High Technology Pumps

Upstream Oil - Downstream Oil - Nuclear Power - Conventional Power - Water & Industrial
An Introduction to
High Technology Pumps

CLYDEUNION specializes in the design and manufacture of high technology pumps and pump packages for the oil, gas, petrochemical, desalination, power (nuclear and fossil) and process industries.

A product range which includes high pressure multi-stage pumps, single and two stage process pumps, vertical single, multi-stage pumps and reciprocating pumps means that the most cost effective solutions are always available.

The company’s worldwide manufacturing facilities have quality management systems certified to ISO 9001, ASME Section III, (N) stamp, (NPT) stamp, RCCM certification and its people are fully committed to the quality process and to meeting the needs of its customers.

This same commitment is found in its aftermarket operations which provide worldwide support to keep pumps running efficiently wherever they are located.

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

**API 610 OH2**

**HHS, DB 10 & SMK** single stage pumps for petrochemical & hydrocarbon processing, transfer, charge & hot services.

- Capacities to: 7,200 US gpm
- Heads to: 1,310 feet
- Maximum temperature: 800°F
- Max. Working Pressure: 735 psi

**API 610 BB1**

**DVDS, DVSS & DB 30** single and two stage pumps for pipeline, booster, off sites, transfer services, reverse osmosis and hydraulic power recovery turbine (HPRT).

- Capacities to: 88,000 US gpm
- Heads to: 670 feet
- Maximum temperature: 350°F
- Max. Working Pressure: 2,300 psi
- Maximum Speed: 3,600 rpm

**API 610 BB2**

**DB 21, KSMK & HOL** single stage pumps for heavy duty, booster, pipeline, transfer, charge and hot bottoms applications.

- Capacities to: 18,000 US gpm
- Heads to: 1,650 feet
- Maximum temperature: 800°F
- Max. Working Pressure: 735 psi

**API 610 BB5**

**DB 22 & KSMK** two stage pumps for high pressure and high temperature services in hydrocarbon processing, oil and gas duties.

- Capacities to: 22,000 US gpm
- Heads to: 1,000 feet
- Maximum temperature: 180°F
- Max. Working Pressure: 900 psi
**API 610 BB3**

**DB 34, DVMX & M** Class Multi-stage pumps for pipeline, water injection, boiler feed, descaling, reverse osmosis and hydraulic power recovery turbine (HPRT).

- Capabilities to: 11,000 US gpm, 2,500 m³/hr
- Heads to: 9,960 feet, 3,000 metres
- Maximum temperature: 400°F, 205°C
- Max. Working Pressure: 4,350 psi, 300 bar

**FK**

**HMBS & DB 36** Diffuser and Volute Pumps for very high pressure water injection, and boiler feed duties plus, high temperature charge, bottoms, transfer services and nuclear charging and safety services.

- Capabilities to: 11,000 US gpm, 2,500 m³/hr
- Heads to: 13,300 feet, 4,000 metres
- Maximum temperature: 480°F, 250°C
- Max. Working Pressure: 5,800 psi, 400 bar
- Maximum Speed: 7,000 rpm

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At CLYDEUNION there is a wealth of worldwide practical experience, together with the best available technology to solve pumping problems.

Insured Safety and Superior Quality OEM Parts from a Name You Can Trust:

- CLYDEUNION – Has heritage since 1850 providing quality OEM parts
- Global Parts Specialists on call 24/7 to provide your parts and service needs
- Expedited parts manufacturing capabilities
**ASME/ANSI B73.2**

**DB 34, DVMX & M** Class Multi-stage pumps for pipeline, water injection, boiler feed, descaling, reverse osmosis and hydraulic power recovery turbine (HPRT).

| Capacities to | 1,800 US gpm | 400 m³/hr |
| Heads to | 500 feet | 152 metres |
| Maximum temperature | 500°F | 260°C |
| Max. Working Pressure | 275 psi | 19 bar |

**API 610 OH4**

VLK and VHK In-line pumps for transfer, booster, process and offsites.

| Capacities to | 6,000 US gpm | 1,365 m³/hr |
| Heads to | 1,100 feet | 335 metres |
| Maximum Temperature | 700°F | 370°C |
| Max. Working Pressure | VLK 735 psi | 50 bar |
| | VHK 1,200 psi | 82 bar |

**API 610 OH3**

VLK-BB In-line pumps for transfer, process booster and offsite services.

| Capacities to | 6,000 US gpm | 1,365 m³/hr |
| Heads to | 1,000 feet | 305 metres |
| Maximum Temperature | 700°F | 370°C |
| Max. Working Pressure | 735 psi | 50 bar |

**API 610 VS1 & VS6**

VX, VBX, VLX, VLBX and DB50 Multistage Bowl Pumps for hydrocarbon and industrial sumps, transfer, reverse osmosis, lift pumps, fire pumps to NFPA 20, pipeline boosting, condensate, cryogenics, nuclear safety services and other very low NPSH applications.

| Capacities to | 31,000 US gpm | 7,000 m³/hr |
| Heads to | 1,900 feet | 600 metres |
| Maximum temperature | 400°F | 205°C |
| Max. Working Pressure | 850 psi | 60 bar |
**API 610 VS1 & VS6**
VMX & VMBX Multistage diffuser pumps for hydrocarbon and industrial sumps, transfer, condensate and other very low NPSH applications.

