

# THE ULTRABAR RANGE

## WATER JETTING EQUIPMENT FOR ULTRA HIGH PRESSURES



Ultrabar 24  
fully enclosed road trailer

**Hughes Pumps Ltd. have combined their high pressure pump manufacturing and UHP expertise to produce a range of 2750 bar (40,000 psi) pumpsets, capable of taking on the toughest of cleaning and cutting tasks.**

Offered in a multi-purpose design of semi or fully enclosed, skid or trailer with lifting points and high quality powder coated paint finish. Fully enclosed models include sound reduction material and full sized, hinged access doors with gas strut supports. Road going trailers are fitted with EC approved, adjustable height tow hitch and under-gear, auto-reverse braking and lighting.

### Standard units are:

**Ultrabar 10:** 2600 bar (38,000 psi) at 9.5 l/min (2.5 gpm) - 48 kW (65 hp)

Based on the Hughes 650 power end, this compact unit is ideal for single gun applications where space and water usage are at a premium, for example shipboard maintenance.

**Ultrabar 15:** 2750 bar (40,000 psi) at 14.5 l/min (3.8 gpm) - 75 kW (100 hp)

Based on the Hughes 1000 power end, this powerful unit is capable of high performance surface preparation, cleaning and cutting on single gun applications.



Ultrabar 24 pump head

**Ultrabar 24:** 2750 bar (40,000 psi) at 24 l/min (6.3 gpm) - 124 kW (165hp)

Based on the Hughes 1500 power end, this powerful unit offers an enhanced flow rate capable of high performance surface preparation, cleaning and cutting on single and twin gun applications.

*The plunger pump heads have been designed to take advantage of technology developed in over 25 years experience of ultra high pressure water jetting. Close coupled, gear driven power ends with pressure lubrication, filtration and oil cooling allow a compact and simple installation. An actuated clutch and auto throttle minimise pump and engine wear during idle periods.*

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|--------------------------------------|
| Dimensions (L×W×H)mm /weight :       |
| Trailer: 4350 x 2000 x 2300 /2250 kg |
| Skid: 2500 x 1500 x 1950 /2000 kg    |

### Features :

- Choice of diesel engines, skid, trailer or truck mounted, with or without sound reduction enclosures
- High quality, powder coated paint finish
- Options include electric motor drive, integral air compressors and auxiliary hydraulic drive systems
- Equipment for hazardous areas
- Full range of accessories including the Ultrastrip rotary gun, Deckblaster, Crawler with vacuum recovery, pneumatic unloading valve ('tumble box'), multi-gun valve, tube cleaning equipment, abrasive cutting nozzles and ultra high pressure hose sets.



### Ease of Maintenance

The fluid head assembly utilises a unique modular design allowing maintenance and trouble shooting to be carried out on individual cylinders. The condition of plunger seals, inlet and outlet valves can be monitored quickly and simply without dismantling the pump. Cylinder assemblies are interchangeable between the three cylinder Ultrabar 15 and five cylinder Ultrabar 24 pump.

### Reliability

A unique method of fixing the pump plunger ensures perfect alignment through its water lubricated guides and seals leading to excellent seal life.

### Compact

All three pump models include an adaptor enabling them to be flange mounted to an engine flywheel housing or electric motor ensuring extremely compact, perfectly aligned installations.

The Ultrabar 10 rated at 48 kW (65 hp) is probably the most compact, lightweight UHP unit ever built, whilst the Ultrabar 15 and 24 compare favourably to any other pump on the market.

### 'Power Safe' Pump Control System

The 'Power Safe' system provides automatic shutdown to protect both operator and equipment under a range of fault conditions including excessive pressure, for example in the event of nozzle blockage. A unique detensifier reduces system pressure for ultra reliable operation of the pressure gauge and over-pressure switch. For ultimate back-up protection a conventional burst disc is also fitted.

For single gun applications the UHP hose is connected directly to the pump 'Power Safe' system - a 'tumble box' is not required and water consumption is zero when jetting ceases. When twin guns are in use, each uses a multi-gun valve to maintain system pressure when one gun stops work. If both guns stop work, the pneumatic pilot signal operates the 'Power Safe' system.

The 'Power Safe' system is based on analogue switch gauges that provide continuous, user friendly, easy to read information.

## APPLICATIONS

1. Paint and corrosion removal for the marine and offshore industries.
2. The Ultrabar 24 in action at a cement works.
3. Removing bitumen from a concrete bridge deck.
4. Cleaning paper making rolls.

**HUGHES**  
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