

FLOWTECH

VACUUM PUMPS

→ LIQUID RING VACUUM PUMPS
FOR ALL PROCESS INDUSTRIES



→ PUMP PACKAGES

→ NEW PUMPS

→ PARTS

→ ON-SITE TESTING

→ EFFICIENCY IMPROVEMENT



→ SERVICE

→ EXCHANGE

→ REPAIRS

→ RENTAL

→ MAINTENANCE CONTRACTS



REZitech

Flowtech Vacuum Pumps

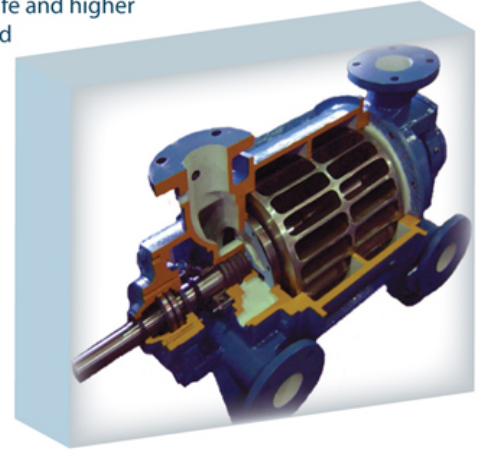


The Flowtech pump range has been specifically designed to withstand the rigours of industry where process liquids and solid particles may carry over into the Vacuum Pump, where the gas is explosive or contains corrosive vapours. Flowtech Vacuum Pumps have only one moving part, a solid cast Stainless Steel rotor mounted on a Stainless Steel shaft. This simple rugged construction ensures very reliable, low maintenance performance. The use of higher quality materials in the Flowtech range provides the benefits of longer life and higher efficiency at no extra cost. The standard materials of construction can easily be upgraded at little extra cost to suit more aggressive applications.

The options include:

- Corrosion Proof Ceramic Metal / Polymer Matrix Linings
- Stainless Steel Cladding on pump heads
- Solid cast Stainless Steel cones and body
- All 304 or 316 Stainless Steel Construction

The wide range of options enable Flowtech Pumps to be economically matched to your process requirements. Shaft sealing by high quality gland packing is standard with a wide range of single, double and cartridge mechanical seals being available to meet environmental protection requirements.



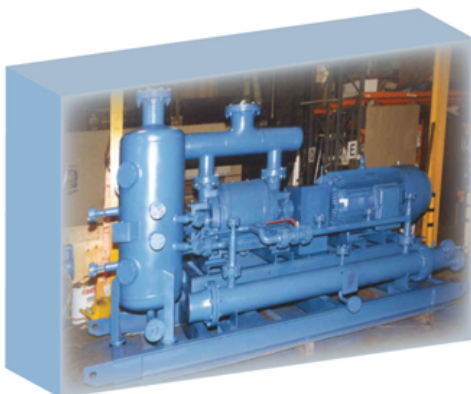
The Flowtech range has 12 sizes ranging from below 200CFM to over 13000CFM in suction capacity. Operating vacuums of up to

27.5 inches of mercury (700mm Hg) can be reached with the single stage design without the use of valves, (see the performance curves for an indication of the capacities available).

Flowtech Pumps can be supplied as

A pre-engineered package could include:

- Electric Motor, Base, Pulleys and Belts
- Seal Water Controls and Discharge Air / Water Separators
- Vacuum Pre-Separators with Extraction Pumps
- Seal Water Recirculation systems with Heat Exchangers or Cooling Towers
- Air of Steam Ejectors and Inter-Condensers for high vacuum applications



Compressor Applications

The FLOWTECH Range can also be used in compressor applications up to 150 kPa (g) discharge pressure.

This package is operated as a vinyl chloride monomer compressor at a chemical plant.

For further details on the Flowtech Vacuum Pump range or technical assistance with the design of your Vacuum Pump system, please contact your local agent or Rezitech Services Pty Ltd direct.

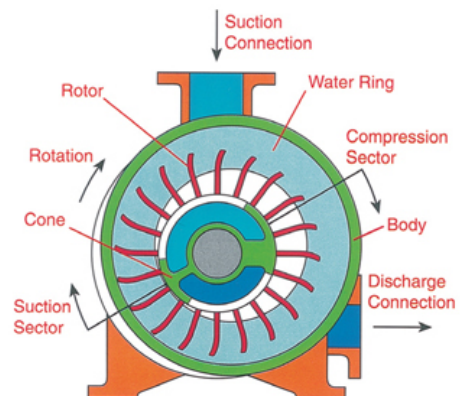
How it Works

The FLOWTECH design Vacuum Pump has only one moving part, a balanced Stainless Steel rotor.

