

Engineered Process Vacuum & Centrifugal Pump Solutions



EMTIVAC
VACUUM PUMP & SYSTEM ENGINEERS

EMTIVAC is an Australian owned engineering company with over 30 years experience in supplying vacuum pump and centrifugal pump solutions for a wide range of process and manufacturing industry applications.

Our professional approach to pump selection, detailed application knowledge and expertise in system design ensures the optimum result for every project.

The Australian specialist

Innovative solutions

One of the most important aspects of our service is a proven ability to design practical solutions that improve efficiency in process vacuum systems. Our aim is to maximise vacuum system reliability to prevent unplanned production losses.

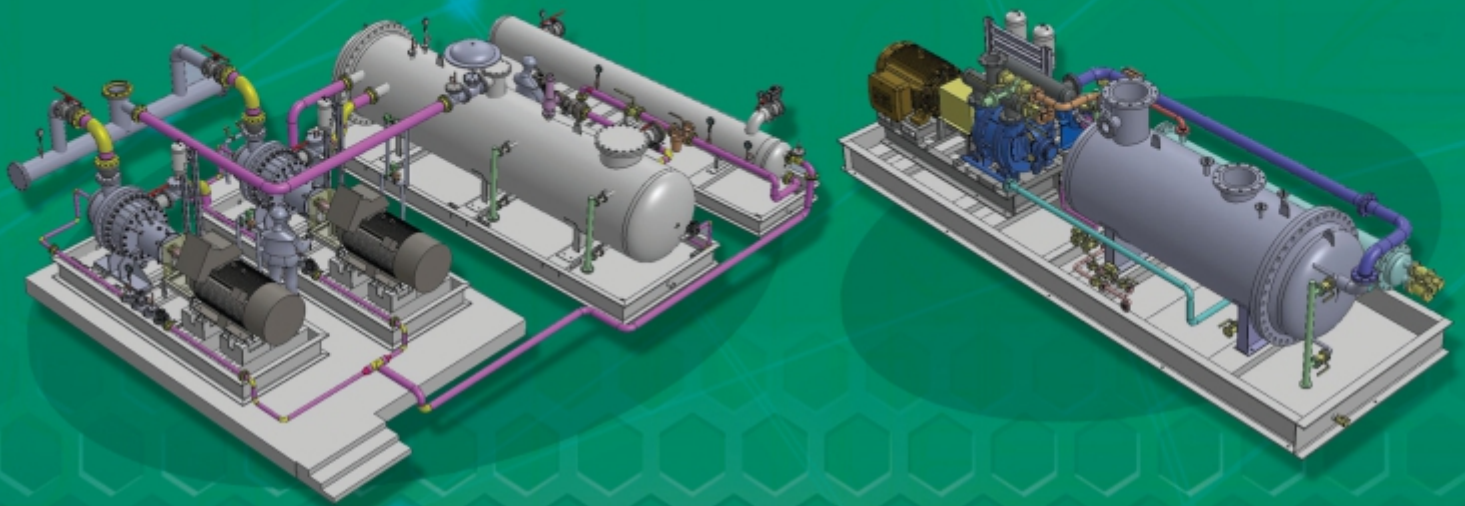


Services that add value at every stage

Every industry is under pressure to achieve more, using less of the world's limited resources. EMTIVAC are the experts in process vacuum systems and can assist you to:

- Measure vacuum pump efficiency and provide energy audit reports.
- Reduce power consumption, in some cases by over 50%
- Eliminate or significantly reduce water consumption
- Reduce cycle times, improve process efficiency and product quality
- Save money through lower initial capital cost and reduced maintenance costs.





