



## **VULKAN EXTRUSION PUMPS**

# THE POWER SERIES FOR PUMPING ... ... LOW TO HIGH-VISCOSITY MATERIALS



## VULKAN – the tried and tested WIWA extrusion pumps for transfer, metering and application of adhesives, insulating materials and sealants

The WIWA VULKAN range of shovel-type piston pumps covers a total of 19 pumps with outputs and pressure ratios in five performance classes and is thus one of the most extensive series worldwide.

The pumps have an output per double stroke of up to 680 ccm and pressure ratios from 13:1 to 94:1.

The pumps are complemented by a comprehensive range of accessories, including for example floor mounts, single-post and twin-post ram units in various sizes, follow plates and follow covers in numerous sizes and versions as well as heating elements and other accessory kits. With these accessories, WIWA is able to implement a wide range of special solutions to meet a wide range of customer requirements.

#### **APPLICATION AREAS**

Automobile industry Machine manufacturer Railcar manufacture Aircraft industry Marine and offshore industry Wind tower production Wood and furniture industry Printing Window and door manufacture Manufacture of silicon products Chemical industry Processing adhesives and polyurethanes Oil and grease transfer systems Application of undercoating Spray and coating technology Paint manufacture Transfer of liquid raw materials Cartridge filling systems

#### **MATERIALS**

Sealants

Mastics

Silicones

**Urethanes** 

**Epoxies** 

Acrylics

Adhesives

Printing inks

Grease and lubricants

Pasty coatings



# THE POWER SERIES FOR APPLICATION ... ... OF ADHESIVES, INSULATING MATERIALS, AND SEALANTS



#### Extrusion pumps for low to high-viscosity and pasty materials

Supplying work stations, robots and other application systems or ring mains with multiple dispensing stations are typical uses for the VULKAN extrusion pump series. Depending on the viscosity of the transferred medium, the extrusion pumps can be outfitted with WIWA ram units or twin-post lifts and follow plates or follow covers.

A constant flow of material is assured through large material passages and the equal pressure and output in the upward and downward strokes. Due to the robust and sturdy design, the pumps of the VULKAN series have thoroughly proven themselves in difficult tasks such as pumping high-viscosity materials over long distances.

Further uses include filling of drums, cartridges or other original containers.

With the modern design featuring the proven WIWA modular system, and the extensive range of accessories, it is possible to offer the optimal and most economical solution for each area of application.

#### **FEATURES**

#### **Air motor**

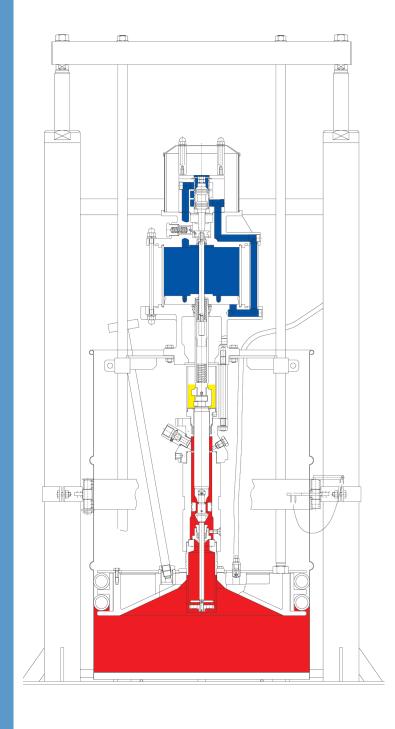
- Design optimized to provide extremly high change over speed
- I Easy to disassemble and assemble due to the use of fewer components

#### **Material pump**

- Large diameter material passages for high output and less pressure loss even with high-viscosity materials
- The shovel-feed technique enables the pumping of low to extremely high-viscosity materials
- Precision guiding ensures simple and exact alignment of parts, as well as less wear and tear
- Seals in the threaded connections prevent them form sticking and ease disassembly
- Carbon steel and stainless versions
- Hardchromed pistons and pressure cylinder

#### THE PLUS POINTS

- Maintenance-free, low-noise air motor
- A closed chamber with release agent separates the air motor and material pump.
- This prevents caking of the material on the piston rods and protects the packing due to its lubricating effect.
- Minimal pulsation due to rapid changeover speed
- High operating pressures also make it ideally suited to pumping high-viscosity materials over longer distances
- Equal output and pressure for upward and downward strokes ensures constant material flow rate
- Diverse sealing systems and materials for differing applications