The 20 bladed rotor transmits power to the liquid inside the casing and causes a ring of liquid to be formed due to the centrifugal force created.

Because the rotor is offset from the central axis of the body the liquid ring fills then empties the chambers formed between the blades of the rotor. In effect the liquid ring creates a "piston like" pumping action. Gas enters and is discharged through the corresponding ports in the cones.

The liquid ring also absorbs the heat of compression and condensation of vapours, therefore cool liquid must be continually supplied to prevent excessive temperature rise and to replace the liquid which is discharged with the gas.



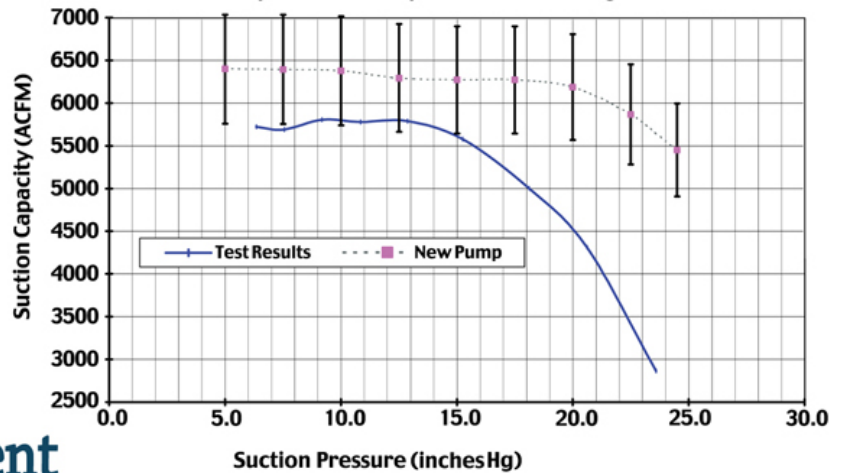
The FLOWTECH Vacuum Pumps can be selected for optimum efficiency at high, medium or low vacuum operation by changing the timing of the discharge port.

On Site Efficiency Testing

Our on-site testing service allows us to determine the actual vacuum and capacity of your existing pumps. The testing is performed quickly during a pump shutdown period and provides important data allowing our clients to schedule repairs or service when appropriate. A poorly performing vacuum pump will use as much, if not more power than an efficient unit. The 'wasted' power consumed will often amount to annual costs in excess of a Rezitech repair. The test example shows the manufacturers published performance curve compared with the actual performance of the unit tested on site.

REZITECH SERVICES PTY. LTD

VACUUM PUMP TESTING ORIFICE PLATE METHOD
 Test: T270-B Test Date: 02/02/01
 Surface Fill Operations Pump No 1 Nash 904 P2 @ 320 RPM



Efficiency Improvement

IMPROVE EFFICIENCY AND REDUCE POWER CONSUMPTION

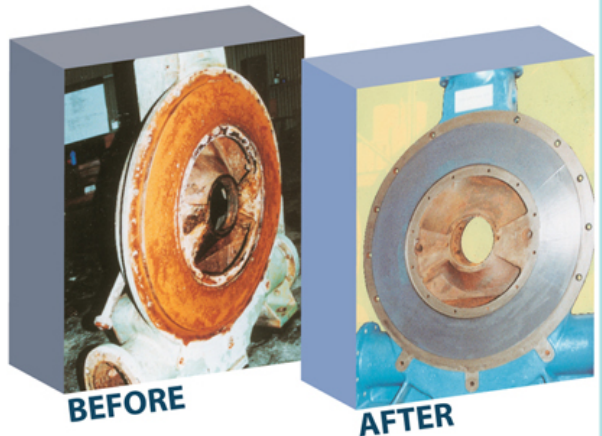
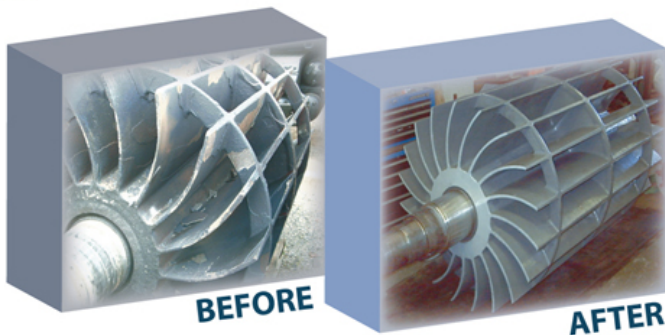
On certain types of fluid flow equipment. It has been proven that the hydrophobic coating applied by Rezitech will result in an increase in efficiency. On large units, this can amount to an enormous saving in power consumption.

