



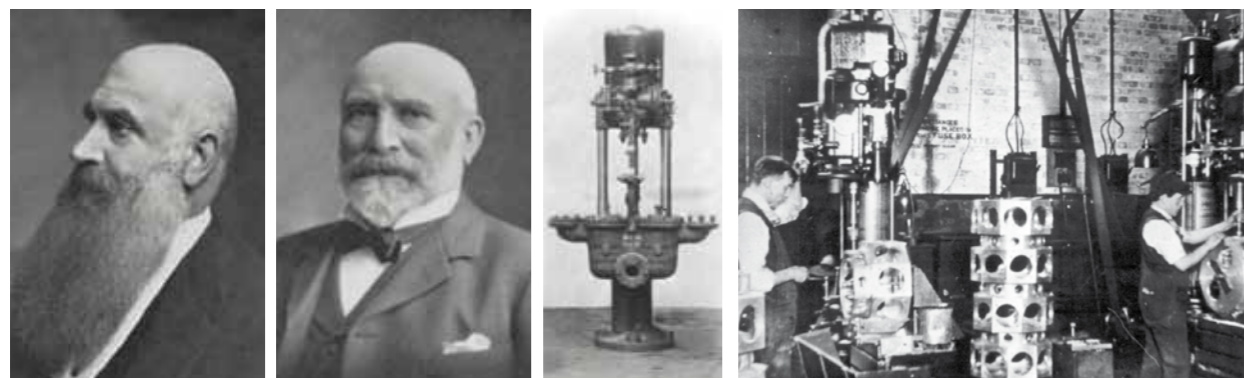
Innovation, Design, Manufacture & Aftermarket Services:
Pumping solutions for a better world

water & industrial



Generations of experience

While the name is comparatively recent, CLYDEUNION Pumps is one of the most experienced specialised engineering companies in the world. Formed through the acquisition and integration of a series of highly respected pump manufacturers and designers on both sides of the Atlantic, CLYDEUNION Pumps incorporates an accumulation of over 300 years of engineering expertise.



George Weir: The eldest of the brothers, George trained as a ships engineer.

James Weir: The second eldest, James began work at 15 in a consulting engineers in Glasgow. He was the inventor of the celebrated direct-acting feed pump.

Assembly of industrial pumps in our Glasgow facility at the beginning of the 20th Century.

The history of CLYDEUNION Pumps begins with the formation, in 1871, of the engineering firm of G&J Weir. Founded by brothers George and James Weir in Glasgow, the company quickly prospered as a result of the improvements they introduced to pump machinery and valve technologies. Their work found applications across the world, from marine engines and power stations to desalination plants.

By the end of the twentieth century G&J Weir had acquired Drysdale Pumps, Harland, Mather and Platt, and WH Allen. They had also, under

the name *Weir Pumps, grown into one of the most respected and iconic engineering enterprises in Scotland.

Meanwhile just 14 years after the establishment of G&J Weir, the Union Manufacturing Pump Company was incorporated in 1885 in Michigan USA. Specialising in the design and manufacturing of steam pumps they grew prosperous, adopted the name Union Pump and established a Canadian sister company.

In 2006, two other highly respected specialist companies, David Brown Pumps of England and DB Guinard

Pumps of France, were brought under the Union Pump umbrella.

A new chapter in the development of both companies began in 2007, when *Weir Pumps was bought by Clyde Blowers, a company owned and run by Jim McColl (who had started his working life as an apprentice with Weir Pumps). At this time the name changed to Clyde Pumps. In 2008, Clyde Blowers bought Union Pump and amalgamated the two specialist engineering companies into CLYDEUNION Pumps.

Our Extensive Brand Heritage:



Today, CLYDEUNION Pumps is recognised as a world-leading centre of excellence in pump technology and bespoke pumping solutions. We are active across many market sectors, with our main operations relating to highly critical areas throughout water treatment, desalination, minerals & mining, offshore & marine, industrial applications, oil extraction and processing, nuclear power and conventional power.



