 | 1800/2150 | 550 |
| 35 | 1600 | 20 | 1800/2150 | 550 |
| 35 | 1500 | 20 | 1800/2150 | 550 |
| 58 | 1050 | 25 | 1800/2150 | 550 |
| 55 | 1000 | 25 | 1800/2150 | 550 |
| 79 | 720 | 30 | 1800/2150 | 550 |
| 107 | 530 | 35 | 1800/2150 | 550 |
| 140 | 410 | 40 | 1800/2150 | 550 |
| 177 | 320 | 45 | 1800/2150 | 550 |
| 219 | 260 | 50 | 1800/2150 | 550 |
| 265 | 210 | 55 | 1800/2150 | 550 |
| 283 | 200 | 60 | 1500/1800 | 480 |
| 332 | 170 | 65 | 1500/1800 | 480 |
| 388 | 140 | 70 | 1500/1800 | 480 |

Technical data, series HDP 160

Assuming 160kw (220hp)
available power

| L/min | WP | D | rpm | |
|-------|------|----|-----------|-----|
| | | | n1 | n2 |
| 40 | 2200 | 20 | 2000 | 500 |
| 58 | 1500 | 25 | 1800/2150 | 460 |
| 81 | 1080 | 30 | 1800/2150 | 460 |
| 79 | 1000 | 30 | 1800/2150 | 460 |
| 108 | 780 | 36 | 1800/2150 | 460 |
| 141 | 600 | 40 | 1800/2150 | 460 |
| 178 | 470 | 46 | 1800/2150 | 460 |
| 220 | 380 | 50 | 1800/2150 | 460 |
| 266 | 310 | 55 | 1800/2150 | 460 |
| 281 | 280 | 60 | 1500/1800 | 380 |
| 330 | 240 | 65 | 1500/1800 | 380 |
| 383 | 200 | 70 | 1500/1800 | 380 |

Our standard configurations are represented in bold type above. For details on other configurations contact a Sureclean technical specialist.

WP = Working pressure (bar)
D = Piston/Plunger dia. (mm)
n1 = Motor/Engine rpm
n2 = Crankshaft rpm

Conversion table

Rating 1kw = 1.34hp
Op. pressure 1bar = 14.5psi
Flow rate 1L = 0.264 US gallon
1L = 0.22 Imp. gallon

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