### TECHNICAL DATA ...

### ... OF THE VULKAN EXTRUSION SYSTEMS



Model	Pressure ratio	Output per cycle	Output at 60 cycles/ min	Max. air input pressure	Maximum operating pressure
78.16	16:1	78 ccm	4.68 l	8 bar	128 bar
78.25	25:1	78 ccm	4.68 l	8 bar	200 bar
78.45	45:1	78 ccm	4.68 l	8 bar	360 bar
78.94	94:1	78 ccm	4.68 l	5 bar	470 bar
134.15	15:1	134 ccm	8.04 l	8 bar	120 bar
134.27	27:1	134 ccm	8.04 l	8 bar	216 bar
134.54	54:1	134 ccm	8.04 l	8 bar	432 bar
134.73	73:1	134 ccm	8.04 l	6.5 bar	474 bar
269.13	13:1	269 ccm	16.14 l	8 bar	104 bar
269.27	27:1	269 ccm	16.14 l	8 bar	216 bar
269.36	36:1	269 ccm	16.14 l	8 bar	288 bar
269.62	62:1	269 ccm	16.14 l	6.5 bar	403 bar
521.14	14:1	521 ccm	31.26 l	8 bar	112 bar
521.19	19:1	521 ccm	31.26 l	8 bar	152 bar
521.32	32:1	521 ccm	31.26 l	8 bar	256 bar
521.40	40:1	521 ccm	31.26 l	8 bar	320 bar
680.14	14:1	680 ccm	40.8 l	8 bar	112 bar
680.24	24:1	680 ccm	40 <b>.</b> 8 l	8 bar	192 bar
680.30	30:1	680 ccm	40 <b>.</b> 8 l	8 bar	240 bar

# AUTOMATISIERTE MATERIALVERSORGUNG ... ... IM SUZUKI WERK



Suzuki has redefined its position as an innovative maker of small cars with an unprecedented push to improve performance. Alongside many trendsetting manufacturing technologies, Suzuki is relying on alternative joining techniques in the bodywork area.

With over 50 WIWA extrusion pumps, Suzuki has implemented an automation process which allows for the fully automatic bonding of different body components up to and including full car bodies.

The high-performance adhesive material is pumped by WIWA-VULKAN shovel-type piston pumps which convey the adhesive to a metering device on a robotic arm. The robotic arm travels to the areas to be bonded and the maximum required amount of adhesive is automatically applied to the body parts at the ideal feed speed.

An automatic changeover process controlled by sensors means that before one drum is completely emptied the second ram unit starts, thus guaranteeing a constant flow of material at all times. This means that application does not have to be interrupted even to change the drum, as the system switches over to the respective full drum automatically.





#### Head Office and Production Germany WIWA Wilhelm Wagner GmbH & Co. KG

Gewerbestrasse 1-3

35633 Lahnau Phone: +49 6441 609-0

www.wiwa.de

#### Subsidiario WIWA de EE.UU.

WIWA LLC – USA, Canadá, America Latina 107 N. Main St. P.O. Box 398, Alger, OH 45812 Tfno · +1-419-757-0141

Tfno.: +1-419-757-0141 Fax: +1-419-549-5173 Gratis: +1-855-757-0141

www.wiwausa.com

#### WIWA (Taicang) Co., Ltd, China

No.11, East Qingdao Rd Taicang City, Jiangsu Province 215400,

Phone: +86 5 12 5354 8858

#### WIWA Middle East General Trading LLC, U.A.E.

Jebel Ali Industrial area 1 DUBAI

Phone: +971 4 884 8220 www.wiwa-middleeast.com

### **PRODUCT RANGE**

WIWA's extensive product range includes 1K, 2K and 3K application equipment for painting, coating and bonding in the machinery and vehicle manufacturing industries and for large surface, high viscosity and high build coatings used in the marine and offshore industries and steel and masonry construction for corrosion-proofing, surface sealing and passive fire protection.



WIWA FLEXIMIX 2 ATEX, electronic plural component spray equipment



WIWA DUOMIX PU HX, hydraulic plural component spray equipment



WIWA HERKULES 333 GX, single feed (airless) spray equipment



WIWA DUOMIX, pneumatic plural component spray equipment



WIWA DUOMIX 333 PFP ATEX, for intumescent fire protection material



WIWA VULKAN, pneumatic extrusion equipment