Water & Industrial - driven by customer service

At CLYDEUNION Pumps we understand the needs of the desalination market. Engineering expertise and experience from throughout our global organisation have been brought together to create a specialist team focused solely on serving the desalination industry and meeting its specific requirements. We deliver best efficiency, performance and quality at market leading pricing.

This team forms a key part of our dedicated Water & Industrial business unit, strategically aligned with customers' requirements and fully committed to the working practices, the demands of scheduling, efficiency and reliability, that prevail within the industry. This allows us to build considerable advantages into the service we offer.

We understand the paramount importance of efficiency and reliability, and the only path to robust, continuous long-term performance is engineering of the highest standard. Our engineering sets the benchmark for the industry, and our products are quality assured by our comprehensive quality system and pump test facilities.

Through a culture of engineering excellence and a customer-centred

approach we have positioned ourselves at the leading edge of pump design, by constantly investing in Research & Development and using the most modern design techniques. This is clearly demonstrated by our industry specific, 'sole purposely designed' and innovative High Pressure Reverse Osmosis pump, the HPRO.

Within the desalination market we offer a comprehensive range of products to cover all applications from intake pumps through to product distribution and pipeline pumps. We are the complete 'one stop shop' pump provider for all your desalination needs.

For specific application and pump coverage please refer to pages 12 - 13.

*Main Right: High Pressure Reverse Osmosis Pump
Below L to R: BB3, OH4/VHK & Uniglide-e Pumps*

desalination

HPRO Technical Data

The HPRO High Pressure Reverse Osmosis pump is a radially split diffuser multistage pump designed specifically for the requirements of desalination plants. It features superior efficiencies and lower capital costs than equivalent pumps, as well as numerous unique design features that ensure maximum through life costs and reliability in service.

Capacity:	up to 3,000 m ³ /hr / 13,212 usgpm
Delivery head:	up to 800 m / 2,660 feet
Temperature:	up to 180 °C / 350 °F
Speeds:	up to 3,600 rpm
Flange drilling:	ANSI or BS



water

CLYDEUNION Pumps has been supplying pumps to the Water Industry for almost three quarters of a century and our Water & Industrial Business Unit fully understands the needs and demands of this market, worldwide. This team comprises industry specialists, focused on customers requirements and is dedicated to providing best in class solutions.

Our robust product ranges, which includes well known heritage brand names such as Weir, Harland, Mather & Platt and Allen Gwynnes, are extensive and designs have been honed and developed over many years, resulting in today's highly efficient and reliable equipment. These include vertical turbine, end suction and multistage pump frames but in particular the Uniglide and Uniglide-e axially split casing ranges. These ranges are the most extensive of any supplier worldwide,

allowing us to optimise on efficiency for virtually every pump selection from 50 mm to 1800 mm branch sizes.

We understand the principal of Life Cycle Cost and the importance pump efficiency and minimising spare parts play in this particular role. As a consequence, our products are purposely designed with these features very much to the forefront. We are also familiar with the role that variable speed applications can

play in pumping and our engineers are highly experienced in selecting pump, motor and drive equipment for these applications.

For details of specific applications and range coverage please refer to pages 12 - 13.



Isoglide Technical Data

Isoglide pumps are available in a wide range of materials with various seal options, and are suitable for handling corrosive and non-corrosive liquids in a variety of applications.

Capacity: up to 1,000 m³/hr / 4,400 usgpm
 Delivery head: up to 200 m / 670 feet
 Temperature: up to 180 °C / 350 °F
 Speeds: up to 3,600 rpm
 Flange drilling: ANSI or BS



Aquaglide Technical Data

The Aquaglide range of high efficiency large end suction pumps has been developed for high capacity water pumping applications.

Capacity: up to 10,000 m³/hr / 44,000 usgpm
 Delivery head: up to 200 m / 670 feet
 Temperature: up to 60 °C / 140 °F
 Speeds: up to 1,500 rpm
 Flange drilling: ANSI or BS



SBWM Technical Data

This pump is designed such that the net positive suction head allows the pump to function successfully.

