

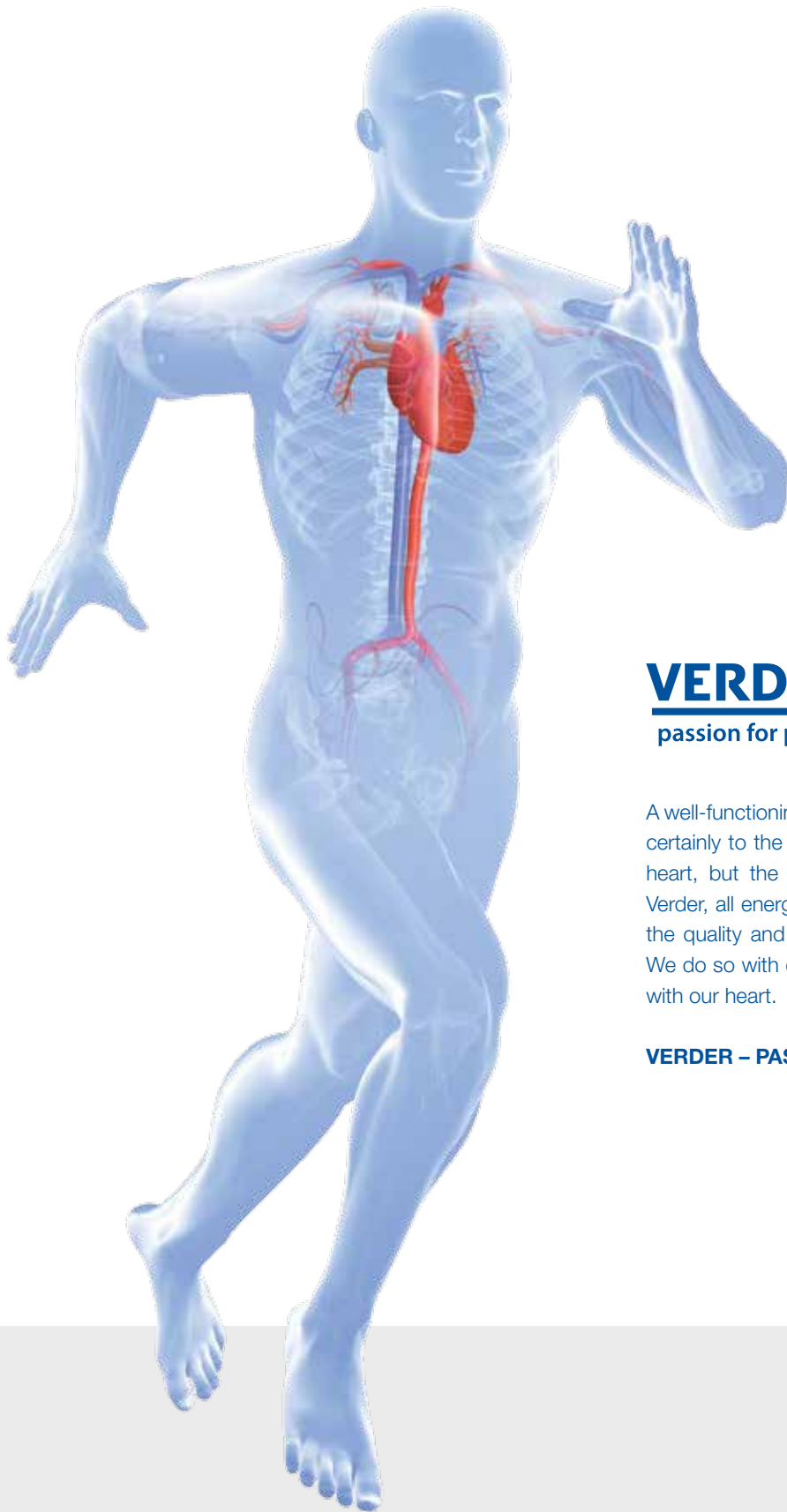
# VERDERFLEX **VANTAGE 5000**

For the Biotech and Pharmaceutical Market



## Benefits

- Simple
- Safe
- Secure



## **VERDER**

passion for pumps

A well-functioning pump helps you succeed. That applies certainly to the most important pump in life, the human heart, but the same goes for pumps in business. At Verder, all energy and attention is focused on improving the quality and performance of our pump and service. We do so with energy, dedication and most importantly, with our heart.

