

The Verdermag Global Metallic Series

A combination of the latest materials and engineering practices, coupled with Verder's 50 years' experience in manufacturing synchronous magnet-driven seal-less pumps, has created a flexible range of pumps ideally suited to modern requirements. Tried and trusted designs have been updated to allow modular construction, with many interchangeable components. The pumps can be assembled from stock components to give quick response times, whilst spares requirements are kept to an absolute minimum.



Working principle

The Global pump utilises the differential pressure generated by the pumping action to create a flow around the bearings and magnets. The pumped liquid acts as a cooling medium to dissipate the heat generated from eddy currents as the magnets pass around the containment shell. It is also used to lubricate the hydrodynamic bearing sets, with flow from the front bearing passing through the balance holes of the impeller and flow around the rear bearing re-entering the low pressure suction area of the volute.

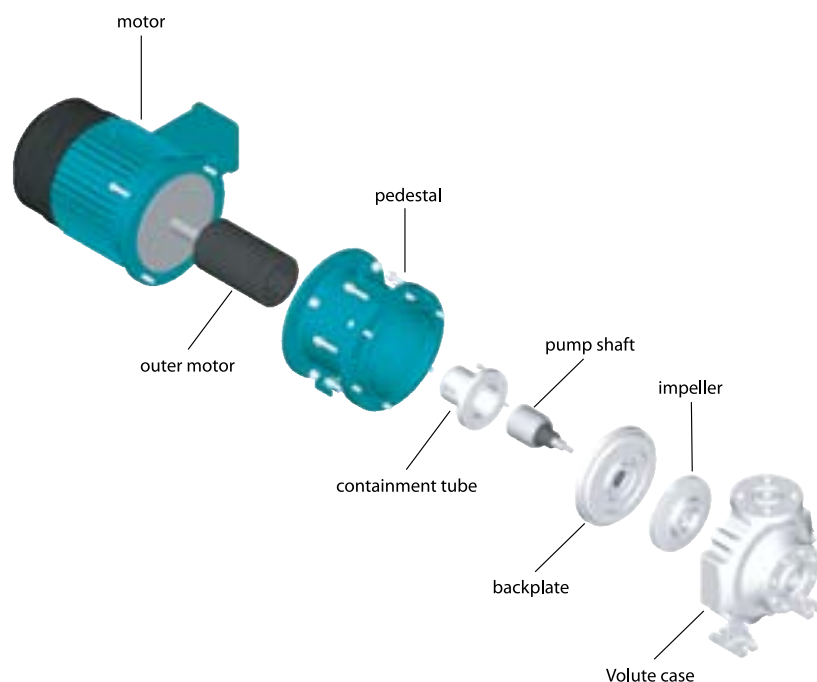
Engineered products

Specialist in-house engineering capabilities allow Global to offer a wide range of made to order products, covering extended flow ranges, temperatures and pumps required for use in high system pressure applications.

Application areas

- Chemical processing
- Tank farms
- Re-circulation duties
- Thermal oil heat transfer
- Sampling systems
- Pharmaceuticals
- Speciality chemicals
- Oil and offshore

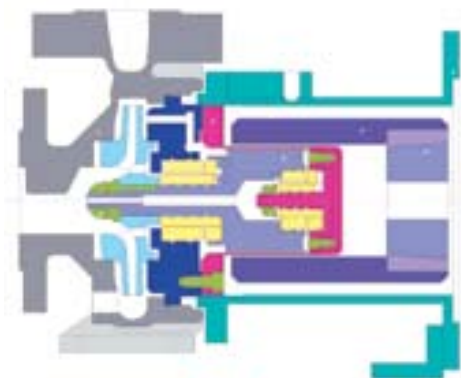
Pump construction





Features and benefits

- 316 Stainless steel construction gives a wide range of chemical compatibility.
- Hastelloy C containment shell reduces the eddy current heat generated and improves the unit's overall efficiency.
- Modular construction allows quick delivery times with some models available from stock.
- Four bearing sizes cover the entire range, reducing the number of spares required to service and maintain a family of pumps.
- Silicon carbide bearings offer long operational service, with low maintenance requirement and very low lifetime cost.
- Simple design leads to effective pumping operation and easy maintenance.
- Samarium Cobalt magnets are capable of operation above the design temperature limits of the pump avoiding risk of magnet break away.
- In house engineering capability allows for specialist pumps to be developed for particular applications.
- All models have quick fit 'cartridge' options, ensuring that critical applications can be returned to service with minimum down time.



Models

■ Style 1

This range of pumps is suitable for lower duties than covered by the ISO 2858 (MII) pumps. They offer a low-cost option for low flow and head duties and are available from stock.



■ MII

Range of ISO 2858 standard pumps, offering a medium to high flow and head duties. Many of the medium flow and head duty pumps are available to assemble from stock components.



■ HSP

The HSP range of pumps are flameproof making them ideal for the Petrochemical Industry. They are also excel in areas where leaks are unacceptable and are particularly effective in applications where chemicals are pumped at high pressures. Samples can be tapped off the main line and pumped through a densimeter /sample extractor.



	Style 1	MII	HSP
Flow range	1-25 m ³ /hr	5-200 m ³ /hr	1-70m ³ /hr
Head	up to 40 m	up to 100 m	up to 100 m
Standard Temp range	-40 to 200°C**	-40 to 200°C**	-40 to 200°C**
Operating pressure	16 bar**	16 bar**	200 bar
Power supply	4 kW	45 kW	11 kW

* Engineered products available outside these ranges