Capacity: up to 40,000 m³/hr / 176,000 usgpm
 Delivery head: up to 100 m / 320 feet
 Temperature: up to 80 °C / 180 °F
 Speeds: up to 1,760 rpm
 Flange drilling: ANSI or BS



Uniglide-e Technical Data

The Uniglide-e range is the latest generation of axially split double entry pumps. It has been developed by CLYDEUNION Pumps following an extensive consultation of major users.

Capacity: up to 4,000 m³/hr / 17,600 usgpm
 Delivery head: up to 200 m / 670 feet
 Temperature: up to 80 °C / 180 °F
 Speeds: up to 1,760 rpm
 Flange drilling: ANSI or BS

wastewater

At CLYDEUNION Pumps, through our heritage Weir Pumps designs, we have products with market leading levels of reliability and robustness installed in wastewater plants throughout the world. These proven designs, supported by our state of the art hydraulic and mechanical design capabilities, enable us to provide "engineered to order" solutions for major large capacity installations. This allows us to offer customised solutions offering optimised levels of hydraulic performance coupled with robust mechanical integrity and operational reliability in these arduous pumping environments.

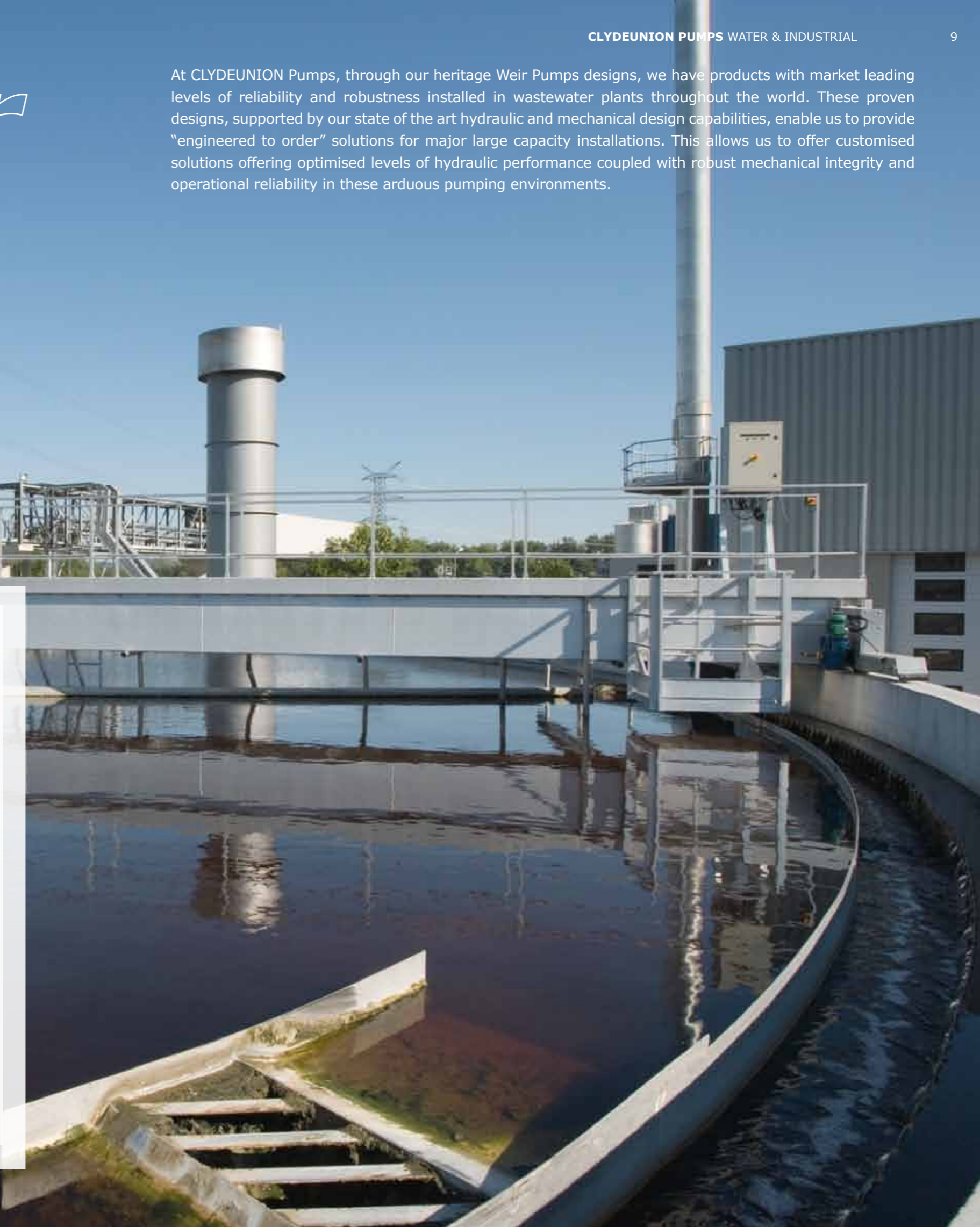
Swallowglide Technical Data

The Swallowglide is a solids handling end suction pump, specifically designed for sewage, effluent and screened sewage. Robust design and features developed over years of running experience make the CLYDEUNION Pumps Swallowglide a highly reliable pump with hundreds of installations globally.

Capacity:	up to 30,000 m ³ /hr /130,000 usgpm
Delivery head:	up to 130 m / 430 feet
Temperature:	up to 60 °C / 140 °F
Speeds:	up to 1,500 rpm
Flange drilling:	ANSI or BS

Our standard solids handling Swallowglide product lines, both vertical and horizontal configurations, are available in a range of materials from cast iron through to Super Duplex to suit all environmental situations throughout the world.

For specific applications and pump coverage please refer to pages 12 & 13.



general industrial

In addition to particular duties for individual industries listed below, the CLYDEUNION Pumps product range covers applications which are common to all industries, including general service water supply, whether seawater, raw water or fresh water and the pumping of slurries, sludges and effluents.

A comprehensive range of frame sizes in each pump type means that CLYDEUNION Pumps can meet *virtually every duty* with a pump or combination of pumps exactly

