



Your project deserves it.



EXTRUSION AND MATERIAL HANDLING



WWW.WIWA.COM



Dear business partners,

just as in the fields of protective coatings, building protection or injection, many of our systems for adhesive and dispensing technology are also custom built. This brochure cannot completely cover all aspects of our product pallet, but it can definitely give you a taste of how we can support your global projects.

In addition, we are always open to new trends and grateful for the honest feedback from distributors and customers who put our products to the test daily. This information enables us to continuously improve and remain by your side as a strong and reliable partner.

Consider the following product lineup as the beginning of a new chapter, the aim of which is to meet the increasing challenges of the market and to grow with them. As a result, we can offer you the best possible equipment solutions, providing durability and longevity. We are on this path together with you and looking forward to expanding our portfolio and surprising you with powerful, robust and creative innovations.

As always, you can expect quality “made in Germany”; simple, efficient solutions and honest cooperation. We will keep you up to date with new product offerings that you can look forward to!

Kind regards on behalf of our entire team

Peter Turczak
Managing Director

Company history

It all started with spray nozzles, which precision mechanic Wilhelm Wagner manufactured in the 1940s. Today – 70 years after it was established – WIWA Wilhelm Wagner GmbH & Co. KG supplies first class coating systems, spray painting equipment, injection and fluid handling systems around the world.

1950	Company founded in Lahnau, WIWA develops and makes oil pumps and lubrication guns.
1967	The first Airless spray painting units are sold.
1970	New products – AIRLESS 10.000, AirCombi units, zinc silicate spraying units, feed pumps, airless spray painting guns – are added to the product range. Company expands: New building is opened on Gewerbestrasse in Lahnau-Waldgirmes.
1975	Founder’s daughter Heidrun Wagner-Turczak takes the commercial helm of the company and Günter Leinweber takes over as Chief Technical Officer.
1980	Expansion of fluids handling technology product range and market launch of WIWA extrusion pumps and hot-spraying systems.
1992	WIWA JUMBO launched on the market – the world’s largest airless unit.
1994	WIWA plural component technology opens up a promising, new market segment with the launch of the DUOMIX range.
1996	Certification of quality management according to DIN ISO 9001.
2000	WIWA LP is established in Tucker, Georgia, USA.
2004	Unveiling of 1K (single-component) and 2K PFP units for fire-protection coatings. WIWA is awarded ATEX certification.
2005	WIWA launches electronic plural component technology with the FLEXIMIX 1 and FLEXIMIX 2.
2007	Relocation of WIWA factory in Leun-Stockhausen to new building at HQ Lahnau.
2009	Unveiling of newly developed range of polyurea application units.
2014	WIWA DUOMIX 333 PFP certified for use on offshore platforms. New generation of airless units, the HERKULES GX series.
2015	Modernization of the DUOMIX range with the launch of the DUOMIX 270.
2016	Introduction of the new generation single feed units HERKULES 270 and 333 GX and of the DATALOGGER.
2017	The 3rd generation takes over the management. Peter Turczak succeeds his mother Heidrun Wagner-Turczak.
2018	Launch of the new generation single feed units PHOENIX GX and PROFESSIONAL GX.
2021	DUOMIX 230 MINI as new 2K entry-level machine. Brand relaunch and realignment to the market segments Protective Coatings, Extrusion/Material Handling and Injection/Building Protection.
2022	Relocation of the 2K special construction to new company building in Aßlar, Germany. With the HYDRO PX series, compressed air independent units complete the WIWA product portfolio.

Reliability and precision for more than 70 years.

WIWA Wilhelm Wagner GmbH & Co. KG is one of the world's leading developers and producers in the fields of 1K and multicomponent airless paint spraying equipment, material handling, extrusion and injection systems. The application spectrum of our equipment and systems ranges from painting and bonding in mechanical and vehicle engineering to large-area and thick-film coatings in the marine and offshore industry, in building and corrosion protection and in passive fire protection.

German engineering is written in capital letters in our company and means the consistent effort for highest quality and innovative approaches. Particularly in the 2K area, one of our core

competences is the individual special construction of customerspecific solutions. Despite growing cost pressure and increasing competition, our customers can rely on the seal „Made in Germany“, which is not least due to the clear commitment to our home location Lahnau and our employees.

Trust in the potential of all specialist departments in our company - from engineering and production to final assembly, dispatch and our service team - and use it for one big goal: your daily success!



How much „Made in Germany“ is actually still in a WIWA system?
Quite clearly - almost 100 %!



Your projects deserve creativity.

Customized special solutions designed to suit your application.

Every project and every production environment brings its own unique challenges: from demanding materials to unusually shaped components with corners and angles to the toughest operating conditions. At WIWA, we love such challenges. Because we are able to develop 100% individual special solutions that optimally meet the specific needs of our customers.

WIWA 1K solutions

from p. 8

WIWA 2K solutions

from p. 59

Your work deserves maximum availability.

Durable products in best quality - made in Germany.

We develop and produce our 1K and multi-component equipment and, of course, our systems for material extrusion and handling with uncompromising quality standards. Only high-quality materials and durable components are installed in all WIWA equipment. So that you can work as trouble-free as possible and achieve perfect results.

WIWA 1K solutions

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*This pump is assigned to the Protective Coatings market segment as standard. The information presented here relates primarily to its use in underbody protection and may therefore be incomplete.



Uniquely versatile

The powerful **WIWA PROFIT** series is a versatile and high-quality pump program for almost all application areas - also for extrusion tasks!

High-quality materials ensure an extremely long service life for our pumps and reduce wear on parts in contact with the material. Minimized repair costs and downtimes ensure the satisfaction of our customers worldwide.

The user benefits from an above-average service life and trouble-free operation thanks to hard-chrome plated double pistons, carbide valve plates and valve balls made of stainless steel, as well as a double filter system consisting of intake and high-pressure filters. The reinforced housing and a new sealing system guarantee a high level of safety during daily work.

Reliable WIWA technology for your benefit!