Industries and Applications

EMTIVAC servicing these Industries and Applications provided

BUILDING PRODUCT MANUFACTURING

- Brick extruder vacuum
- Cement sheet drying
- Timber impregnation

COAL INDUSTRY

- Methane gas extraction
- filters for coal washing

COAL SEAM GAS

- Well head booster compressors
- Gas compressors

ENVIRONMENTAL INDUSTRY

- sparging blowers
- Suction truck vacuum pumps

FOOD PROCESSING

- Evaporation (dairy and fruit juice)
- Vacuum filters, flash cooling, vacuum filling, vacuum packing

LABORATORIES AND HOSPITALS

- Central vacuum systems
- Autoclaves
- High vacuum laboratory pumps
- Freeze dryers and vacuum ovens

MANUFACTURING

- Vacuum forming, vacuum holding, laminating, vacuum tables

MINERAL PROCESSING

- Vacuum filters, evaporation,
- Hazardous gas compressors

POWER GENERATION

- Condenser evacuation, vacuum priming
- Gas compressors

PULP AND PAPER

- Sheet drying, pre separators, head box compressors, de aerators, evaporators.

PETROCHEMICAL

- Vapour recovery
- Distillation columns
- Pipeline drying
- Flare gas compressors

SUGAR MILLS

- Evaporators
- Vacuum pans
- Mud filters

WATER AND WASTE WATER

- Vacuum filters
- Sparging blowers
- Vacuum priming
- Digester gas compressors

WINE INDUSTRY

- RDV filters
- Bottle fillers

Service, Repairs and Spare Parts

- Service and spare parts for all brands of liquid ring and rotary vane type vacuum pumps
- On site servicing and efficiency testing
- Internal fibrescope inspections
- In house pump refurbishment and machine service
- 10 & 25 ton overhead cranes
- Cast iron weld repairs fabrication of new components, (eg. impellers or portplates)
- Chrome boron coatings, polyceramic coatings, stainless steel lining
- Engineering consulting

EMTIVAC supplies a wide range of vacuum pump and centrifugal pump technologies to ensure that the right type of equipment is recommended for your individual application.

All our equipment is manufactured to accredited ISO 9000 quality standards and supported by EMTIVAC's 24 hour, 7day back up service.

A comprehensive product range



SVC Dry Screw Vacuum Pumps

SVC Dry Screw Vacuum Pumps for Chemical and Industrial Process applications. An efficient, cost effective, low maintenance, solution for aggressive applications, compliant with restrictive International environmental regulations. Standalone performance from 110 to 2,700 m³/hr with vacuum levels to 0.05 mbar absolute.



Pompetravaini Liquid Ring Vacuum Pumps

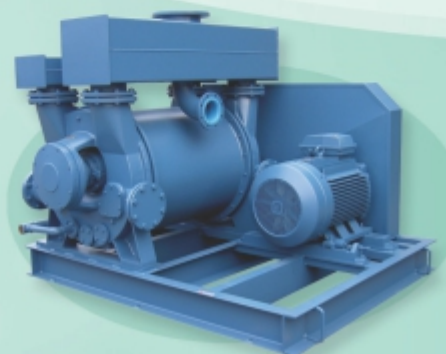
Manufactured in Italy, Pompetravaini are one of the world's leading manufacturers of single and two stage liquid ring vacuum pumps with suction capacities from 4 to 3,500 m³/hr capacity and vacuum levels to 10 mbar absolute. Pompetravaini have the flexibility to manufacture with special materials and seals to suit your unique requirements.



Emtivac N2BE Liquid Ring Vacuum Pumps

The EMTIVAC N2BE range of large capacity vacuum pumps is manufactured to our exacting standards to meet the requirements of the toughest applications in the mining, paper, sugar and power industries.

- Suction capacity from 1,800 to 70,000 m³/hr
- High efficiency variable discharge port
- Vacuum to 33 mbar Abs
- Available in cast iron, 304, 316 or Duplex SS



Liquid Ring Compressors

EMTIVAC is the number one source for Liquid Ring Compressors with a huge range to suit difficult process gas compression applications. From small low pressure Sewage Digester Gas applications to large capacity Coal Mine Methane Drainage systems to High Pressure API 681 compliant Flare Gas Recovery Compressors and Packages.

EMTIVAC has decades of experience in applying liquid ring compressors to the most difficult process gas compression applications, ranging from compressor selection to package design and manufacture.