**VERDER – PASSION FOR PUMPS**



## THE VERDER GROUP

- 1 Company
- 27 Countries
- 55+ Years of expertise
- Global network
- Local distributors
- In-house service & maintenance
- A solution for every application

*The Verder group is a family owned business formed over 55 years ago in the Netherlands; the group consists of a worldwide network of production and distribution companies. Group companies are involved in the development and distribution of industrial pumps, pumping systems, high-tech equipment for quality control, research and development into solid material (solids sample preparation and analytical technologies). The Verder Group employs over 1600 people and has annual sales of \$ 450 million (€ 380 million).*

Our US operation is headquartered in Macon, Georgia where Sales, Marketing, Engineering and Warehousing are located.

## Verderflex peristaltic pumps

*Verderflex is a core Verder group product, solving pumping problems in such varied industries as: chemical manufacturing, food production, environmental remediation, water treatment, biotech, pharmaceutical and general manufacturing, while also developing custom OEM solutions.*

Verderflex peristaltic pumps are manufactured in the EU within ISO 9001, ISO 14001 and ISO 18001 accredited facilities, and the products have a range of food and similar industry specific certifications.

Verderflex peristaltic hose and tube pumps are the ideal solution for demanding environments as well as "difficult to pump" applications. These range from small OEM pump modules and precision metering tube pumps for shear sensitive cell cultures and broths to the world's largest high pressure hose pumps for dense, solids laden slurries and highly abrasive, viscous or corrosive liquids.

# VERDERFLEX

## VANTAGE 5000

### Special features



✓ **State of the art**  
High definition 4½" LCD Touch Screen

✓ **Dosing & batching**  
Standard programs

✓ **Wide range of control options**

- Start the pump using switches or the touch screen
- Remotely control speed by 0-10 VDC, 4-20 mA, RS485, Modbus® & Profibus®

✓ **Leak detection**  
Standard on every pump

✓ **Standard tube sizes**

- 1/8" (1.6 mm) & 3/32" (2.4 mm) wall thickness
- Color Coded Rotors eliminate errors

✓ **Simple Programming**  
Icon based programming on touch screen



## What are **your benefits** using a Verderflex Vantage 5000 pump?

Verderflex's precision pumps are a safe choice for your process.  
The three core elements of every Verderflex pump are:

### Simple

---

- *Icon based programming on touch screen*
- *Direct entry of flow or dose*
- *Control pumps using 4 to 20 mA, RS 485, 0-10 VDC, Profibus or even another Vantage 5000*

### Safe

---

- *Real time clock time stamps events*
- *Back up the pump using USB port*
- *Import jobs to 2nd pumps to eliminate intra-pump variations*

### Secure

---

- *Download job records*
- *Download pump operational history*
- *Download pump settings from on board storage*



## VERDERFLEX **VANTAGE 5000**

Powerful record keeping and control options



### 1. Record keeping

- Pump's onboard memory stores time stamped activity records
- Download via USB for storage & import for further analysis in Excel for PAT

### 2. Compliant

Vantage 5000 meets US, EU and Canadian safety standards

### 3. Secure

Import, Export & Backup pump settings using USB v2 Socket

### 4. Safe

Grounding Point



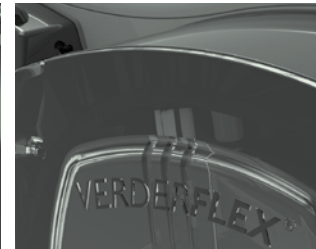


### No moving parts are in the liquids stream

- Aseptic pumping
- Eliminates the risk of cross contamination between product and pump
- Pump is easily and completely cleanable without disassembly - tubes can be sterilized by steam (SIP) or chemicals/detergents (CIP).
- Continuous tubing pumping up to 30 PSI (2 Bar)  
or: Self contained Vantage 5000 tube elements with Quick Release Hose Barb and Tri Clamp connections.