LONGER SERVICE LIFE

Degradation of fluid flow equipment is often attributed to the effects of erosion, corrosion and cavitation. The Rezitech treatment often totally eliminates damage caused by corrosion, which in turn greatly reduces the effects of erosion. Equipment repaired and / or protected by Rezitech often has a service life exceeding that of a new unit.

Service Exchange/Repair

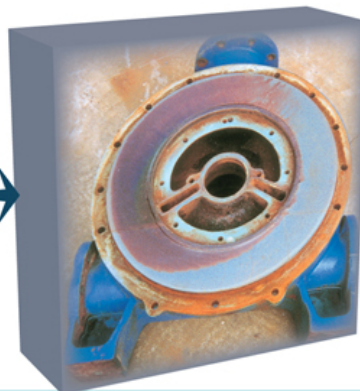
It is common for an inefficient pump to be left in operation due to a replacement unit being unavailable. Our 'service exchange' system provides a fully refurbished pump in exchange for the client's inefficient unit.



This system ensures minimal disruption to production for the cost of a repair rather than the cost of a replacement pump. Our 'service exchange' pumps are fully guaranteed and are protected with our high quality 'ceramic' coatings which ensure a service life longer than a new, unprotected unit.

Not Just a Pretty Face!

Many of the photos taken of repaired pumps are taken in a workshop before the pump is reassembled and operated. As expected, the pumps look terrific before installation. The photograph on the right shows the internals of a vacuum pump repaired utilising our high temperature, ceramic linings 2 years prior. This pump has been subjected to entrained solids, high temperature and extreme corrosion due to sealing water with a pH of "3".



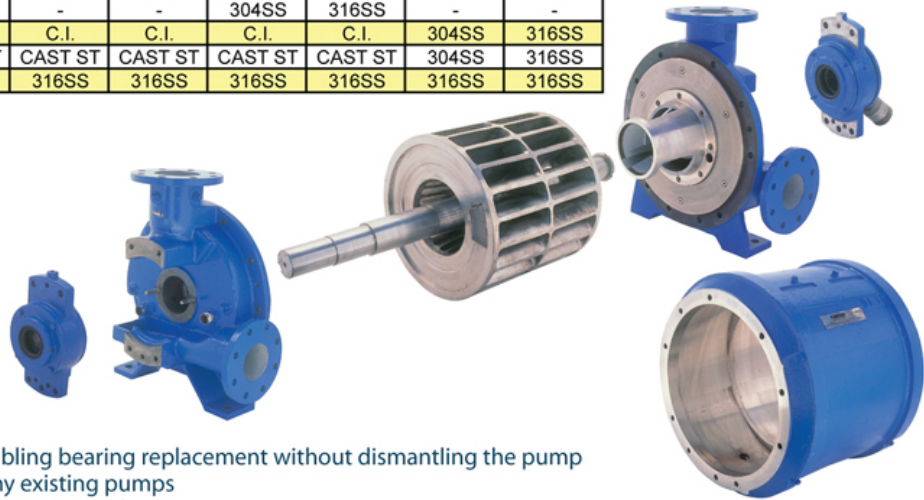
Galvanised parts previously fitted to this pump were destroyed in 6 weeks! The photo shows that after 2 years operation the pump is still in excellent condition.