Areas of application

- (Rail) vehicle construction
- Underbody protection
- Cavity sealing
- Sound insulation

Materials

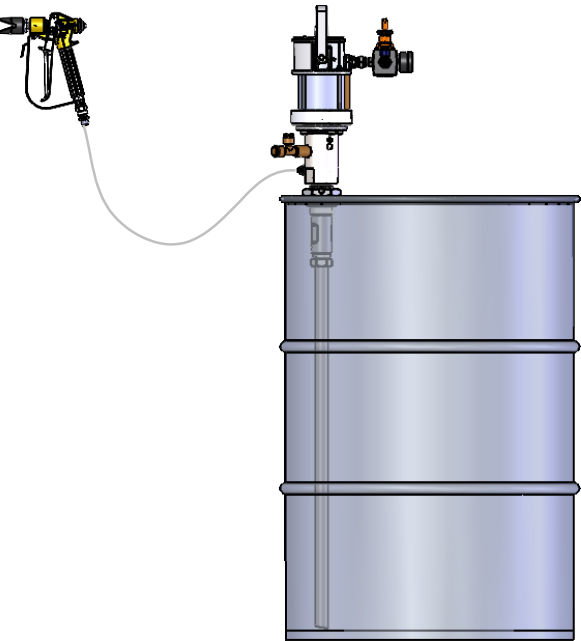
- (Underbody) protection materials
- Insulation materials

Advantages

- Less pressure loss even with higher viscosity materials
- Hardly noticeable pulsation due to extremely fast stroke changeover
- Fast maintenance and easy assembly and disassembly thanks to few components

Technical data example units WIWA PROFIT				
Model	Pressure ratio	Output per cycle	Max. air inlet pressure	Max. operating pressure
3033	33:1	14 cm³	8 bar	264 bar
4233		27 cm³		

System solution for 200 liter containers



i For information on the use of WIWA PROFIT in the field of protective coatings - its main area of application - please refer to the corresponding catalog.

Part No. complete system: 0669501 (N)

Suitable for	Components
• One delivery point with low consumption	• WIWA PROFIT 3033 • Material hose • Compressed air regulator • Airless gun
Technical data	
• Max. output (per 60 cycles): 0.8 l/min • Pressure ratio: 33:1	

Evolution of a masterpiece

Experience tangible quality, the best engineering and durability under the toughest operating conditions.

The WIWA GX motor generation impresses with a full metal housing, optimized air distribution during operation to minimize icing during continuous operation and reduced noise development. Low-maintenance, long-life material pumps reduce operating costs and ensure uncompromising material handling.

Unconditional joy of use perfected. That is the **WIWA PROFESSIONAL GX** - a masterpiece in its class!



Areas of application

- Steel and hall construction
- Machine and vehicle construction
- Wagon factories
- Insulations

Advantages

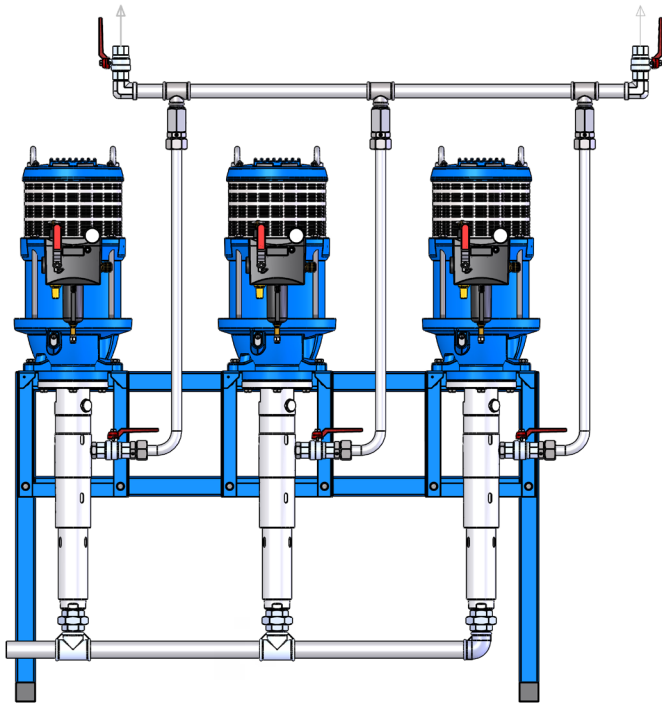
- Durable all metal construction
- Reduced operating costs due to low-maintenance material pumps
- Optimized air distribution to minimize icing during continuous operation

Materials

- Abrasive Materials
- Greases
- Insulating and thick-film materials
- (Acoustic) protection materials
- Materials with short fiber fillers

Technical data WIWA PROFESSIONAL GX				
Model	Pressure ratio	Output per cycle	Max. air inlet pressure	Max. operating pressure
230063	63:1	153 cm³	7 bar	441 bar
230051	51:1	189 cm³	8 bar	408 bar
230035	35:1	275 cm³	8 bar	280 bar
230027	27:1	360 cm³	8 bar	216 bar

System solution for large containers



Suitable for	Components
<ul style="list-style-type: none">• Several delivery points with high consumption and high pressure	<ul style="list-style-type: none">• PROFESSIONAL GX• Filling pipes• Maintenance unit• Support frame
Technical data	
<ul style="list-style-type: none">• Max. output (per 60 cycles): 9.2 - 21.6 l/min• Pressure ratio: 27 - 63:1	

i For information on the use of WIWA PROFESSIONAL GX in protective coatings - its main area of application - please refer to the relevant catalog.

Engineering in perfection

With its oil-free and low icing, technically optimized high-performance air motor, the **WIWA HERKULES GX** complements the WIWA airless product range in the upper performance classes.

It is particularly suitable for large-area and thick-film coatings with very high pressure ratios and enormous outputs - and thus also for processing materials with a higher viscosity! Even the use of several spray guns poses no problems for this airless paint sprayer.



i For information on the use of WIWA HERKULES GX in protective coatings - its main area of application - please refer to the corresponding catalog.

Areas of application

- Container construction
- (Rail) vehicle construction
- Building construction
- Steel construction
- Plant construction

Materials

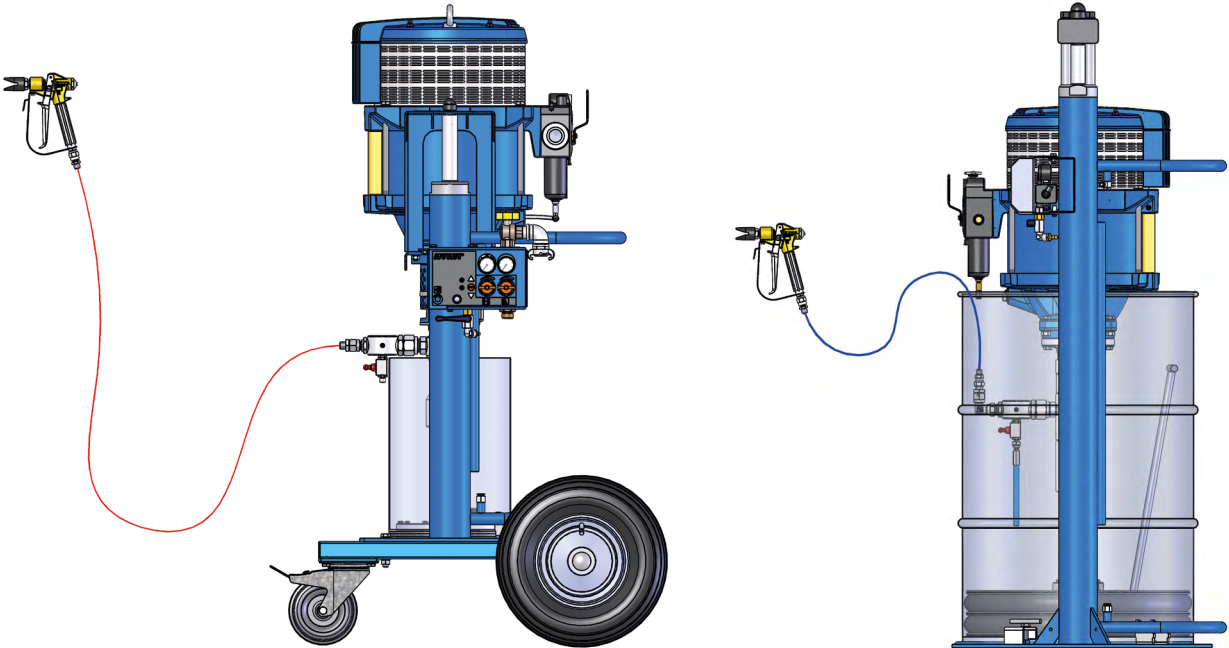
- Underbody protection materials
- Flame retardant

