

Ebsray®

Industrial Liquid- Transfer Solutions

EBSRAY®
Product Portfolio



Where Innovation Flows


a **DOVER** company

ebsraypumps.com/au

Ebsray® is an acknowledged leader in the global Pump Industry offering products of unparalleled quality, efficiency, innovation and reliability. Ebsray commenced business as a precision engineering company in the early 1930s (*as VR Ebsary & Co.*), then changing in 1938 to Ebsray Pumps Pty Ltd to pump design and manufacture. Since that time, the commitment to the application, design, development, manufacture and supply of specialist pumps has placed Ebsray in the pump industry's front line.

Our Mission – To be the premier engineered solutions provider for the movement of liquids in the marketplace

Our Values – Safety, Quality, Schedule, Cost, Community

Our Vision – To deliver exceptional value by providing to our customers:

- Optimized productivity and profitability
- Improved safety and environmental protection
- A high level of responsiveness
- Commitment to our promises



LIQUID TRANSFER EQUIPMENT FOR INDUSTRY

Ebsray is a Global Leader in the design and manufacturing of Regenerative Turbine Pumps and a key member of Blackmer®, a part of Dover Corporation's Pump Solutions Group®.

The Ebsray Team strategy is to be the Number One supplier of liquid transfer and processing to the Australian and New Zealand markets because of:

- Knowledgeable and professional sales and support teams
- Local manufacturing to meet customer needs
- Representing Dover's Pump Solution Group®'s leading global brands

Ebsray Pumps has its primary focus on the manufacture of pumps and pumping equipment – predominantly for process and industrial niche markets.

Specializing in process-pump applications as diverse as petroleum liquids such as aviation fuels, bitumen, grease, LPG, lube oils, additives and solvents. In the Chemical Industry, Ebsray Pumps can handle aggressive, toxic, viscous and flammable liquids at high and/or low temperatures. Military, Mining, Food & Beverage, Municipal & Utility Services, Sugar, and Paint Industries are a few of the industries served.



SYDNEY NSW, AUSTRALIA
EBSRAY PUMPS PTY. LIMITED

GEAR PUMPS INTERNAL GEAR & HELICAL GEAR

General Purpose application pumps utilising the renowned "Internal Gear" principle – with only two basic moving parts. A complete range of highly efficient pumps that offer excellent self-priming capabilities, quiet operation, smooth continuous flow, low shear, reversible flow, minimal maintenance and simplicity.



MD & HD SERIES

Fields of Application

Universal industrial pumps for handling the widest range of liquids for chemical, oil, food, ink, paint, paper, petrochemical, sugar, pharmaceutical and many other industries.

Constructional Features

- Mechanical seal/hydraulic packing
- Accurate axial rotor control and adjustment
- Heating/cooling jackets available
- Heavy-duty bearings
- Integral relief valve – *optional*
- Heavy-duty design
- Variety of porting configurations

Materials of Construction

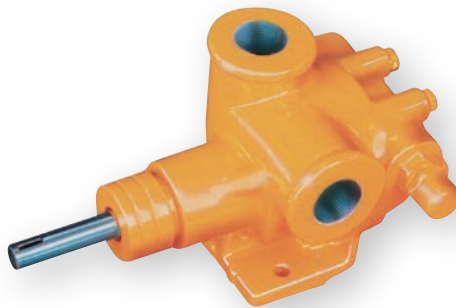
- **Casing** – cast iron, ductile iron, steel, stainless steel
- **Rotors** – cast iron, ductile iron, steel, stainless steel, synthetic
- **Shaft** – high-tensile alloy steel, stainless steel
- Corrosion/abrasion resistant and special materials to specification

Range of Performance – HD

- Flows to 5,000 L/min.
- Diff. Pressures to 2,000 kPa
- Viscosities to 500,000 cSt
- Temperatures from -40°C to 350°C

Range of Performance – MD

- Flows to 1,200 L/min.
- Diff. Pressures to 1,400 kPa
- Viscosities to 500,000 cSt
- Temperatures from -40°C to 350°C



Z SERIES

Fields of Application

Low-flow, general purpose industrial applications. Ideally suited for fuel oil transfer and injection processes – particularly OEM uses.