The Flowtech CN Pump Range

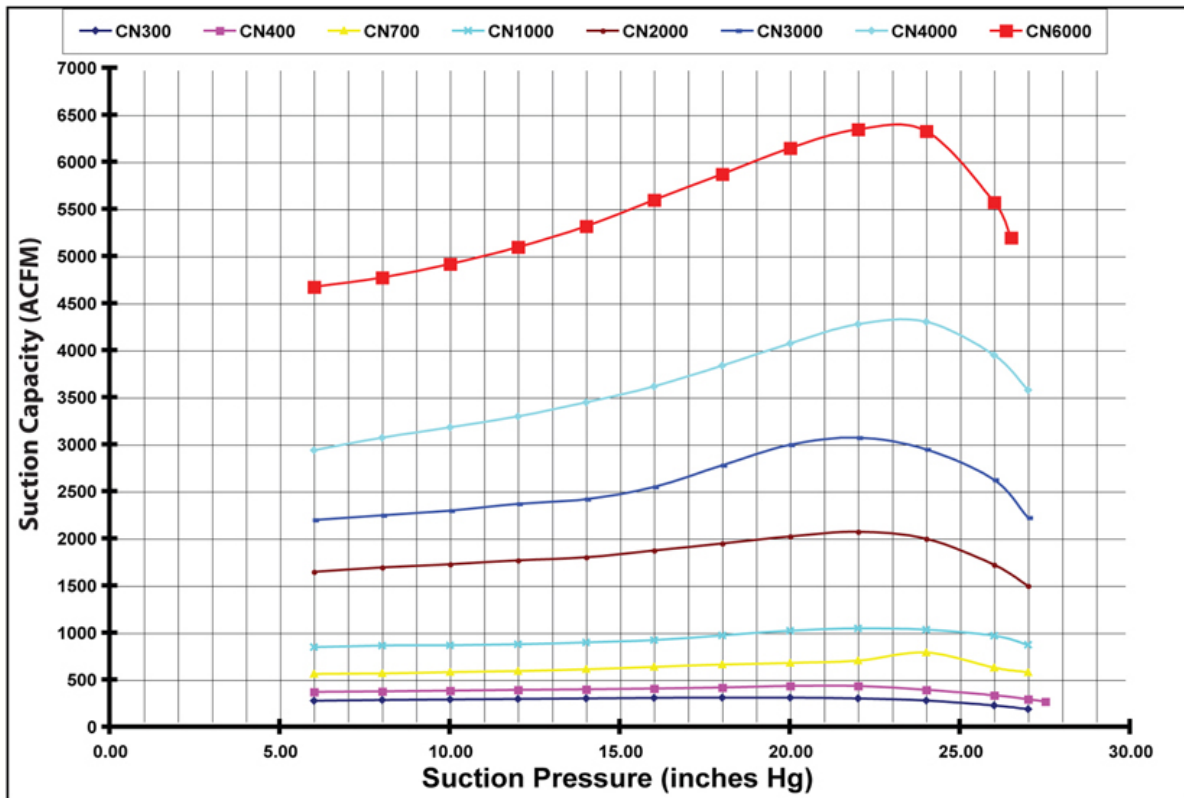
Optional Materials of Construction

FLOWTECH PUMPS MATERIALS OF CONSTRUCTION								
PART	FCD	STD	BVC	BVS	XVS	PVS	SS4	SS6
ROTOR	C.I.	304SS	304SS	304SS	304SS	316SS	304SS	316SS
SHAFT	S45C	410/431	410/431	410/431	410/431	410/431	316SS	316SS
CONES	C.I.	C.I.	304SS	304SS	304SS	316SS	304SS	316SS
BODY	C.I.	C.I.	C.I.	304SS	304SS	316SS	304SS	316SS
CLADDING	-	-	-	-	304SS	316SS	-	-
HEADS	C.I.	C.I.	C.I.	C.I.	C.I.	C.I.	304SS	316SS
BEARING CAPS	CAST ST	CAST ST	CAST ST	CAST ST	CAST ST	CAST ST	304SS	316SS
GLAND FOLLOWER	316SS	316SS	316SS	316SS	316SS	316SS	316SS	316SS



Features Include

- Removable bearing cartridges enabling bearing replacement without dismantling the pump
- Directly interchangeable with many existing pumps
- No alteration to pipework or footprint required
- Standard model supplied with stainless steel rotor and shaft
- All models have 316 stainless steel packing gland assemblies
- Cast steel bearing caps to reduce breakages
- Highly reliable with only one moving part
- Large inlet ports on cones allow maximum condensation effect achieving improved capacity
- Fully shrouded rotor for maximum strength
- A single seal water connection is provided to simplify installation
- High quality grease lubricated bearings