Advantages

- Minimalistic design
- Few wearing parts and easy assembly and disassembly
- Optimum spraying result due to low pressure fluctuations

Technical data example units WIWA HERKULES GX				
Model	Pressure ratio	Output per cycle	Max. air inlet pressure	Max. operating pressure
270049	49:1	275 cm³	8 bar	392 bar
333075	75:1		6.5 bar	487 bar

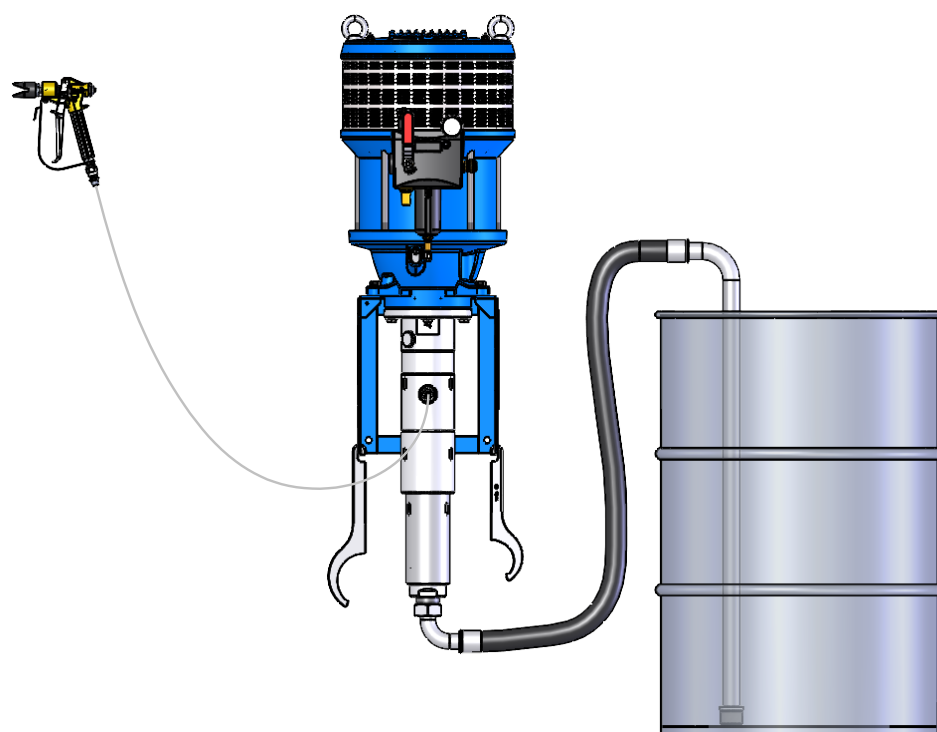
System solutions for small and large containers



Part No. complete system mobile: 0669497 (R) / Part No. complete system stationary: 0669498 (R)

Suitable for	Components	Technical data
• One to two delivery points	• HERKULES GX 333075 • Material hose • Maintenance unit • Twin post ram • Following plate • Airless gun	• Max. output (per 60 cycles): 16.5 l/min • Pressure ratio: 75:1

System solution for 200 liter containers



Part No. complete system: 0669502 (RS)

Suitable for	Components
<ul style="list-style-type: none"> • Several delivery points 	<ul style="list-style-type: none"> • HERKULES GX 270049 • Suction kit • Material hose • Maintenance unit • Airless gun
Technical data	
<ul style="list-style-type: none"> • Max. output (per 60 cycles): 16.5 l/min • Pressure ratio: 49:1 	

DID YOU KNOW?

Underbody coatings ... properties, advantages and disadvantages

Underbody coatings - also known as underbody protection or anti-drumming compounds - basically have the following functions: They are intended to preserve the sub-floor of an object by protecting it against falling rocks, rust attacks or other climatic conditions. Another task of the material is to reduce noise in the interior. Underbody protection material usually consists of a solvent-free mixture of polymer powders based on PVC, a plasticizer, additives and fillers.

An additional varnish or special waxes are sometimes applied for additional protection.

The underbody protection is also often combined with seam sealing and is, for example, relevant to the car body construction, container or (rail) vehicle construction.

Usually the agent is sprayed on. Due to the relatively high application speed and the large fan width, airless or air-assisted airless (AirCombi) are often the spray methods of choice. However, an extrusion application is also possible.

The phenomenon of gravel flight

At speeds of 125 miles and more, the phenomenon of gravel flight can seriously damage railcars. High-speed trains in particular, some of which can reach speeds of over 185 mph, can be seriously damaged and forced to be taken out of service.

High-quality underbody and insulation protection systems can prevent such failures.



i

Gravel flight includes not only ballast stones whirled up from the track bed, but also masses of ice that break away from the underbody of a train and shatter in the track bed.

Spot-on application solutions for highly complex requirements.

WIWA systems are built for perfection.

Our application techniques guarantee uniform and gapless application at a wide range of pressure ranges and viscosities. Powerful pumps and motors ensure efficient material handling and effortlessly process even difficult-to-flow masses or materials containing fibers - for a noticeably first-class result. In which industry can we support you?

Aviation

Shipbuilding

Electrical industry

Chemical industry

Construction industry

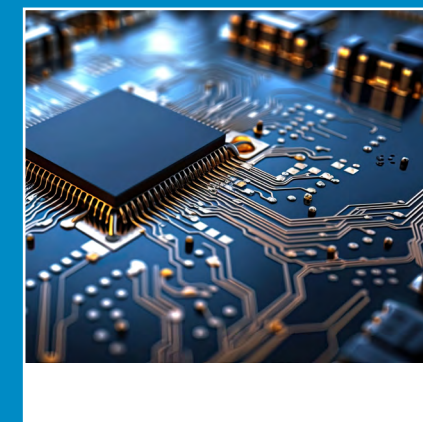
Container construction

Wood and furniture industry

Machine and (rail) vehicle construction

Our key markets*

*in the field of extrusion & material handling



The right pump for every system solution

The proven WIWA air motors continue to be used for the new **low-pressure pumps of the GX series**.