suitable for the application:

- Metal Production
- Factories & Offices
- Brewing & Distilling
- Sugar
- Agriculture & Irrigation
- Water Supply / Water Treatment
- Jet Fueling Systems
- Reciprocating Pumps Power Ends
- Descaling

For specific applications and pump coverage please refer to pages 12-13.

*Main Right: Steel Mill
Below L to R: Hard Metal Slurry Pump, Jet Fueling Systems, Diesel Engine Skid Packages & Self Priming Pump*



application

coverage

KEY WATER PRODUCT TYPES

	CUP DESIGNATION	FLOWS UP TO		HEADS UP TO		Borehole Extraction	Filter Washing	Fresh Water Supply	High Lift Pumping	Lift Station	Water Transfer	Pressure Boosting	Primary Treatment	Raw Water	Water Treatment
		M ³ /HR	USGPM	M	FT										
SINGLE & TWO STAGE PUMPS															
Single Stage End Suction Pump	Isoglide	1,000	4,400	200	670										
Single Stage Large End Suction Pump	Aquaglide	10,000	44,000	200	670										
Single Stage End Solids Handling Pump	Swallowglide	30,000	130,000	130	430										
Single Stage Axially Split Between Bearings Pump	Uniglide	20,000	88,000	200	670										
Single Stage Axially Split Between Bearings Pump	Uniglide-e	4,000	17,600	200	670										
Two Stage Axially Split Between Bearings Pump	Duoglide	2,500	11,000	320	1,050										
Two Stage Axially Split Between Bearings Pump	Duoglide-e	1,350	5,950	275	910										
Single / Two Stage API Axially Split Between Bearings Pump	BB1	20,000	88,000	1,000	3,300										
Single Stage Sump Pump	VS4	900	4,000	150	500										
Single / Two Stage Vertical Bowl / Turbine Pump	CW	40,000	176,000	100	330										
MULTISTAGE PUMPS															
Multi Stage Vertical Bowl / Turbine Pump	SBWM	40,000	176,000	100	330										
Multi Stage API Vertical Diffuser / Turbine Single Case Pump	VS1	7,000	31,000	600	1,900										
RECIPROCATING PUMPS															
Power Driven Small (Single Acting Plunger) - Simplex/Duplex/Triplex	Small Power	17	75	6,900	23,000										
Power Driven Medium (Single Acting Plunger) - Triplex/Quintex	Medium Power	87	385	6,900	23,000										
Power Driven Large (Single Acting) - Triplex/Quintex	Large Power	146	645	6,900	23,000										
Power Driven Geared (Internally Geared)	Geared Power	142	325	5,200	17,300										
SPECIALIST PUMPS															
Submersible Motor Driven Pump	Ulectriglide	3,400	15,000	200	670										
Concrete Volute Pump	CR	120,000	530,000	70	230										