The Flowtech CNL Pump Range

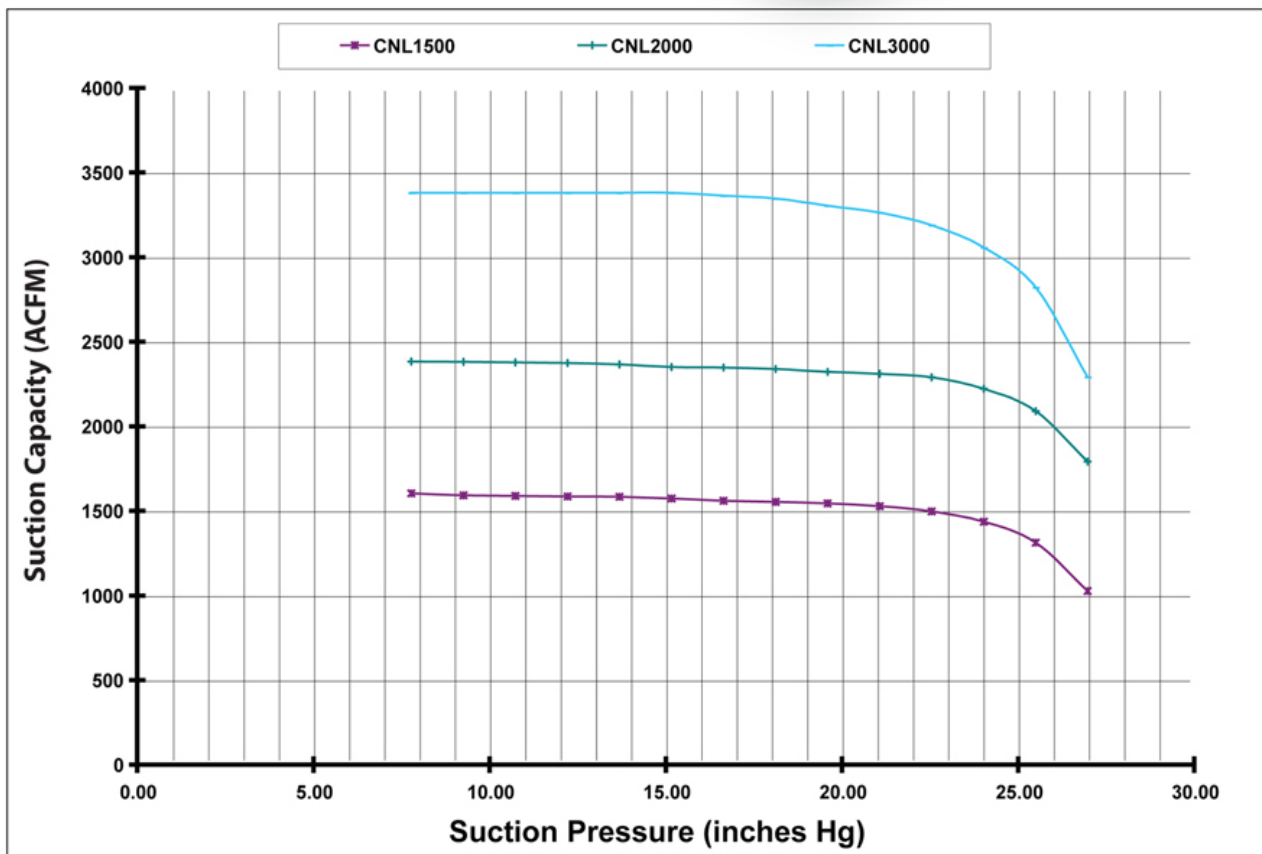
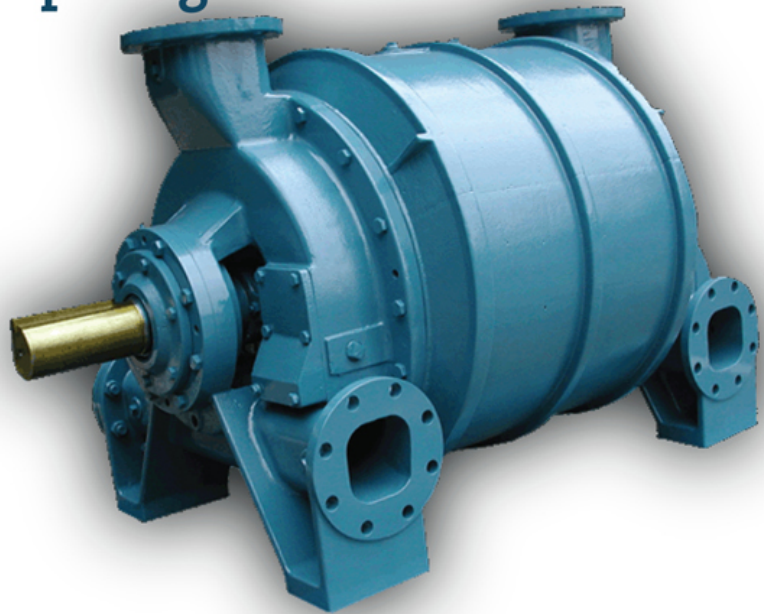
Large inspection cover on head...

Allows replacement of flexible discharge port without pump disassembly;

AND allows access to critical tolerance area without pump disassembly!

Flexible discharge port via check valve means...

No longer a need for 1,2 or 3 sized cones. ONE CONE will cover low, medium & high vacuum duty.