### Easy to control, precise dosing

- No internal backflow (or slip) and deliver accurate doses
- High resolution 4000:1 turndown drive provides precise dosing control
- Direct entry of flow or dose values, or pumps can be controlled using 4 to 20 mA, 0-10 VDC RS 485, Profibus or even another Vantage 5000



### 5. Analog feedback & control

- Remotely control pump operation & speed with external signals
- Outputs give real-time operational confirmation or
- 4 to 20mA Input & Outputs  
7 x Dry Contact Inputs & 4 x Dry Contact Outputs

### 6. Communicate digitally

- Interface with the pump via computers or PLCs
- Modbus & RS 485 Control via M12 Port
- PROFIBUS via dedicated connector



# How **Vantage 5000** in biotech applications

## Tubing

*A quality tube is at the heart of a peristaltic pump.*

Verder produces a wide range of standard sized 30 PSI (2 Bar)

Rated materials including:

- Verderprene – a general purpose long-life tube and
- Platinum Cured Silicone – low residual Food Grade & USP rated tube

**The tube is the only part of the pump that comes into contact with the media**

Each roll of tube or tube assembly is supplied with:

- Batch specific Certificate of Conformity
- Batch specific bar coded label
- Ultra violet light protected packaging eliminating risk of tube degradation

For Platinum Cured Silicone a comprehensive material validation package is available.



Wall thickness mm/"	Tube Internal Diameter (mm)	Tube Internal Diameter (")	Part no. (15m/50' Roll)
	1.6	1/16	460.0006.15
1.6 mm	3.2	1/8	460.0007.15
	4.0	5/32	460.0051.15
(1/8")	4.8	3/16	460.0008.15
	6.4	1/4	460.0009.15
	8.0	5/16	460.0010.15
	3.2	1/8	460.0052.15
2.4 mm	4.8	3/16	460.0053.15
	6.4	1/4	460.0032.15
(3/32")	8.0	5/16	460.0705.15
	9.6	3/8	460.1034.15





# pumps can help ...

## Gentle pumping action, maintain cell structures

- Ideal for shear sensitive products, "live" broths and cell cultures
- No product damage
- Shear rate  $<150 \text{ s}^{-1}$

## Dry running

- No pump damage if the media source runs out, or the liquid flow is interrupted
- The tube is compressed between the pump head and the stainless steel rollers that run on their integral bearings and rollers with integral bearings

## Reversible rotation

- The pump can be used to empty lines or clear blockages





## OUR **PRODUCTION** FACILITY

From our design office to your process



*Verder offers pumps that bring working solutions to customers such as making your development processes smoother, safer and more reliable. Verder pumps are synonymous with quality, longevity and reliability, operating across the globe in some of the most challenging environments and demanding of projects. The quality and build of Verder pumps is a result of over 55 years of designing and manufacturing pumps and gaining the knowledge and understanding of industrial and Scientific processes to continuously refine and improve our offering.*

In-house pump production allows us to be more responsive to customer demand, assures the shortest lead times and maintains greater control over quality and costs.



### **Verder – United Kingdom**

Verder's British peristaltic pump manufacturing facility is responsible for the design, development, production and testing of such state of the art pumps as the Vantage 5000.

All Vantage 5000 pumps are assembled at Castleford, UK manufacturing facility. The factory is fully accredited to ISO 9001, ISO 14001 and ISO 18001 quality, environmental & safety standards.

### **Verder Inc**

For the US market, pumps are stocked locally in our Macon, GA facility. Macon also provides local technical support and servicing.



## Contact Verder

*If you would like to know more about Verderflex peristaltic pumps then please visit our website [www.verderliquids.com](http://www.verderliquids.com) where you will find the full breakdown of our pump range as well as application stories, latest news and technical datasheets and more.*

### **VERDER, INC**

312 Corporate Parkway, Suite 101

Macon, GA 31210

USA

Tel: 877-476-3569

Email: [sales@verder-us.com](mailto:sales@verder-us.com)

**Verderflex**<sup>®</sup> is a registered trademark of the Verder Group.



If you want to know more about Verder, don't hesitate to contact us: [info@verder-us.com](mailto:info@verder-us.com) or visit our website [www.verderliquids.com](http://www.verderliquids.com)



**VERDER, INC**  
312 Corporate Parkway, Suite 101  
Macon, GA 31210

**WEB** [www.verder-us.com](http://www.verder-us.com)  
**MAIL** [sales@verder-us.com](mailto:sales@verder-us.com)  
**TEL** 877-476-3569

AUSTRIA / BELGIUM / BULGARIA / CHINA / CROATIA / CZECH REPUBLIC  
DENMARK / FRANCE / GERMANY / HUNGARY / INDIA / ITALY / JAPAN / THE  
NETHERLANDS / POLAND / ROMANIA / SERBIA / SLOVAKIA / SLOVENIA / SOUTH  
AFRICA / SOUTH KOREA / SWITZERLAND / THAILAND / UNITED KINGDOM / USA