Constructional Features

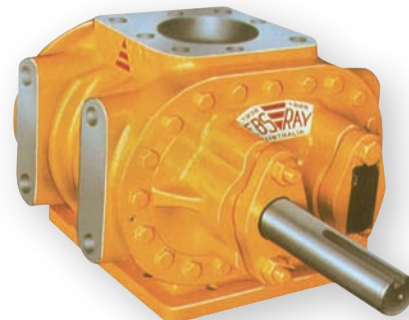
- Mechanical seal/hydraulic packing
- Integral Pressure Relief Valve – *optional*
- Direct coupling to 4–6–8 pole motors
- High efficiency
- Robust, lightweight and compact

Materials of Construction

- **Casing** – cast iron
- **Rotors** – hardened alloy steel, ductile iron
- **Shaft** – high-tensile hardened alloy steel

Range of Performance

- Flows to 24 L/min.
- Diff. Pressures to 2,000 kPa
- Viscosities to 10,000 cSt
- Temperatures to 200°C



G SERIES

Fields of Application

A robust design particularly suitable for pumping bitumen/asphalt in the toughest of environments, i.e. bitumen transfer, road sprayers, tanker duties.

Constructional Features

- Internal (submersible) or external tank mounting
- Reversible rotation
- Helical-cut gears-hardened
- Extra heavy-duty build
- Simplicity of design

Materials of Construction

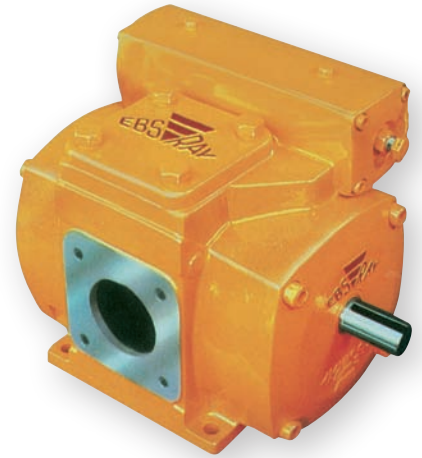
- **Casing** – cast iron
- **Rotors** – cast iron
- **Shaft** – extra-high-tensile alloy steel
- Special materials to specification

Range of Performance

- Flows to 1,250 L/min.
- Diff. Pressures to 2,000 kPa
- Viscosities to 500,000 cSt
- Temperatures to 350°C

SLIDING VANE PUMPS: V SERIES

Highly efficient self-priming Positive Displacement Sliding Vane Pumps, generally for low to medium viscosity lubricating and non-lubricating liquids. Designed and precision built to optimise all the advantages of the Sliding Vane Principle. Automatic compensation for vane wear assures the pump will maintain its superior priming characteristics and line-stripping ability over a long service life. Smooth output flow ensures quiet operation within the NPSH range. The pumps can be direct-coupled to synchronous-speed motors.



Fields of Application

Road-tanker mounting or fixed installation for loading and unloading of petroleum products such as: petrol, distillate, aviation fuels, lubricating oils, LPG, chemicals, solvents and edible oils.

Constructional Features

- Replaceable wearing components
- Positive axial location of rotor
- Balanced mechanical seals, shaft lip seals
- Multi-porting configurations
- Double-ended shaft (*some models*)
- Pressure Relief Valve integral, adjustable
- Lightweight or standard
- Compact and robust

Materials of Construction

- **Casing** – cast iron, ductile iron, aluminium, steel
- **Rotors** – cast iron, ductile iron
- **Vanes** – synthetic, univane
- **Liner** – cast-iron toughened
- **Shaft** – high-tensile alloy steel, stainless steel
- Special materials to specification

Range of Performance

- Flows to 3,570 L/min.
- Diff. Pressures to 1,400 kPa
- Viscosities to 10,000 cSt
- Temperatures to 100°C

REGENERATIVE TURBINE PUMPS: R / RB / RC / RX SERIES

Fields of Application

Specially designed for low-flow, high-pressure duties on low-viscosity liquids such as LPG, propane, butane, DME, CO₂, refrigerants, anhydrous-ammonia, boiler feed etc. Exceptional performance and reliability even under extremely low NPSH operating conditions combined with the ability to handle entrained vapours without undue loss of efficiency or internal damage. Underground, aboveground and submersible LPG pumping performance is exceptional.