Other Features Include

- Increase in capacity
- Decrease in power consumption
- Removable bearing cartridge
- Rotor/shaft assembly, casing interchange with existing Nash and Flowtech parts
- Readily available, heavy duty cylindrical and spherical roller bearings
- Same footprint as Flowtech CN and Nash CL ranges

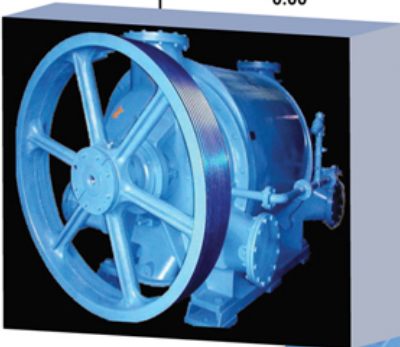
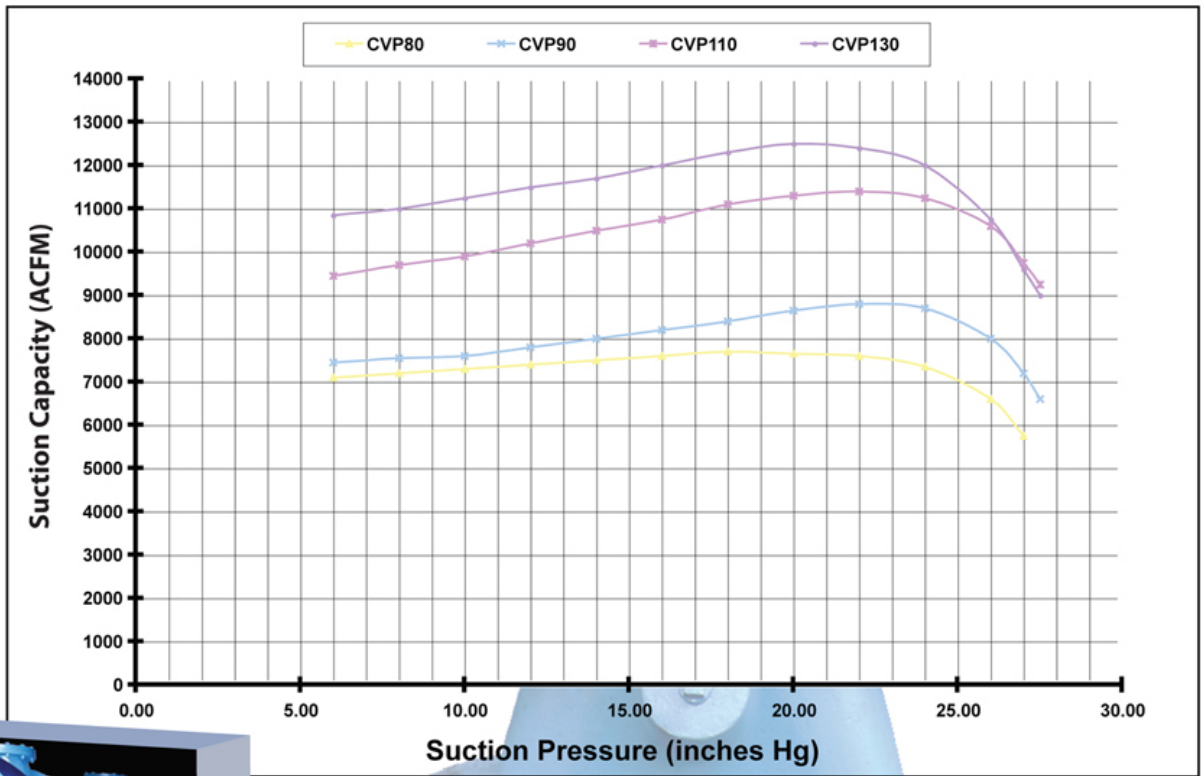