Gases can include Hydrogen, Methane, VCM, Flare Gas, Butadiene, Chlorine, H₂S and Solvent Vapours. Wet, dirty, toxic and corrosive applications are our speciality.

The low temperature isothermal compression inside the liquid ring compressor makes it the ideal choice in many process applications.

Capacities range from 4 – 70,000 m³/hr with maximum pressure to 14 bar.



Engineered Systems



Gas Compressor Packages

Liquid Ring Gas Compressors used for safe compression of hazardous gases. In this case compressing sewage gas (methane) on a Sewage Digester for gas mixing.



Emtivac Oilsys Packages

Oil sealed Liquid Ring Vacuum Pump systems designed to provide the ruggedness of a liquid ring pump with zero water usage, low maintenance and the capability to handle hot applications whilst maintaining full efficiency.



Medical Suction Systems

Designed and built to Australian Standards, the EMTIVAC VSA branded Medical Suction Systems are available in a versatile arrangement to allow installation in any plant room.



Pre-Combustion Chamber Gas Compressor

A high pressure liquid ring gas compressor package used to supply pre-combustion chamber gas for a Waste to Energy system at a Sewage Treatment Plant. Emtivac can supply this type of compressor up to 11 bar for hazardous & non-hazardous applications.

Rotary Vane Vacuum Pumps & Compressors



Rotary Vane Vacuum Pumps Oil Lubricated

- Suction Capacity 2 to 915m³/h
- Vacuum to 0.1mbar Abs



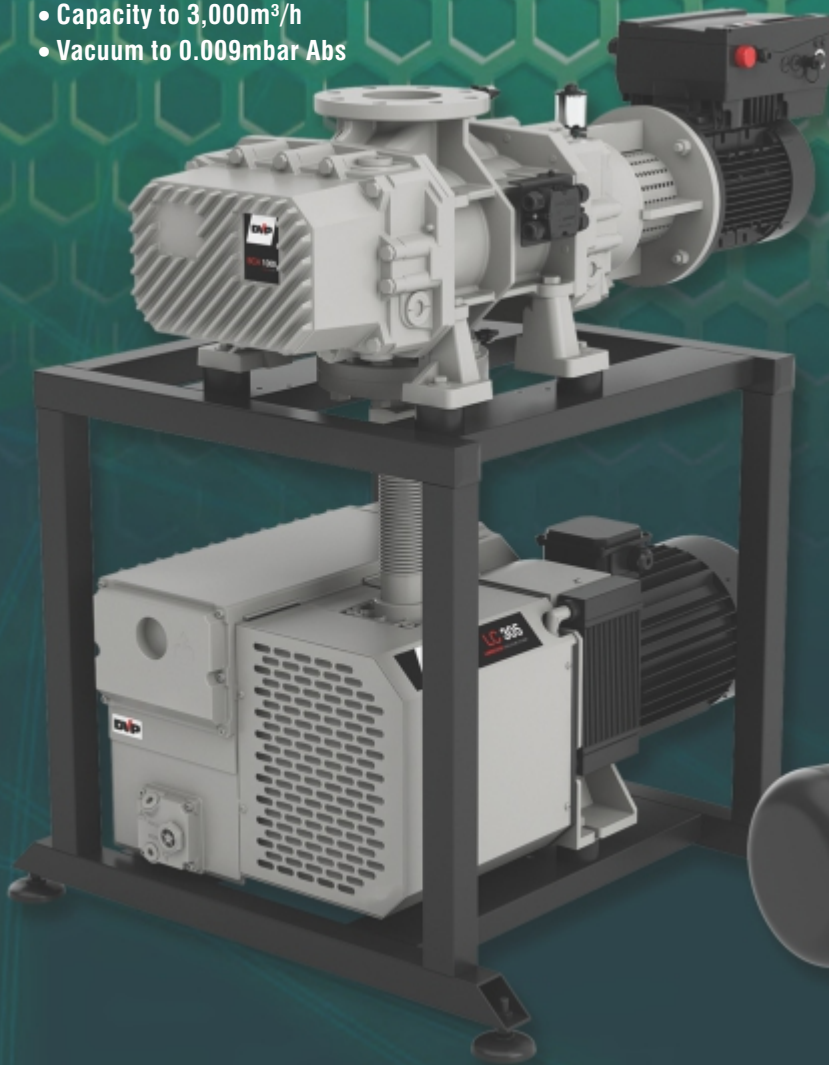
Dry Vane Vacuum Pumps and Compressors

- 100% Oil Free
- Capacity 5 to 140m³/h
- Vacuum to 150mbar Abs
- Pressure to 1.3bar