Constructional Features (*Not applicable to all models*)

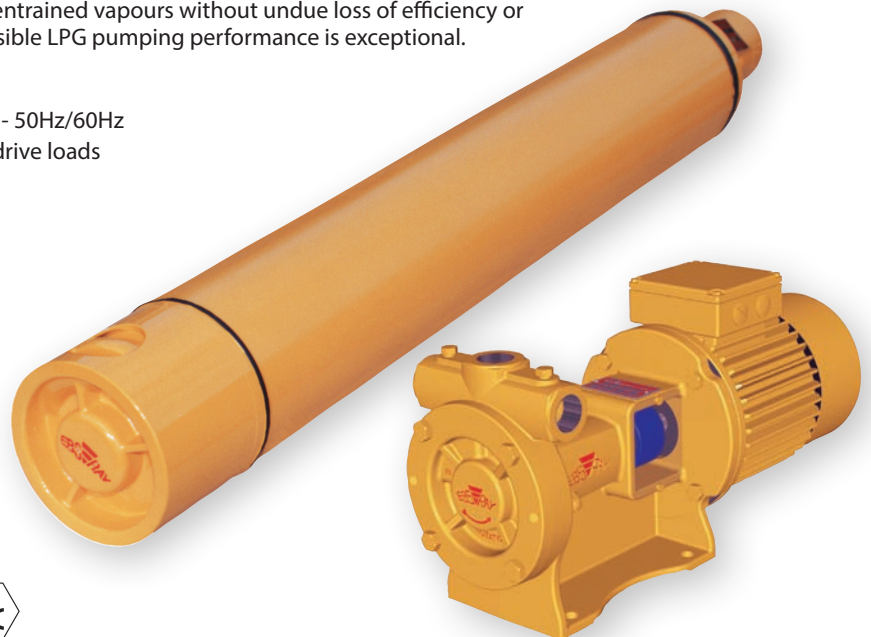
- Direct coupling to synchronous-speed electric motors - 50Hz/60Hz
- Heavy-duty sealed-for-life bearings – can accept belt-drive loads
- Self-venting robust casing design
- Balanced mechanical seal – simple, reliable
- Throttle bush as standard – added safety feature
- Extremely quiet operation

Materials of Construction

- **Casing** – ductile iron, steel
- **Impeller** – bronze, ductile iron
- **Shaft** – high-tensile alloy steel
- Special materials to specification

Range of Performance (*Not Applicable to all models*)

- Flows to 180 L/min.
- Diff. Pressures to 1,500 kPa
- Viscosities to 50 cSt
- Temperatures from -40°C to 100°C



LOBE PUMPS: L & T SERIES

Fields of Application

All viscous products in chemical, oil, paint, resin, petrochemical and sugar industries.

Constructional Features

- Mechanical seal/hydraulic packing
- Heating/cooling jackets
- Reversible rotation and flow
- Integral relief valve – optional
- Heavy-duty design

Materials of Construction

- **Casing** – cast iron, steel
- **Rotors** – cast iron, ductile iron
- **Shaft** – high-tensile alloy steel, stainless steel
- Special materials to specification

Range of Performance

- Flows to 5,000 L/min.
- Diff. Pressures to 2,000 kPa
- Viscosities to 700,000 cSt
- Temperatures from -40°C to 350°C



BYPASS VALVES: RV SERIES

In-line design Bypass/Pressure Relief Valves for a wide variety of industrial services. Adjustable differential pressure is attained for accurate and repeatable performance in return-to-tank or bypass systems. This enables full pump flow while maintaining controlled preset maximum pressure. Suitable for a wide range of services from LPG to bitumen. Manufactured to Australian Standards and Codes.