The main features of the material pumps are a follower piston packing, easy assembly and disassembly thanks to coarser threads, and large material valves that allow even highly viscous inks to be sucked in easily. The material flow has been optimized and enables better cleaning of the pump. In addition, the **WIWA LP pumps GX** are particularly user-friendly, easy to maintain and durable due to the spring-loaded packings. The closed system due to the encapsulable release agent chamber is especially advantageous when processing ISO material.

Our low-pressure pumps can also be equipped with a powerful hydraulic motor for integration into mobile units with hydraulic power packs - for road marking, for example. We will be happy to advise you!



Areas of application

- Feed and paint supply
- Spraying and coating technology
- Paint and varnish production and processing
- Paint circulation systems and painting lines
- Water supply for blasting systems or heating systems

Materials

- Sprayable varnishes and paints
- Waterborne coatings
- Solvent-based coating materials
- Oils and greases
- Release agents
- Stains
- Adhesives and glues
- Plastics
- Sealants
- Bitumen
- Epoxies
- Underbody protection
- Roof coating material
- Insulating and thick-film materials
- Other high viscosity materials with high solids content
- Isocyanates

Advantages

- Optimized material flow
- User-friendly, easy to maintain and durable
- Easy assembly and disassembly due to coarser threads

i RS = Stainless steel, rust and acid resistant N = Normal steel, galvanized
K = short version L = long version
Further pumps and descriptions of the individual versions can be found on the next page.

Technical data WIWA LP pumps GX					
Model	Version	Output per 60 cycles	Pressure ratio	Max. operating pressure	Part No.
72.03.7	Standard	4.33 l/min	3.7:1	29.6 bar	0669759 (RS-K)
	ISO				0670107 (RS-K)
	Glue				0669919 (RS-K)
	Water				0670140 (RS-K)
72.07.6	Standard	4.33 l/min	7.6:1	60.8 bar	0669758 (RS-K)
	ISO				0670108 (RS-K)
	Glue				0669920 (RS-K)
	Water				0670141 (RS-K)
72.011.4	Standard	4.33 l/min	11.4:1	91.2 bar	0669757 (RS-K)
	ISO				0670109 (RS-K)
	Glue				0669921 (RS-K)
146.01.8	Standard	8.8 l/min	1.8:1	14.4 bar	0669485 (RS-K)
	Standard				0669481 (RS-L)
	ISO				0669487 (RS-K)
	ISO				0669483 (RS-L)
	Glue				0669922 (RS-K)
	Water				0670136 (RS-K)
	ISO				0669809 (N-L)
146.03.7	Standard	8.8 l/min	3.7:1	29.6 bar	0669486 (RS-K)
	Standard				0669482 (RS-L)
	ISO				0669488 (RS-K)
	ISO				0669484 (RS-L)
	Glue				0669923 (RS-K)
	Water				0672990 (RS-L)
	ISO				0670137 (RS-K)
146.05.6	Standard	8.8 l/min	5.6:1	44.8 bar	0663033 (N-L)
	Standard				0667739 (RS-K)
	ISO				0667775 (RS-L)
	ISO				0667738 (RS-K)
	Glue				0667774 (RS-L)
	Water				0669924 (RS-K)
	ISO				0670138 (RS-K)
146.08	Standard	8.8 l/min	8:1	48 bar	0666083 (N-L)
	Standard				0673020 (RS-K)
	Standard				0673101 (RS-K)
	Standard				0673102 (RS-L)
					0673104 (RS-L)

Technical data WIWA LP pumps GX					
Model	Version	Output per 60 cycles	Pressure ratio	Max. operating pressure	Part No.
146.015.2	Standard	8.8 l/min	15.2:1	91.2 bar	0672760 (RS-K)
	Standard				0673106 (RS-K)
	Standard				0673103 (RS-L)
	Standard				0673105 (RS-L)
374.05.2	Standard	22.44 l/min	5.2:1	41.6 bar	0670164 (N-K)
	Standard				0670165 (N-L)
	Standard				0669753 (RS-K)
	Standard				0669754 (RS-L)
	ISO				0670207 (N-K)
	ISO				0670208 (N-L)
374.09.5	Standard	22.44 l/min	9.5:1	76 bar	0670166 (N-K)
	Standard				0670167 (N-L)
	Standard				0669210 (RS-K)
	Standard				0669263 (RS-L)
	ISO				0670209 (N-K)
	ISO				0670210 (N-L)
	ISO				0670531 (RS-K)
	ISO				0670531 (RS-K)
603.03.2	Standard	36.18 l/min	3.2:1	25.6 bar	0670168 (N-K)
	Standard				0669860 (RS-K)
	ISO				0670211 (N-K)
603.05.9	Standard	36.18 l/min	5.9:1	47.2 bar	0670169 (N-K)
	Standard				0669321 (RS-K)
	ISO				0670212 (N-K)
603.012.1	Standard	36.18 l/min	12.1:1	78.65 bar	0670170 (N-K)
	Standard				0669755 (RS-K)
	ISO				0670213 (N-K)

Version	Standard	ISO	Water	Glue
Description	<ul style="list-style-type: none"> Standard or stainless steel version Short or long version 	<ul style="list-style-type: none"> Closed packing template and special seals 	<ul style="list-style-type: none"> Stainless steel and special seals 	<ul style="list-style-type: none"> Stainless steel, with special seals and double pistons
Material / area of application	<ul style="list-style-type: none"> Paints and coating materials 	<ul style="list-style-type: none"> Isocyanates or isocyanate-containing paints 	<ul style="list-style-type: none"> Water 	<ul style="list-style-type: none"> Cold glue Feeding of labeling machines Supply of dowel setting machines

System solution for small containers and individual workstations

Advantages

- Easy handling
- Perfect spray result
- High application rate



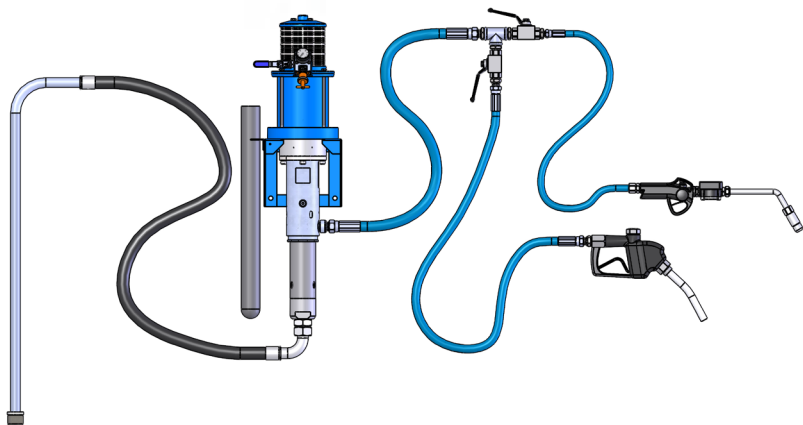
Part No. complete system: 0672415 (RS)