- Capacities to: 2,200 US gpm
- Heads to: 3,900 feet
- Maximum temperature: 400°F
- Max. Working Pressure: 1,700 psi

**API 610 VS6 & VS7**
DB 62C Cryogenic Multi-Stage Pumps for LNG and other cryogenic services.

- Capacities to: 11,000 US gpm
- Heads to: 1,310 feet
- Maximum temperature: -328°F
- Max. Working Pressure: 1,100 psi

**MUTUP MULTIPHASE PUMP**
Subsea, onshore and offshore for handling multiphase mixture such as gas, oil and water.

- Capacities to: 100,000 bsd
- Pressure to: 1,180 psi
Reciprocating Pumps

**SX3, DX5, TX10 & TD28**
Simplex, duplex and triplex single acting plunger pumps for general industrial and process services. Also available to API 674.

- Capacities to: 40 US gpm
- Pressures to: 10,000 psi
- Temp range: -100°F to 360°F
- Max. continuous Powers to: 28 hp

**TD30, TD60 & QD100**
Triplex and quintuplex single acting plunger pumps for general and process services. Also available to API 674.

- Capacities to: 127 US gpm
- Pressures to: 10,000 psi
- Temp range: -100°F to 360°F
- Max. continuous Powers to: 100 hp

**TX50 THROUGH TX200 & QX300**
Internally geared triplex single acting plunger pumps for general and process services. Also available to API 674.

- Capacities to: 600 US gpm
- Pressures to: 10,000 psi
- Temp range: -100°F to 360°F
- Max. continuous Powers to: 350 hp

**TD120, 240 & QD200, 400**
Triplex and quintuplex single acting plunger pumps for general industrial and process duty. Also available to API 674.

- Capacities to: 720 US gpm
- Pressures to: 10,000 psi
- Temp range: -100°F to 360°F
- Max. continuous Powers to: 500 hp
QD7000 & TD8060
Triplex and quintuplex single acting plunger pumps for general industrial and process duty. Also available to API 674.

Capacities to 1,100 US gpm 250 m³/hr
Pressures to 10,000 psi 690 bar
Temp range. -100°F to 360°F -73°C to 180°C
Max. continuous Powers to 850 hp 635 kW

DHD DIRECT ACTING DUPLEX
Double acting duplex piston pump widely used with steam, gas or air drive on boiler feed and refinery process duties.

Capacities to 1,000 US gpm 225 m³/hr
Pressures to 350 psi 24 bar
Temp range. 350°F 180°C

DVP & SMC VALVE POT PISTON
The DVP is a double acting duplex piston pump whilst the SMC is simplex version. The units are used on high temperature applications, slurries, viscous or volatile liquids.

Capacities to 1,200 US gpm 273 m³/hr
Pressures to 600 psi 42 bar

SHD-P double acting piston power pump (motor drive). Pumps sold for detergent slurry in Venezuela.

Our TD8060 can handle severe services such as the one shown designed for water flood.

QD-400 for produced water injection service.
CLYDEUNION operates in five key markets

- Power
- Upstream Oil
- Downstream Oil
- Industrial
- Water

CLYDEUNION is a centre of excellence in Pump Technology, Hydraulic Design and Engineering. We aim to employ the best designers and engineers, re-establishing this business as a world leader in the markets in which it operates.

With over 120 years of experience, CLYDEUNION has become the preferred supplier of heavy duty industrial Simplex, Duplex, Triplex, and Quintuplex reciprocating power pumps. At CLYDEUNION, we pride ourselves with manufacturing reliable and high quality pumps to meet the demands of today’s industrial applications. All models can be offered to comply with API-674, NACE, or other customer specifications. When your business requires a pump, think CLYDEUNION.
CLYDEUNION understands its customers' needs in keeping critical plant running and client concerns when a breakdown occurs. To assist in keeping your equipment in top condition, we offer a full spares and service capability.

**Spare Parts**
- Original Specification
- Rapid Response Available
- Fully Warranted
- Upgrades for all Brands
- Assemblies
- Obsolete Product
- Inventory Management

Genuine warranted OEM parts are manufactured to original specifications, offer no compromise on quality and ensure optimum machine reliability.

CLYDEUNION can offer turnaround within 24 hours on selected parts through our Rapid Response Turned Parts service.

Independence insures best choice of wear parts.
CLYDEUNION is your first choice for spares and service of all the brands listed below.

- Installation & Commissioning
- Repair, Maintenance & Overhaul
- Emergency Service
- Site Testing
- Problem Solving & Technical Support
- Root Cause Analysis
- Condition Monitoring
- Upgrading: Hydraulic, Mechanical & Material for all Brands
- Re-rating of all Brands

Weir Pumps
Mather & Platt
Drysdale
WH Allen
Girdlestone
Allen Gwynnes
Harland
Union Pump
David Brown Pumps
DB Guinard Pumps
American Pump
Pumpline

Pump availability in the power industry is critical. CLYDEUNION understands this and its wide range of service offerings ensure you get the best from our equipment.
We are constantly endeavouring to improve the performance of our equipment and as a result, we reserve the right to make alterations from time to time, and equipment may differ from that detailed in this brochure.

CLYDEUNION offers the following heritage products:

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

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**Worldwide sales contacts**

**CLYDEUNION**

www.clydeunion.com