Constructional Features

- 90° flanged porting
- Screwed ports (certain models)
- Adjustable pressure setting within spring range
- Low-pressure rise

Materials of Construction

- **Casing** – cast iron, ductile iron, steel
- Special materials to specification

Range of Performance

- Flows to 2,400 L/min.
- Diff. Pressures to 2,000 kPa
- Temperatures from -40°C to 350°C



PFM SYSTEM EQUIPMENT

(PRESSURE AND FLOW MODULATING)

For applications in pumping systems that demand accurate and repeatable Constant Pressure Control (CPC) or Flow Modulation/Control irrespective of changes in product viscosity.

Constructional Features

- In-line or Integral (pump-mounted) types available
- Simple design, instantaneous response, smooth vibration-free operation
- Pneumatic or hydraulic operation
- Manual, automatic or PLC controlled
- Local or remote control to suit application

Materials of Construction

- **Casing** – ductile iron, cast steel
- **Internals** – cast iron, steel
- **Elastomers** – nitrile, Viton®
- **Piston Seals** – PTFE

Range of Performance

- Flows to 3,000 L/min.
- Viscosities to 500,000 cSt
- Pressures to 1,850 kPa
- Temperatures to 150°C



STRAINERS: F SERIES

A range of extremely low-pressure drop in-line suction strainers for use in a wide variety of industrial applications in the Petroleum Industry. For pump protection in road/rail tanker unloading/loading of petrol, distillate, heating oil, bitumen, fuel oil, etc.

Constructional Features

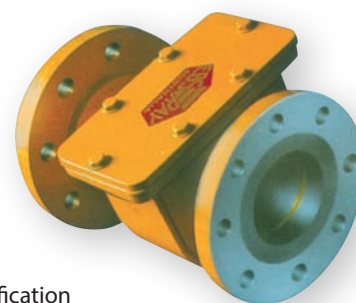
- Fabricated steel for safety
- Simplicity of design
- Ease of maintenance
- Flanged connections
- Drain-connection fitted

Materials of Construction

- **Casing** – steel
- **Element** – steel
- Special materials to specification

Range of Performance

- Flows to 5,400 L/min.
- Temperatures to 350°C





BLACKMER: SLIDING VANE PUMPS

Many of the chemicals used in industrial-process applications are difficult to handle, often toxic or corrosive in nature, difficult to seal and expensive to purchase. Blackmer's sliding vane pumps are available in compatible materials with shaft sealing and seal-less options that make them the products of choice for many process applications.

Fields of Application

- Acids
- General chemicals
- CO₂
- Paints, inks and coatings
- Solvents
- Refrigerants
- Soaps and detergents
- Diesel Exhaust Fluid (DEF)

Features & Benefits

- Designed for specific process and transfer applications
- Highly efficient sliding vane technology
- Self-adjusting vanes sustain performance
- Self-priming, line-stripping and dry-run capabilities
- Ideal for thin or non-lubricating, viscous, abrasive and shear-sensitive fluids
- Seal-less and mechanically sealed designs available
- Reduced energy consumption
- Reduced costs
- Sustained performance
- Consistent flow
- Handles thin or non-lubricating, viscous, abrasive and shear-sensitive fluids
- High volumetric efficiency

Technical Data

- Cast-iron, ductile-iron and stainless-steel models available
- Sizes: 19mm (3/4 in.) to 254mm (10 in.)
- Max. working pressures: 17.2 bar (250 psi)
- Max. temperatures: 266°C (511°F)
- Viscosities to >21,000 cSt (100,000 SSU)
- Motor-speed and gear-reducer drives