Suitable for
<ul style="list-style-type: none"> • One delivery point with low consumption
Components
<ul style="list-style-type: none"> • LP pump 146.1.8 • Hose package for compressed air and glue (Part No.: 0669474) • Compressed air regulator • Glue gun (Part No.: 0520041)
Technical data
<ul style="list-style-type: none"> • Max. output (per 60 cycles): 8.8 l/min • Pressure ratio: 1.8:1

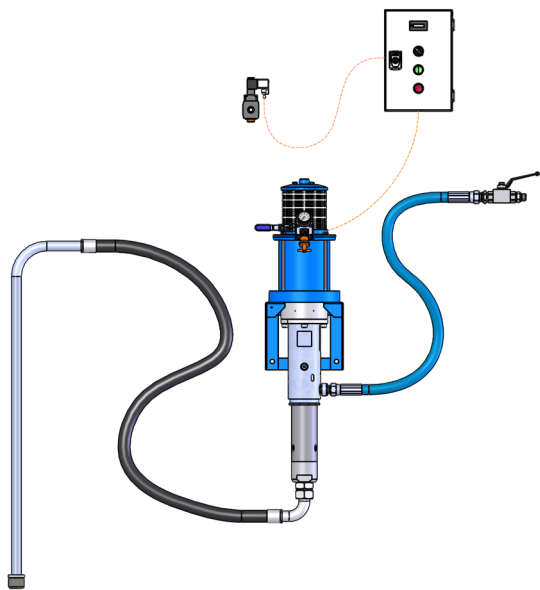


RS = Stainless steel, rust and acid resistant N = Normal steel, galvanized R = Stainless steel
Hose package and gun are not included in the complete system part numbers.

System solutions for 30 and 200 liter containers

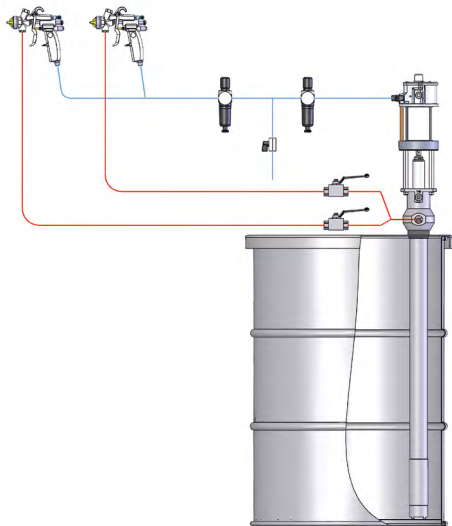
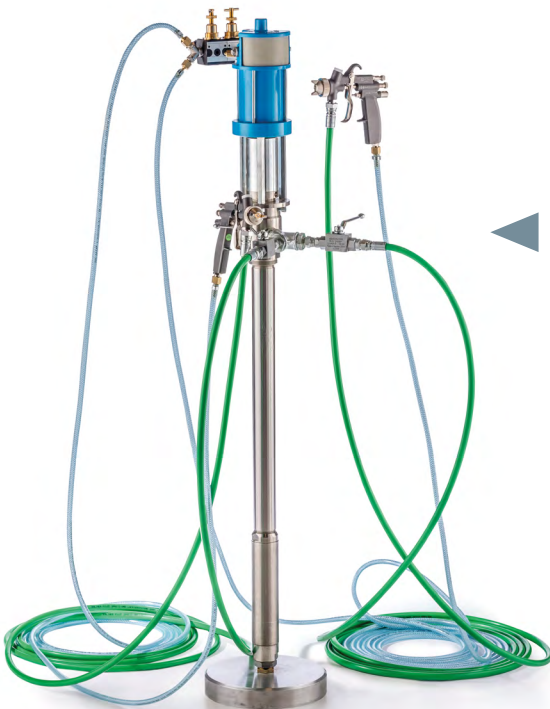


Suitable for
<ul style="list-style-type: none"> Filling or dosing Low consumption
Components
<ul style="list-style-type: none"> LP pump GX Compressed air regulator Wall bracket Suction kit Dispensing or dosing valve
Technical data
<ul style="list-style-type: none"> Max. output (per 60 cycles): 8.8 - 22.44 l/min Pressure ratio: 3.7 - 9.5:1



Suitable for
<ul style="list-style-type: none"> Dosing One delivery point with low consumption
Components
<ul style="list-style-type: none"> LP pump GX Compressed air regulator Wall bracket Suction kit Dosing control Automatic valve
Technical data
<ul style="list-style-type: none"> Max. output (per 60 cycles): 8.8 - 22.44 l/min Pressure ratio: 3.7 - 9.5:1

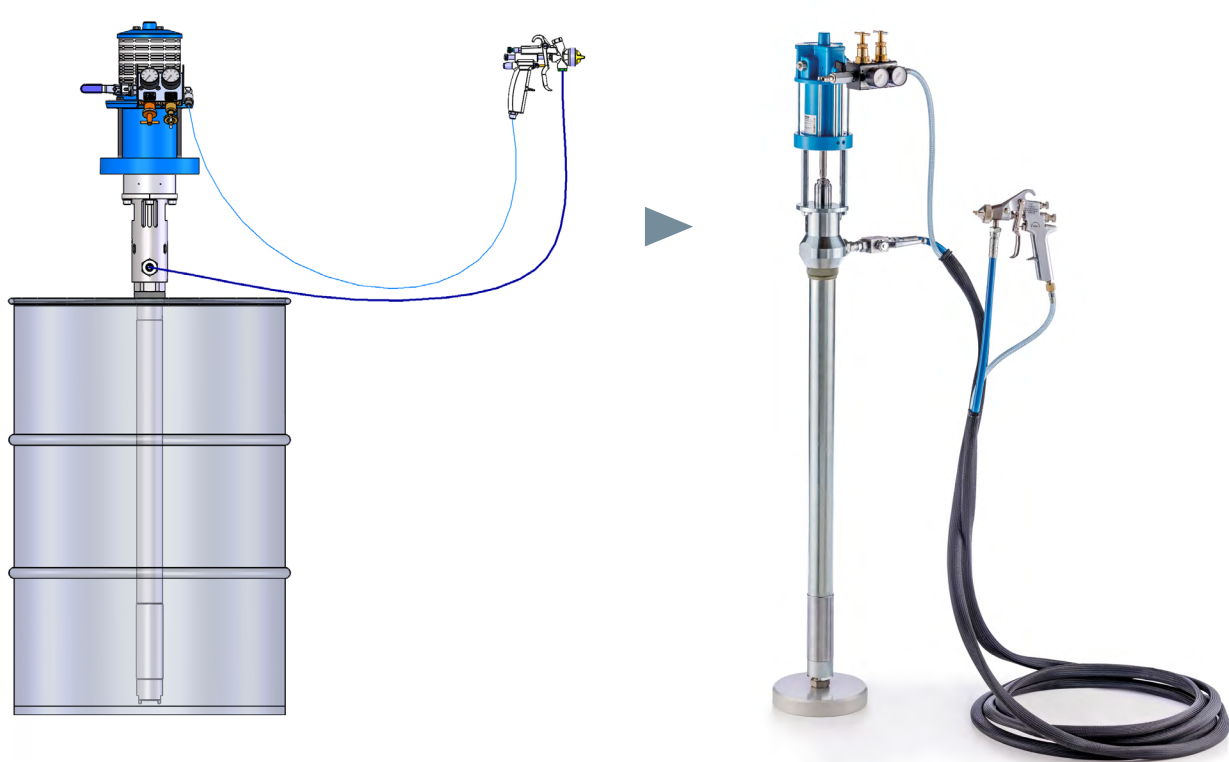
System solution for 200 liter bunghole drums



Part No. complete system for one gun: 0669685 (RS)

Suitable for	Technical data
<ul style="list-style-type: none"> One to four delivery points with high consumption 	<ul style="list-style-type: none"> Max. output (per 60 cycles): 8.8 l/min Pressure ratio: 1.8:1
Components	
<ul style="list-style-type: none"> LP-pump 146.1.8 with connection for guns Hose package for compressed air and glue (Part No.: 0669474) Glue gun (Part No.: 0520041) 	

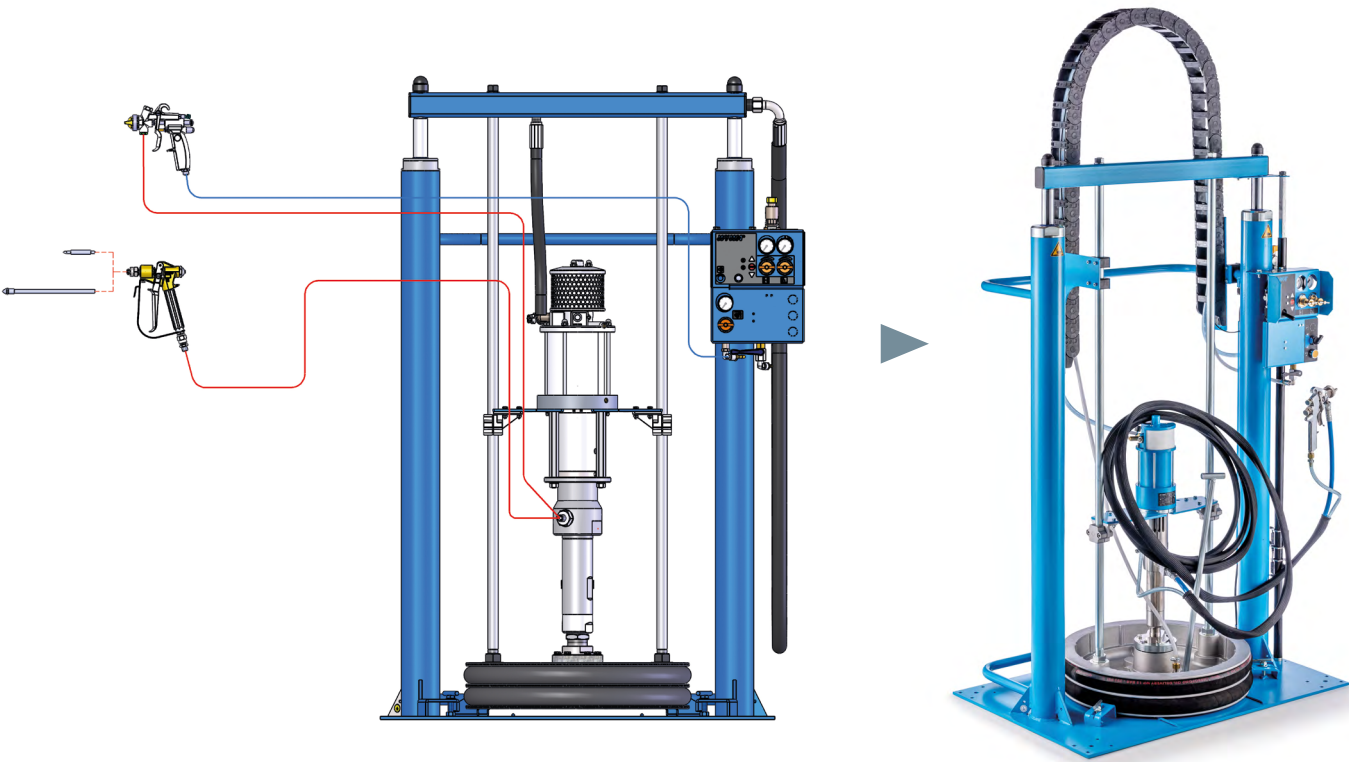
System solution for 200 liter containers (direct suction)



Part No. complete system 146.8: 0673130 (RS)
Part No. complete system 374.09.5: 0673131 (N)

Suitable for	Components
<ul style="list-style-type: none"> One delivery point 	<ul style="list-style-type: none"> LP pump 146.8 / 374.09.5 Hose package for compressed air and glue Compressed air regulator Mastic gun
Technical data	
<ul style="list-style-type: none"> Max. output (per 60 cycles): 8.8 - 22.44 l/min Pressure ratio: 8:1 - 9.5:1 	

System solution for 200 liter containers



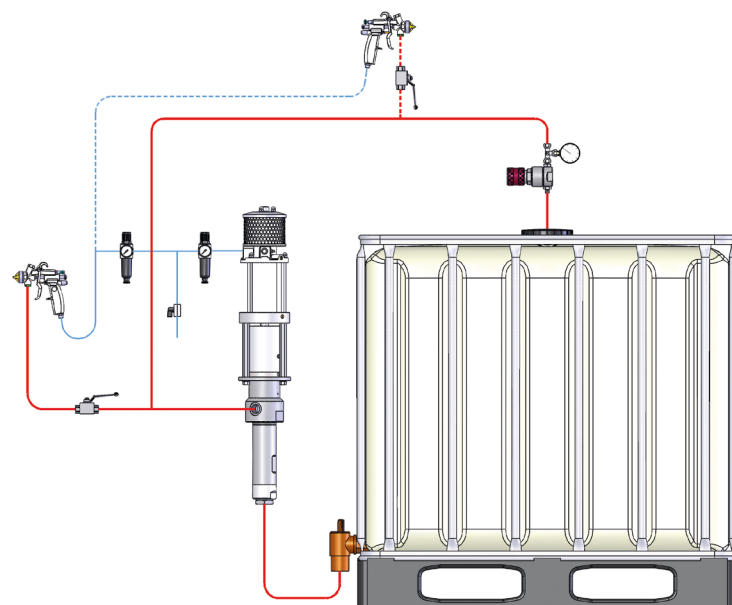
Part No. complete system mastic gun: 0669503 (R)
Part No. complete system extrusion gun: 0669504 (R)

Suitable for	Components	Technical data
<ul style="list-style-type: none"> One to two delivery points Spraying or extrusion 	<ul style="list-style-type: none"> LP pump Hose package for compressed air and glue with all connections Compressed air regulator Twin post ram Following plate Mastic or extrusion gun 	<ul style="list-style-type: none"> Max. output (per 60 cycles): 22.5 l/min Pressure ratio: 9,5:1 (with LP pump 375.09.5)

System solution for 1000 liter IBC

Advantages

- Environmentally friendly due to lower number of waste containers
- Reduced operational costs thanks to longer service life of the containers
- Frequency of container switch out reduced by feeding with large containers



Part No. complete system 375.05: 0669167 (R)

Part No. complete system 600.06: 0669168 (R)

Suitable for

- Central adhesive supply via ring line
- Up to 50 delivery points with high consumption

Components

- LP pump 375.05 / 600.06
- Feed hose for connection to an adhesive ring line
- Circulation regulator for constant material pressure
- Compressed air regulator
- Hose package for compressed air and glue (Part No.: 0669474)
- Glue gun (Part No.: 0520041)

Technical data

- Max. output (per 60 cycles): 22.5 - 36 l/min
- Pressure ratio: 5:1 - 6:1

Areas of application

- Industry and trade
- Machine and vehicle construction
- Structural and civil engineering

Materials

- Oil



Oil supply? Secured!

With our pneumatically driven piston pumps for transferring oil, you always have a reliable partner on hand.

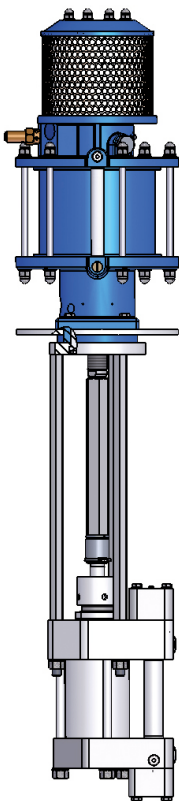
The robust series have a 2" bung fitting and are suitable for material transfer from containers with 25, 30, 60 or 216 liters capacity.

i N = normal steel, galvanized

Technical data WIWA Oil transfer pumps				
Model	Output per cycle	Pressure ratio	Max. operating pressure	Part No.
40.04	2.4 l/min	4:1	32 bar	0656759 (N)
40.06	2.4 l/min	6:1	48 bar	0656760 (N)
82.02	4.9 l/min	2:1	16 bar	0656757 (N)
82.03	4.9 l/min	3:1	24 bar	0656758 (N)
150.05	9 l/min	5:1	40 bar	0646116 (N)
150.015,5	9 l/min	15.5:1	69.75 bar	0665891 (N)

Advantages

- Simple
- Robust
- Durable



Uncompromising dedication

With the **WIWA 4-ball pumps**, you can transfer even the most difficult materials.

Areas of application

- Paint circulation systems
- Transfer pumps
- Feed pumps
- Release agent spraying systems
- Automatic lubrication and cooling systems
- Pipe production

Technical data WIWA 4-ball pumps				
Model	Output per cycle	Pressure ratio	Max. operating pressure	Part No.
865	865 cm ³	4:1	32 bar	0656175
		11:1	88 bar	0656174
1140	1140 cm ³	3:1	24 bar	0655040
		8:1	64 bar	0654171
		17:1	136 bar	0654237
1820	1820 cm ³	2:1	16 bar	0654619
		4:1	32 bar	0654624
		11:1	88 bar	0653283

Advantages

- High output and pressure ratios
- Fast and service-friendly maintenance
- All material-carrying parts made of stainless steel

DID YOU KNOW?

Solvent-borne adhesives ... properties, advantages and disadvantages

With solvent-borne adhesives, the adhesive substances - also called binders - are dissolved in (a mixture of different) organic solvents. Binding agents, which make up a substantial part of the solids content, are often resins or rubber.

Solvents initially serve as a means of transport by keeping the binders pliable. During the processing of the adhesive they evaporate, leaving undiluted adhesive at the end. They also influence, for example, the adhesion of an adhesive by promoting wetting and effecting the flash-off time through the speed the solvents evaporate.

There are two types of solvent-borne adhesives: Products that soften the

surface to be bonded and contact adhesives. These form the largest group of adhesives and must be applied alternately to the two surfaces you want to join. There they dry for a pre-determined period before the two surfaces are bonded together. Especially with vertical surfaces, the advantage here is that a certain initial strength is immediately available.

More environmentally-friendly, highsolid or super-high-solid adhesives with reduced solvent content are steadily gaining popularity. One reason is that less volatile organic compounds are released into the environment. They are also less flammable.

Product group	Solid	High-Solid	Super-High-Solid
Solids content	Ca. 50 %	Ca. 60-70 %	> 70 %
Viscosity	Up to 500 mPas	Up to 1.000 mPas	> 1.000 mPas
Areas of application e.g.	Metal, wood, textile, felt, high-quality foam bonds	Foam, wood, hardboard and composite board, cardboard, rubber hair, styrofoam	

i

High-solids adhesives have the advantages of reduced flammability, reduction in the quantity of adhesive required and reduced transportation costs. Furthermore, there is less packaging waste.

Established quality refined



The **WIWA VULKAN GX** extrusion pumps for conveying, dosing and applying adhesives, insulating materials and sealing materials now also rely on the new WIWA GX air motor. This impresses with a full metal housing, optimized air distribution during operation to minimize icing during continuous operation and reduced noise.

The range of extrusion pumps includes a total of 19 pumps in four performance classes with different outputs and pressure ratios, making it probably one of the most comprehensive series in the world. It is supplemented by an extensive selection of accessories such as base mountings, single and twin post ram presses in various sizes, following plates and following covers in all sizes and designs, as well as heating elements and other mounting kits. This modular system makes it possible to put together a suitable unit for almost any application.