Multi-Stage Vacuum Systems

- Capacity to 3,000m³/h
- Vacuum to 0.009mbar Abs



Claw Pumps

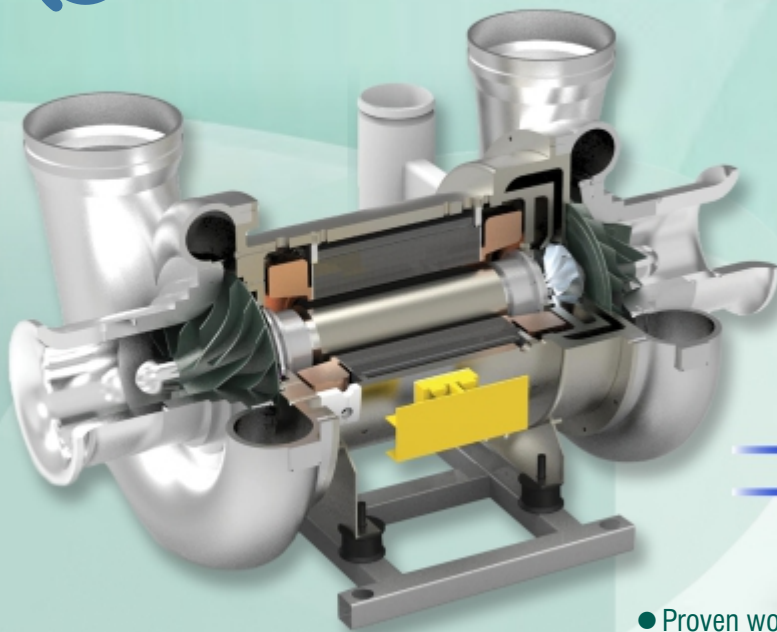
- Capacity to 315m³/h



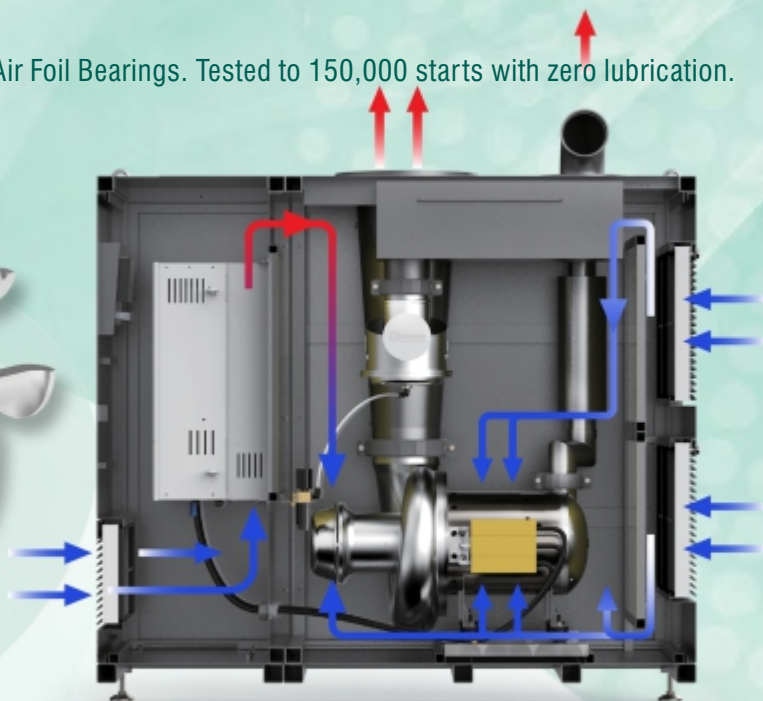
Energy Saving Turbo Blowers



Patented best technology Air Foil Bearings. Tested to 150,000 starts with zero lubrication.