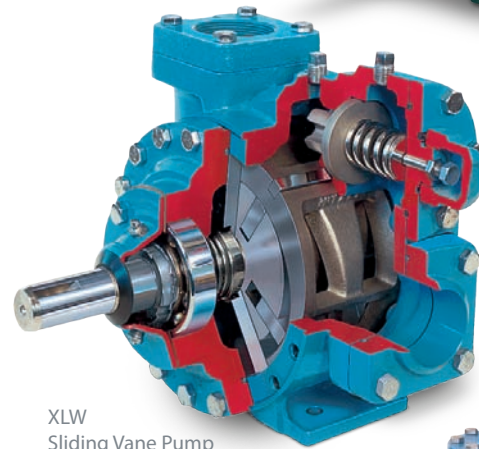
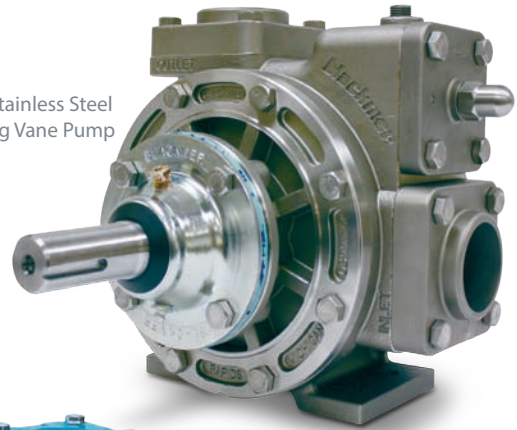
Performance Data

- Max. flow: 8,404 L/min (2,220 gpm)
- Max. differential pressure: 13.8 bar (200 psi)

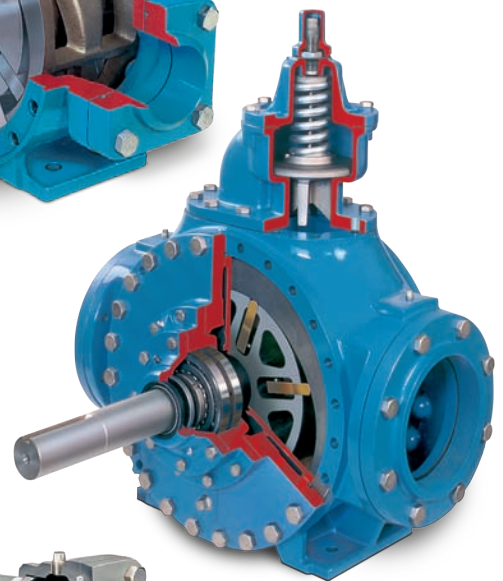
Certifications & Associations:



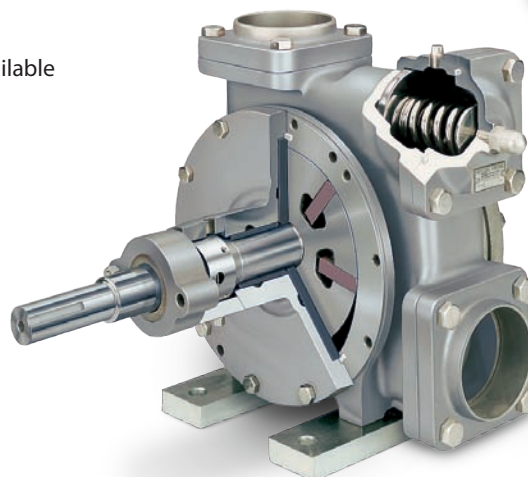
STX Stainless Steel Sliding Vane Pump



XLW Sliding Vane Pump



HXL Sliding Vane Pump



SNP Stainless Steel Sliding Vane Pump



maag

industrial pumps

ENVIROGEAR: SEAM-LESS GEAR PUMPS

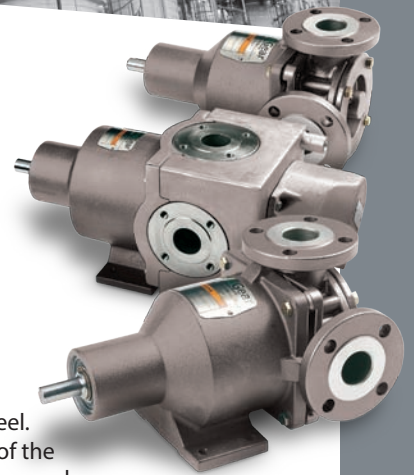
The revolutionary seal-less design effectively eliminates leaks and mechanical wear, helping to increase personal and environmental safety.