The Flowtech CVP Large Pump Range



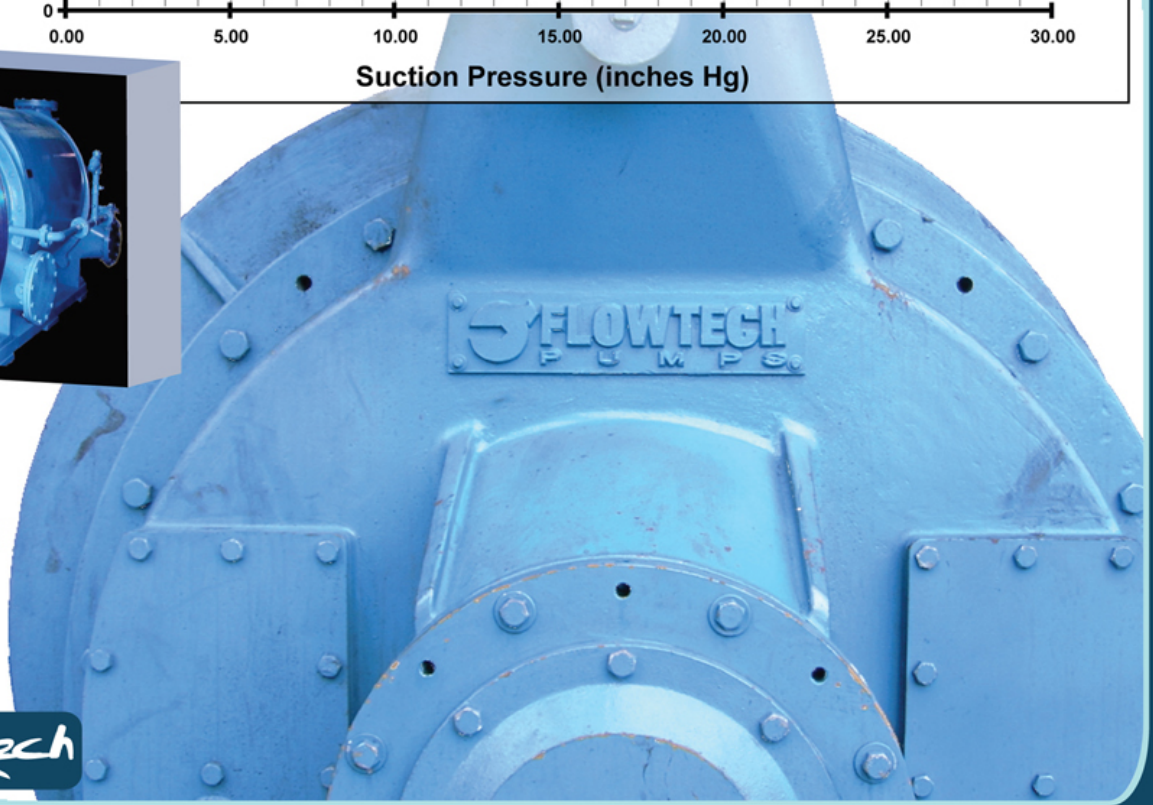
CVP110

More than 11,000 CFM capacity in vacuum!



CVP130

In excess of 13,000 CFM in suction capacity!



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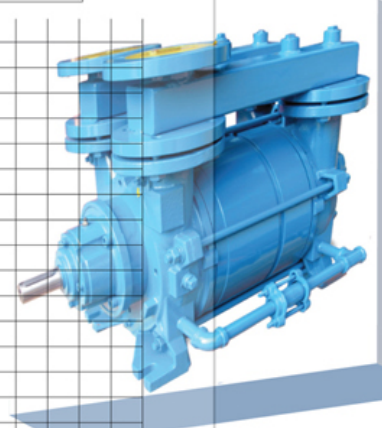
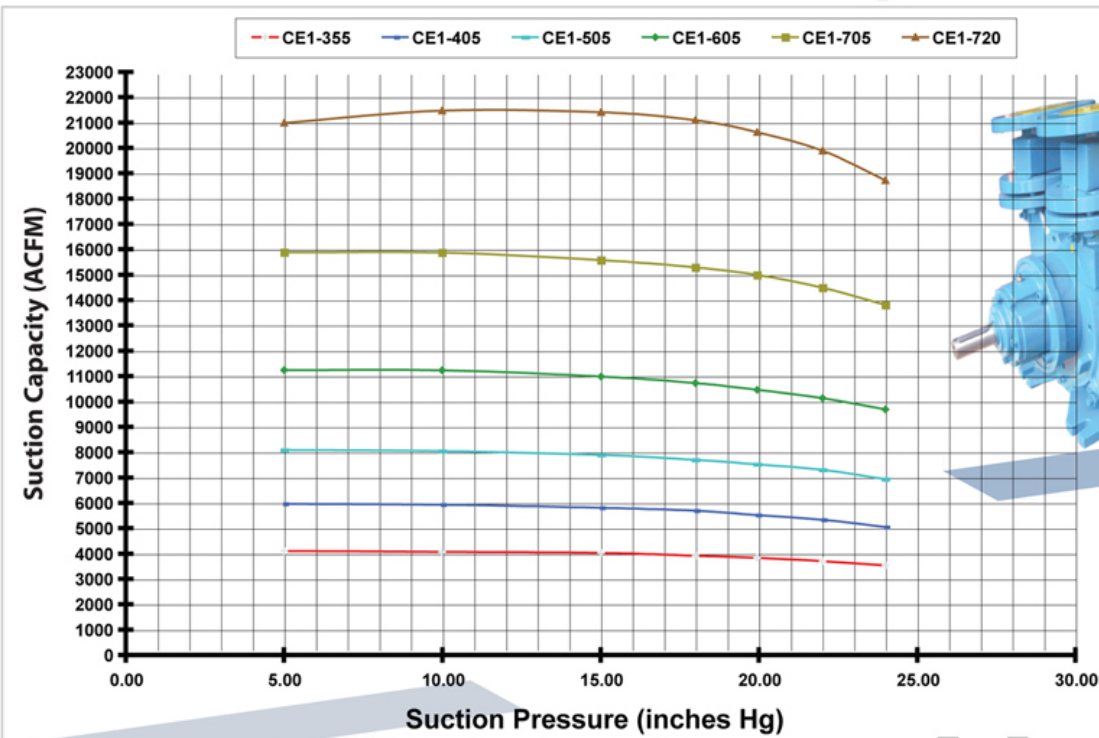
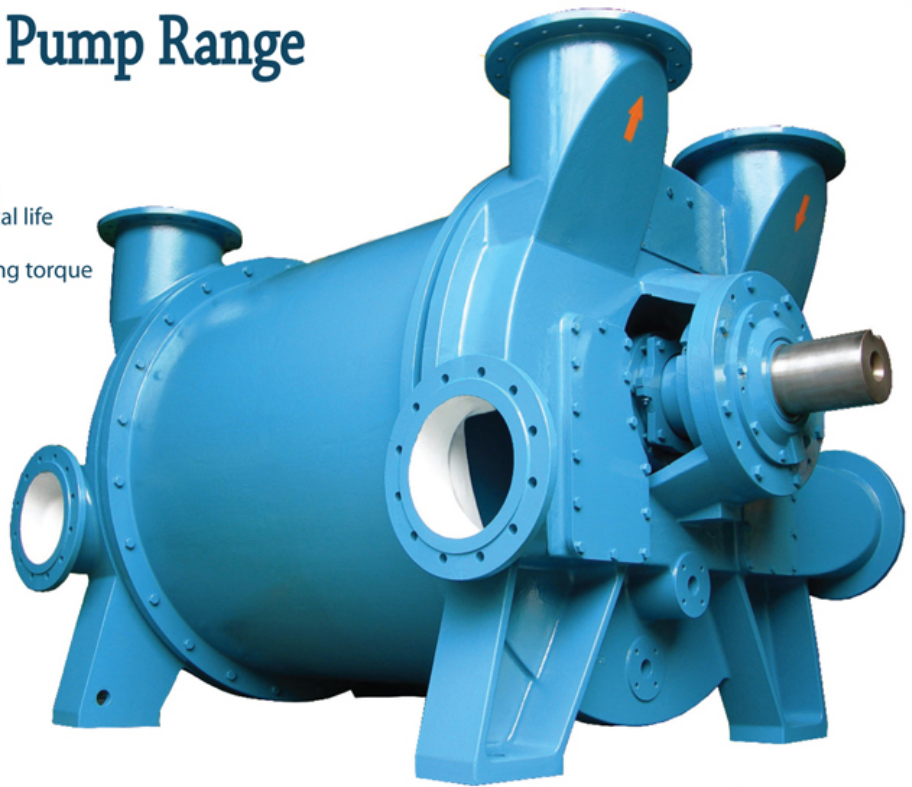
The Flowtech CE Pump Range