KEY DESALINATION PRODUCT TYPES

	CUP DESIGNATION	FLOWS UP TO		HEADS UP TO		Intake Pump	Booster Pump	HP Pump	HP Booster (ERD)	Interstage Pressure Boost Pump	2nd Pass Pump	Brine Pump	Produced Water Pump	Cleaning & Flushing
		M ³ /HR	USGPM	M	FT									
SINGLE & TWO STAGE PUMPS														
Single Stage End Suction Pump	Isoglide	1,000	4,400	200	670									
Single Stage Large End Suction Pump	Aquaglide	10,000	44,000	200	670									
Single / Two Stage API Axially Split Between Bearing Pump	Uniglide	20,000	88,000	200	670									
Single Stage Axially Split Between Bearings Pump	Uniglide - e	4,000	17,600	200	670									
Two Stage API Axially Split Between Bearing Pump	Duoglide	2,500	11,000	320	1,050									
Two Stage API Axially Split Between Bearing Pump	Duoglide - e	1,350	5,950	275	910									
Single Stage API Vertical In-line Pump	OH4 / VHK	1,365	6,000	335	1,100									
Single Stage API End Suction Pump	OH2 - HHS	1,635	7,200	400	1,310									
MULTISTAGE PUMPS														
Multistage - Radially Split Diffuser Pump	HPRO	3,000	13,212	800	2,660									
Multistage API Axially Split	CUP-BB3	2,750	12,000	3,350	11,000									
Vertical Turbine Pump	SBWM	40,000	176,000	100	330									
RECIPROCATING PUMPS														
Power Driven Small (Single Acting Plunger) - Simplex/Duplex/Triplex	Small Power	17	75	6,900	23,000									
Power Driven Medium (Single Acting Plunger) - Triplex/Quintex	Medium Power	87	385	6,900	23,000									
Power Driven Large (Single Acting) - Triplex/Quintex	Large Power	146	645	6,900	23,000									
Power Driven Geared (Internally Geared)	Geared Power	142	325	5,200	17,300									
SPECIALIST PUMPS														
Submersible Motor Driven Pump	Ulectriglide	3,400	15,000	200	670									
Concrete Volute Pump	CR	120,000	530,000	70	230									