Fields of Application

- Adhesives
- Biofuels
- Chemicals
- Food processing
- Lube oil and grease
- Paint and coatings
- Petrochemical
- Petroleum additives
- Polyurethane
- Printing
- Resins
- Soaps

Constructional Features

Larger diameter, harder materials provide more rigid support for less shaft deflection and bearing wear. Materials are 4140 carbon steel or 17-4 PH stainless steel. Large, long radial bushings support the entire length of the rotating element, which spreads out the hydraulic forces and allows the bushings to last longer.

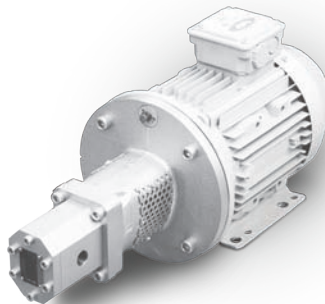


G SERIES: INTERNAL GEAR PUMPS

G Series pumps are excellent for transferring high-viscosity fluids and are designed with only two moving parts. This pump operates equally well in both directions and provides a positive, non-pulsating flow.

Fields of Application

- Chemical processing
- Soaps and detergents
- Paints, coatings and adhesives
- Resins
- Polyurethane foam
- Food and beverage
- Pharmaceuticals
- Textile manufacturing
- Petroleum refining/distribution
- Construction
- Automotive
- Pulp and paper
- Mining
- Water/wastewater treatment



H SERIES: EXTERNAL GEAR PUMPS

A very robust external gear pump in which the pumped medium lubricates the plain bearings, thus generating less wear and noise even at speeds of up to 3,000 rpm.

Fields of Application

- Lube oil and grease
- Waxes and paraffins
- Thermal, mineral, sealing, hydraulic, hardening, cutting, cooling and processing oils

Features/Benefits

- Robust bearing-in-the-housing design
- Floating-plain bearings
- High-precision mechanical parts
- High stiffness due to the single-bar gear design
- Helical gears for low pulsation
- High speeds with low noise
- Extended lifetime
- Extra-wide gears for a high power-density pump solution
- Compact design



S SERIES: TWIN SCREW PUMPS

S Series pumps are ideally suited for high-pressure oil transfer, but also offer many configurations for non-lubricating, LPG, sulfur and solid-laden applications.

Fields of Application

- Chemicals/petrochemicals
- Soaps and detergents
- Paints, coatings and adhesives
- Resins
- Polyurethane foam
- Food and beverage
- Pharmaceuticals
- Textile manufacturing
- Petroleum refining/distribution
- Terminals/shipping
- Bilge and ballast
- Fire-suppression
- Bulk transfer
- Oil and gas



BITUMEN SPRAYING EQUIPMENT: SB SERIES SPRAYBARS

Range of Performance / Size

- Flows to 1,500 L/min.
- Lengths to 8 m (78 taps)

Fields of Application

Ebsray manufactures a range of engineered Spraybars (previously called "Continental Spraybars") for all grades of bitumen, cutback, emulsion, etc. that feature internal product recirculation operation for truck or trailer mounting in the toughest road-spraying environments. Spraybars are used in conjunction with Ebsray's range of purpose-built heavy-duty bitumen pumps – either internally tankmounted or externally on tanker.

Constructional/Operational Features

- Recirculation system for liquid temperature maintenance eliminates tap blockages
- Environmental requirements met by eliminating the need to "dump" product during cleaning operations – no blowing required
- Cleaning procedures greatly simplified
- Modular construction to suit a variety of configurations, bar lengths, capacities, etc.
- Zero-leak precision taps incorporating spindle O-rings for positive sealing, eliminating tap lock-up, and allowing low-torque actuation
- Accurate spraybar alignment with machined flanges and extension connections
- Custom design (if required) to suit unique installations and applications

Ebsray®

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Where Innovation Flows



Authorized PSG Partner: