A Complete Aftermarket Service

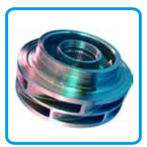
Our customer focussed aftermarket organisation is positioned to provide comprehensive care for our varied and diverse product lines. Heritage and obsolete products benefit from the same level of attention and expertise in order that reliability and availability is maximised irrespective of service length.

Customer Satisfaction

Prompt and accurate quotation service and progress reporting during contract execution, facilitates ease of doing business. Promise to deliver and accelerated service are recognised as key customer requirements. We therefore offer a Rapid Response option with component deliveries from as little as 24hrs on selected parts.

Genuine High Quality

Original or upgraded specification spare parts, coupled with full engineering design capability, enables longevity of reliable operation. Highly skilled and experienced service engineers ensure accuracy in build and optimised performance. The worldwide presence of CLYDEUNION Pumps offers local service facilities in over 40 countries.



Service Solutions

CLYDEUNION Pumps is committed to supporting our installed base wherever it may be. Depending on your location we will provide either direct service support or support via our local authorised service partners. Whichever option is provided, you can be assured of the best attention from fully qualified and experienced engineers.

- **Upgrades & Re-rates**
- **Service & Overhaul**
- **Installation & Commissioning**
- **Technical Support**
- **Inventory Management**
- **3rd Party Equipment**

Worldwide sales contacts
www.clydeunion.com

CLYDEUNION PUMPS

Sales:	Aftermarket:	Manufacturing:					
Europe							
✓	✓	✓	Annecy:	Tel: + (33) 45 005 5600	Fax: + (33) 45 005 5880	Email:	annecy@clydeunion.com
✓	✓	✓	Penistone, UK:	Tel: + (44) 122 676 3311	Fax: + (44) 122 676 6535	Email:	penistone@clydeunion.com
✓	✓	✓	Glasgow, UK:	Tel: + (44) 141 637 7141	Fax: + (44) 141 637 7358	Email:	glasgow@clydeunion.com
✓			Nordic countries:	Tel: + (47) 815 310 02	Fax: + (47) 815 310 03	Email:	nordic@clydeunion.com
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Americas							
✓	✓		Baton Rouge, LA:	Tel: + (1) 225 775 2660	Fax: + (1) 225 778 0212	Email:	batonrouge@clydeunion.com
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	✓		Bethlehem, PA:	Tel: + (1) 866 224 4787	Fax: + (1) 610 746 5907	Email:	bethlehem@clydeunion.com
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	✓		Salt Lake City, UT:	Tel: + (1) 801 292 7882	Fax: + (1) 801 292 7885	Email:	saltlake@clydeunion.com
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✓	✓	✓	New Delhi:	Tel: + (91) 120 4640 400	Fax: + (91) 120 4640 401	Email:	newdelhi@clydeunion.com
✓	✓	✓	Shanghai:	Tel: + (86) 216 160 6969	Fax: + (86) 216 160 6968	Email:	shanghai@clydeunion.com
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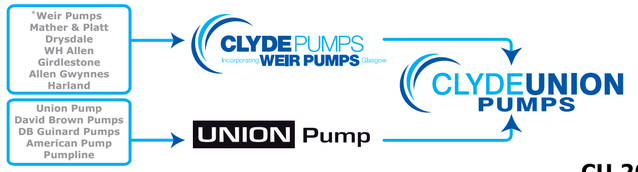
Middle East / Africa							
✓	✓		UAE:	Tel: + (97) 12 631 1959	Fax: + (97) 12 635 1242	Email:	uae@clydeunion.com
✓			Algeria:	Tel: + (213) 21 69 2319	Fax: + (213) 21 69 3046	Email:	algeria@clydeunion.com

CLYDEUNION Pumps - offers the following heritage products:



** This is a heritage product acquired when the Weir Pumps business transferred to Clyde Pumps in May 2007*

CU 20

OH2 Centrifugal Pump

Centerline Mounted, Single Stage, Overhung

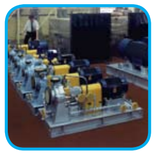
CLYDEUNION PUMPS

OH2 Centrifugal Pump

Centerline Mounted, Single Stage, Overhung

The HHS product line is engineered to meet or exceed the rigorous requirements of API 610, whilst maintaining a high degree of parts interchangeability. Our robust bearing housing design incorporates significant advances in lubrication and cooling technology, which provides maximum bearing life and reliability. This results in a heavy duty pump with a long history of success in demanding process applications, combined with a rugged baseplate and a reputation as the stiffest in the industry.






Flanges:
Flanges are 300 lb. RF per ANSI B16.5 and API 610 standards. Optional surface finish and ratings available.

Wear Rings:
Renewable casing and impeller wear rings are held in place by locking pins or setscrews. No back wear ring design optional. Composite reduced clearance wear rings optional.

Impeller:
Designed to provide low suction specific speeds (Nss<11,000). Low NPSHR impellers available. Streamlined impeller locknut for improved suction performance.

Shaft:
Rigid design with minimized overhang limits deflection at the seal faces to well below the stringent API 610 criteria

Suction Nozzle:
Flow straightening vane reduces inlet swirl and ensures uniform flow to the impeller eye. Top suction nozzles available on select sizes.

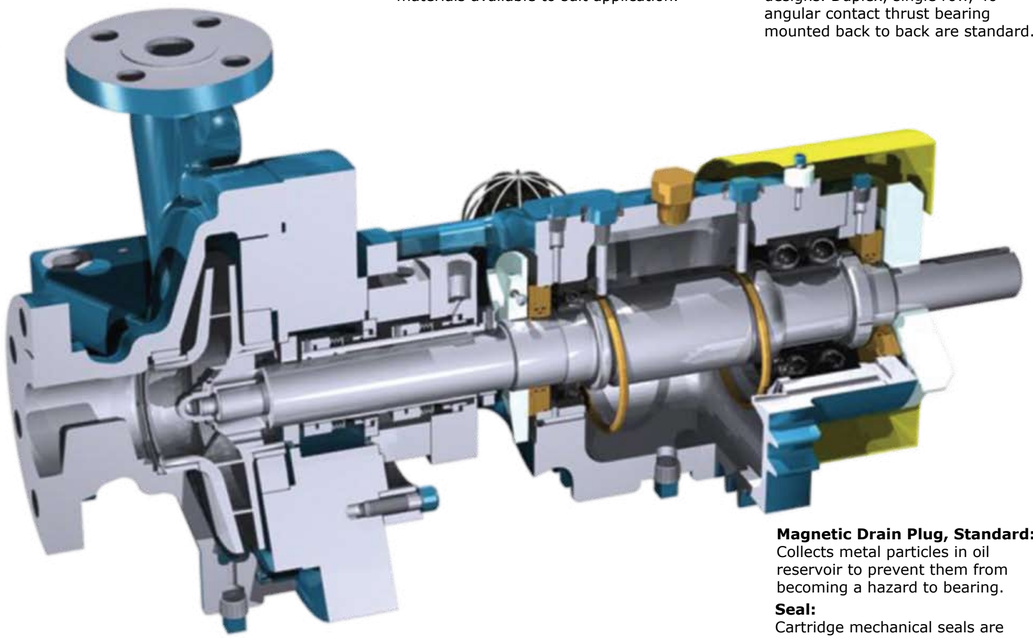
Casing Drain:
Casing drain can be completely drained. Drain valves optional.

Throat Bushing:
Throat bushing is pressed in from the high pressure side.

Pump Casing:
Centerline mounted casings withstand API 610 nozzle loads. Double volute casings (4" nozzle size and larger) ensure low vibration and radial loads.

Casing / Cover:
Metal to metal fit with fully confined, controlled compression gasket ensures proper sealing and alignment. Spiral wound 300 Series stainless steel gasket standard. Alternate materials available to suit application.

Bearings:
High capacity radial and thrust bearings. Single row, deep groove radial bearing-cooler running and longer life than roller bearing designs. Duplex, single row, 40° angular contact thrust bearing mounted back to back are standard.



Magnetic Drain Plug, Standard:
Collects metal particles in oil reservoir to prevent them from becoming a hazard to bearing.

Seal:
Cartridge mechanical seals are standard for precise seal face setting and ease of maintenance. Stainless steel shaft sleeve and gland plate are standard.

Seal Chamber:
Designed to API 610 and API 682 Table 1, Table 2 optional. Accepts all mechanical seal arrangements.

Bearing Housing:
Rigid shell moulded cast steel construction. Finned for maximum convective heat transfer, twice the surface area of non-finned housings.

Typical drawing only

Specification

Applications:

- Petroleum / Refinery
- Petrochemical
- Gas Processing
- Coal Processing
- Offshore Installation
- Nuclear / Cogeneration
- Desalination

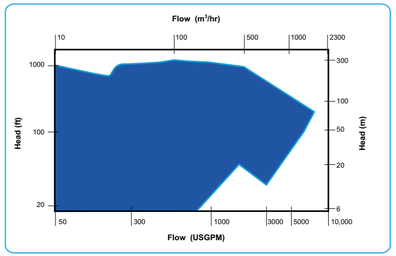
Technical data:

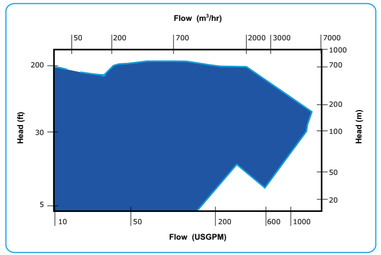
- Capacity: up to 1,635 m^3/hr / 7,200 USGPM
- Delivery head: up to 400 m / 1,330 ft
- Speed: up to 3,600 rpm
- Temperature: up to 425 ^{0}C / 800 ^{0}F
- Flange drilling: BS or ANSI

Standard pump materials of construction:
(Casing – Impeller)

- Standard API 610 material classes for the HHS are S-1, S-3, S-4, S-5, S-6, S-9, C-6, A-8, D-1 and D-2.
- Other material combinations are available.

Range Coverage Charts





Special Features of the Back Pull Out upgrade kit