Turbowin can lower motor temperature by at least 10 degrees compared to other brands through its dual cooling system. This patented technology is composed of motor and inverter with no separate cooling device such as an external cooling fan.



- Proven worldwide in waste water treatment plant aeration & many other applications
- Low cost of ownership compared to other technologies
- Massive cost savings over positive displacement lobe blowers
- Built in PLC & VSD control with option for wireless monitoring & control
- 100% oil free & low maintenance solution
- Reduced carbon footprint (Up to 57.5% less energy than traditional technologies)
- Built in Air Flow Meter



Huge Range of sizes & applications

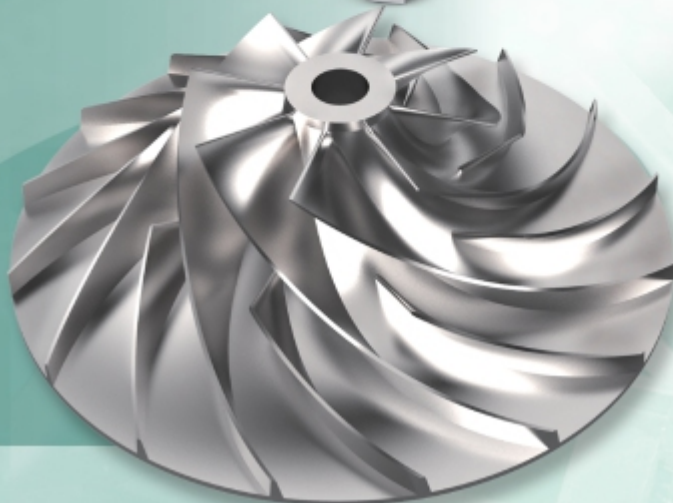
WL Series Turbo Blowers, 0.4 – 1.2 bar (15 – 900 kW)

WH Turbo Compressor, 1 – 8 bar (3 – 400 kW)

Supersonic Impeller

Turbowin's Supersonic Impeller is in-house designed and manufactured which can be made of aluminum alloy (AL7075-T651), stainless steel or titanium depending on customer's requirement.

Turbowin allows less than 0.001mm tolerance in machining and process protocol. The Supersonic Impeller is specially coated with hard anodizing on the surface providing excellent corrosion and chemical resistance.



Blower Systems and Solutions

FPZ Side Channel Blowers

FPZ, the worlds leading Side Channel Blower manufacturer, from Milan, Italy produce high quality blowers with an industry leading 3-year warranty for peace of mind.

EMTIVAC stocks a huge range in Melbourne to cover most eventualities. The range includes hazardous rated units with 'Ex' certification amongst a host of other special versions.

We produce custom solutions including the use of VSD's for variable performance requirements.

- Suction capacities from 10 to 2,500 m³/hr
- Pressure to 75kPa
- Vacuum to -50kPa



Air Knives

FPZ Air Knives are a low-pressure energy efficient design driven by an FPZ Blower and enable you to significantly reduce operational costs.



Baratti Lobe Blowers

Baratti blowers with patented high efficiency 'gamma twin lobe system' technology.

- Power consumption reduced by 10 - 20%
- Reduced discharge pulsation by 85%
- Lower noise level than traditional blowers
- Lower temperature rise than traditional blowers
- pressures up to 130kPa (with reinforced cooling version)
- Vacuum down to -70kPa
- Up to 6,000m³/h individual capacity
- Gas tight versions for hazardous applications
- Constant efficiency and operating temperature from 20-100% speed range



Hydropath Anti-Scaling Technology

Unique, patented and effective anti-scaling technology, that prevents limescale, flocculation, biofouling, struvite and more.