KEY INDUSTRIAL PRODUCT TYPES

	CUP DESIGNATION	FLOWS UP TO		HEADS UP TO		Chemical Extraction	Coal Processing	Electronics	Food & Beverages	Gas/LNG Plants	General Industry	Pulp & Paper	Petrochemical	Steel Production	Jet Fueling Systems	Descaling
		M ³ /HR	USGPM	M	FT											
SINGLE & TWO STAGE PUMPS																
Single Stage End Suction Pump	Isoglide	1,000	4,400	200	670											
Single Stage Large End Suction Pump	Aquaglide	10,000	44,000	200	670											
Single Stage End Solids Handling Pump	Swallowglide	30,000	130,000	130	430											
Single Stage Axially Split Between Bearings Pump	Uniglide	20,000	88,000	200	670											
Single Stage Axially Split Between Bearings Pump	Uniglide-e	4,000	17,600	200	670											
Two Stage Axially Split Between Bearings Pump	Duoglide	2,500	11,000	320	1,050											
Two Stage Axially Split Between Bearings Pump	Duoglide-e	1,350	5,950	275	910											
Single Stage API End Suction Pump	OH2-HHS	1,635	7,200	400	1,310											
Single Stage API Vertical In-line Pump	OH3	1,365	6,000	305	1,000											
Single Stage API Vertical In-line Pump	OH4/VHK	1,365	6,000	335	1,100											
Single Stage API Vertical In-line Pump	OH5	2,000	8,800	230	770											
Single / Two Stage API Axially Split Between Bearings Pump	BB1	20,000	88,000	1,000	3,300											
Single Stage Sump Pump	VS4	900	4,000	150	500											
Single / Two Stage Vertical Bowl / Turbine Pump	CW	40,000	176,000	100	330											
Single Stage Vertical In-line Pump	VCM	410	1,800	150	500											
MULTISTAGE PUMPS																
Multi Stage Vertical Bowl / Turbine Pump	SBWM	40,000	176,000	100	320											
Multi Stage Through Bolt Radially Split Pump	FT	1,800	7,950	3,500	11,600											
Multi Stage Barrel Radially Split Pump	FK	2,500	11,000	4,000	13,300											
Multi Stage API Axially Split	CUP-BB3	2,500	11,000	3,000	9,960											
Multi Stage API Vertical Diffuser / Turbine Single Case Pump	VS1	7,000	31,000	600	1,900											
Multi Stage API Vertical Diffuser / Turbine Double Case Pump	VS6	7,000	31,000	600	1,900											
RECIPROCATING PUMPS																
Power Driven Small (Single Acting Plunger) - Simplex/Duplex/Triplex	Small Power	17	75	6,900	23,000											
Power Driven Medium (Single Acting Plunger) - Triplex/Quintex	Medium Power	87	385	6,900	23,000											
Power Driven Large (Single Acting) - Triplex/Quintex	Large Power	146	645	6,900	23,000											
Power Driven Geared (Internally Geared)	Geared Power	142	325	5,200	17,300											
Power Driven High HP (Single Acting Plunger) - Triplex/Quintex	High Horse Power	155	680	13,800	20,000											
Steam Driven Simplex (Direct Acting)	Simplex Direct Acting	160	705	6,900	23,000											
Steam Driven Duplex (Direct Acting)	Duplex Direct Acting	173	760	6,900	23,000											
SPECIALIST PUMPS																
Positive Displacement Crew Pump	IMO	1,800	7,950	3,500	11,600											
Multi Stage Radially Split Diffuser Pump	HPRO	3,000	13,212	800	2,660											
Submersible Motor Driven Pump	Ulectriglide	3,400	15,000	200	670											
Concrete Volute Pump	CR	120,000	530,000	70	230											



Lifetime worldwide support



Parts: Any brand, any material, anytime. CLYDEUNION Pumps supplies parts for all of the heritage brands as well as upgrades and improvements.



Installation and commissioning: Trouble free commissioning anywhere in the world.

Every product CLYDEUNION Pumps supply is supported by a full lifetime commitment. CLYDEUNION Pumps provides a full aftermarket service, drawing on either its own engineers or fully trained and highly experienced service partners, depending on the location of the installation. CLYDEUNION Pumps has service facilities in over 40 countries spread throughout Europe, America, Asia, the Middle East and Africa.

CLYDEUNION Pumps after sales support extends across all of its legacy brands as well as new equipment, and provides full backup for obsolete products and for third party equipment. The parts CLYDEUNION Pumps supply meet the original specification, or are upgraded where appropriate, and many components can be covered by a Rapid Response option which can have parts on site within 24 hours.

CLYDEUNION Pumps after sales support is subject to the same supply chain management as the pump manufacturing. This provides customers with the lowest lead times and costs whilst meeting the highest standards of quality assurance.

In addition to spare parts, routine servicing, overhauls and inventory control, the aftermarket support covers upgrades and comprehensive technical advice about the potential

refitting of existing installations for greater efficiency and reliability. CLYDEUNION Pumps can work with your own engineers to carry out meticulous inspections and advise on maintenance schedules, carry out full vibration analysis, pressure and pulsation testing, and train your service personnel.

CLYDEUNION Pumps history and breadth of experience, as well as its geographical coverage and expertise, make it the natural first choice for any pump related problem or enquiry, no matter what the location, the scale of the task or the original manufacturer.

We guarantee supply of parts for all heritage brands & or obsolete products, including:

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



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

water &
industrial

CLYDEUNION
PUMPS