Features Include

- Oil free and environmentally friendly
- Simple, reliability and long economical life
- Compact design
- Low vibration, noise levels and starting torque
- Material construction flexibility

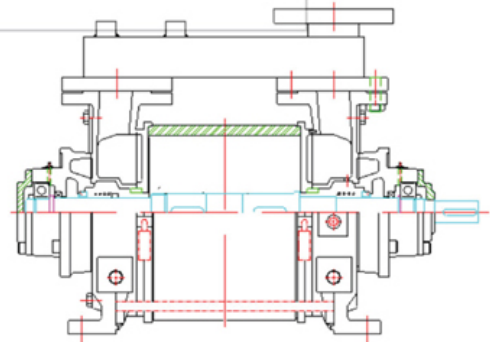
Applications

- Central vacuum systems
- Condenser exhaust
- De-aeration
- Drying systems
- Evaporation crystallization
- Evisceration
- Extrusion
- Filtration
- De-aeration
- Impregnation
- Priming
- Sterilization



and More

- Vacuum condensing
- Vacuum conveyance
- Vacuum distillation
- Vacuum packaging
- Vacuum trucks
- Vapour and solvent recovery





... The Company

Rezitech is a 100% Australian Owned, private company which commenced trading in the industrial maintenance market in 1968.

In 1972, Rezitech introduced the Belzona Polymeric range of metal, rubber and concrete repair/protection materials to Australia.

In addition, Rezitech supplies high quality stainless steel vacuum pumps at a price often comparable with cast iron vacuum pumps.

Rezitech's total vacuum pump service includes sales of new or reconditioned vacuum pumps, repair services, supply of replacement parts, design and supply of complete vacuum systems plus on-site efficiency testing.

As sole Australian distributor for Belzona Polymerics, Harrogate, England, Rezitech can offer a vast range of metal, rubber and concrete repair/protection materials to Australian industry.

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