HydroFLOW units utilise a unique technology to transmit an electric field into the pipe and the water inside causing limescale to form in suspension, which is then washed away with the flow. This technology works on all types of pipe material without the need for any cutting or plumbing, making it ideal for retrofit.

The signal can travel throughout the plumbing network, both upstream and downstream, to protect the entire system.

Save Water

- Water saved via reduced backwash and increased cycles.

Improve Lifespan

- Equipment works more efficiently and lasts longer.

Optimise Chemicals

- Systems are protected with little or no need for harmful chemicals.

Reduce Downtime

- Downtime for cleaning is less frequent and cleaning becomes easier.

Improve Efficiency

- Heat transfer improves and pipelines become clearer, saving energy.

Laboratory Equipment

- High vacuum pumps
- Piston pumps
- Diaphragm pumps
- Vacuum chambers
- Vacuum gauges



MANN + HUMMEL Filtration

EMTIVAC are the Australian distributor for MANN-FILTER and are able to offer the complete range. The OE brand. Guaranteed to be first fit specification compliant. Vacuum pumps, compressors, automotive, industrial and off road.

We currently stock more than 1800 different part numbers in our warehouses in Sydney and Perth and every order received until 13:00 AEST will be shipped same day provided stock is on hand.



Centrifugal Pumps

Pompetravaini Centrifugal Pumps

- Made in Italy, built to ISO 2858 and ISO 5199 standards
- Available in various material selections
- Low NPSH self priming multistage pumps
- TCK and TBK. Single and multistage magnetic driver pumps



TCHM

- Capacity 140 ltr/sec (500 m³/h)
- Pressure max 10 Bar
- Closed/Vortex impellers



TCN

- Capacity 470 ltr/sec (1700 m³/h)
- Pressure 6 Bar



TCH

- Capacity 554 ltr/sec (2000 m³/h)
- Pressure max 15 Bar
- Closed/Open/Vortex impellers



TBA-TMH

- Low NPSH, Gas handling & Self priming
- Capacity 95 ltr/sec (350 m³/h)
- Pressure max 64 Bar



TCHV

- Capacity 140 ltr/sec (500 m³/h)
- Pressure max 10 Bar
- Closed/Open/Vortex impellers
- Pump length 3m



TCD

Hot Oil Pump

- Capacity 95 ltr/sec (350 m³/h)
- Pressure max 10 Bar
- Liquid Temp 320°C

FLO-MASTER Pumps Australia

- Split case pumps up to 400mm discharge
- Available in either single or two stage
- Horizontal and vertical execution



FM

- Capacity 833 ltr/sec (3000 m³/h)
- Pressure 20 to 36 Bar

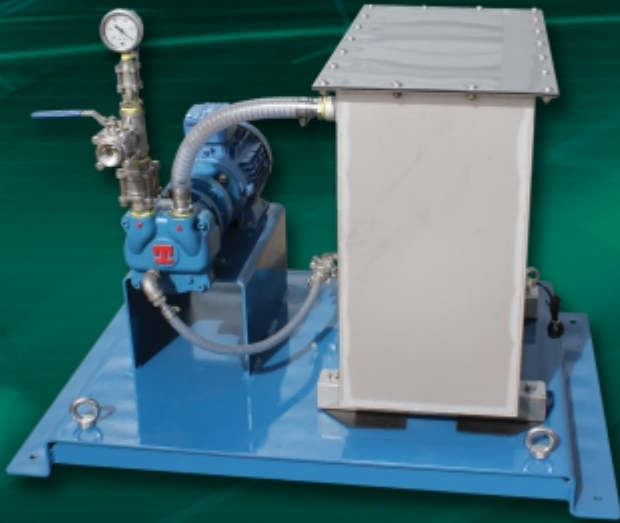


ESL

- Single Stage End Suction Back Pull-out Pumps
- 833 ltr/sec (3,000m³/h)
- Pressure 18 Bar

Vacuum Priming Systems

The EMTIVAC priming system consists of two major sections, the remote mounted Priming Column and the Vacuum Pump set. A variety of arrangements and materials are available, designed to suit your specifications and budget.



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