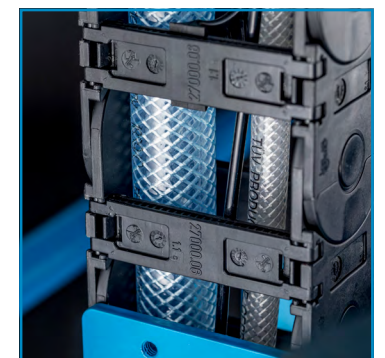
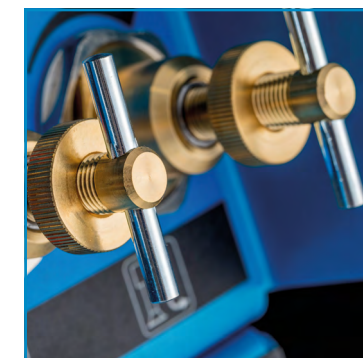
Our configurator, which we have shown for you in simplified form on pages 42/43, will help you to do this. In addition, we can implement a wide variety of special solutions to meet your requirements.

Areas of application

- Supply of single workstations and robots
- Automotive industry
- Machine and vehicle construction
- Rail vehicle construction
- Aircraft industry
- Marine and offshore industry
- Wind energy
- Wood and furniture industry
- Printing plants
- Window and door construction
- Production lines in the chemical industry
- Adhesive and polyurethane processing
- Lubrication technology (oil and grease conveying systems)
- Underbody protection applications
- Spraying and coating technology
- Paint and varnish production and processing
- Conveying of raw material for the production of adhesives
- Cartridge filling systems
- Production and processing of silicone products

Materials

- Adhesives and glue
- PVC and other sealing materials
- Greases and lubricants
- Printing inks
- Bitumen
- Underbody protection
- Pasty coating materials and other medium and high viscosity products
- Mastics
- Silicone
- Butyls
- Urethanes
- Epoxies
- Acrylics



Advantages

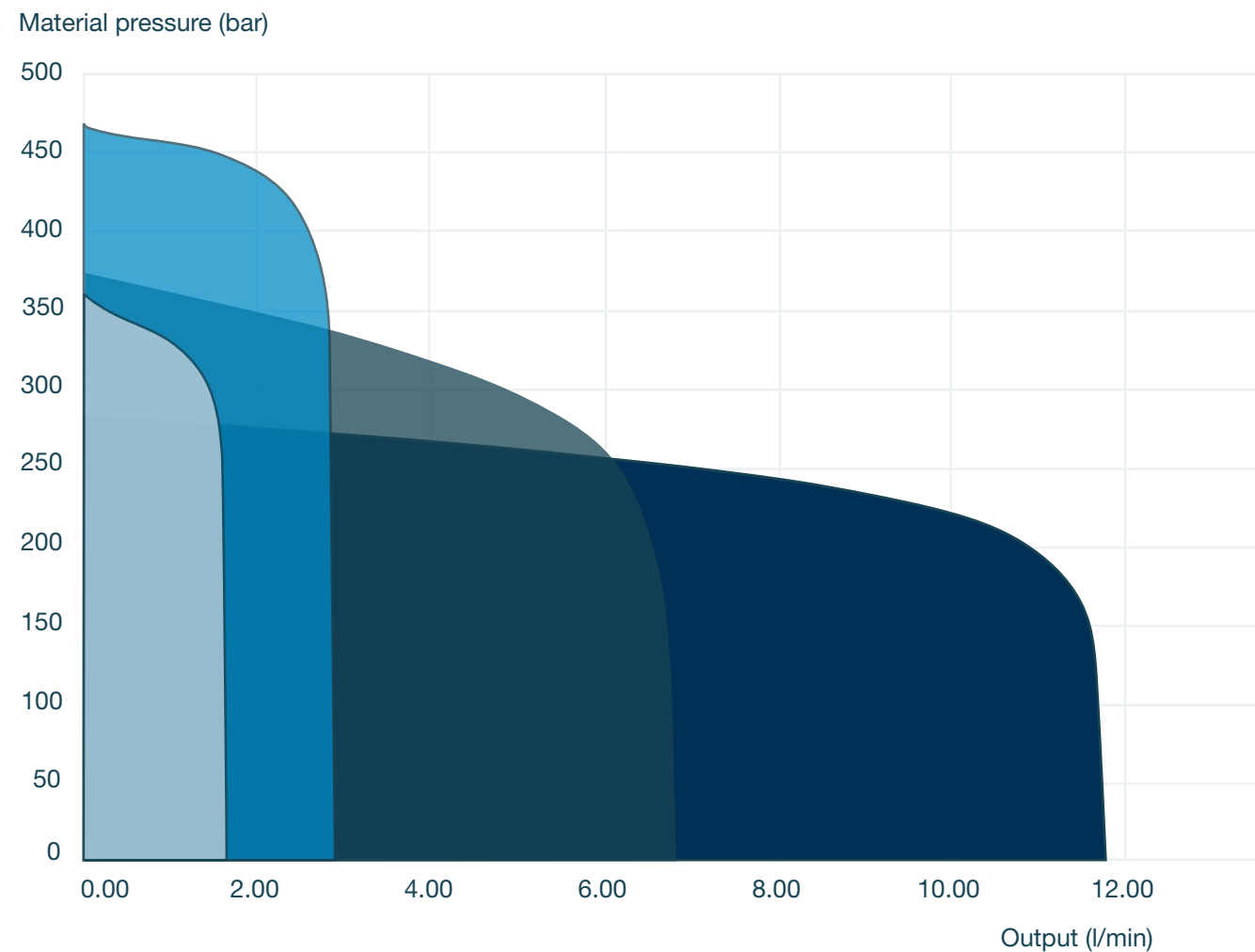
- Steady material flow
- Precise results due to low pulsation
- Top performance even in the toughest areas of application and in continuous operation



i RS = Stainless steel, rust and acid resistant
N = Normal steel, galvanized
The part numbers describe the extrusion pumps only. Complete systems are configured through our sales team.

Technical data example systems WIWA VULKAN GX					
Model	Pressure ratio	Output per 60 cycles	Max. air inlet pressure	Max. operating pressure	Part No.
79.24	24:1	4.74 l/min	8 bar	192 bar	0668165 (N)
79.24					0668174 (RS)
79.45	45:1	4.74 l/min	8 bar	360 bar	0666444 (RS)
79.45					0668166 (N)
134.14	14:1	8.04 l/min	8 bar	112 bar	0668167 (N)
134.14					0668175 (RS)
134.26	26:1	8.04 l/min	8 bar	208 bar	0668176 (RS)
134.26					0668168 (N)
134.54	54:1	8.04 l/min	8 bar	432 bar	0668177 (RS)
134.54					0668173 (N)
134.72	72:1	8.04 l/min	6,5 bar	468 bar	0668169 (N)
134.72					0668178 (RS)
330.29	29:1	19.8 l/min	8 bar	232 bar	0668170 (N)
330.62	62:1	19.8 l/min	6 bar	372 bar	0667080 (N)
580.23	23:1	34.8 l/min	8 bar	184 bar	0668172 (N)
580.35	35:1	34.8 l/min	8 bar	280 bar	0665422 (N)

You know your material
and the necessary output.
We have the best pump for the job.



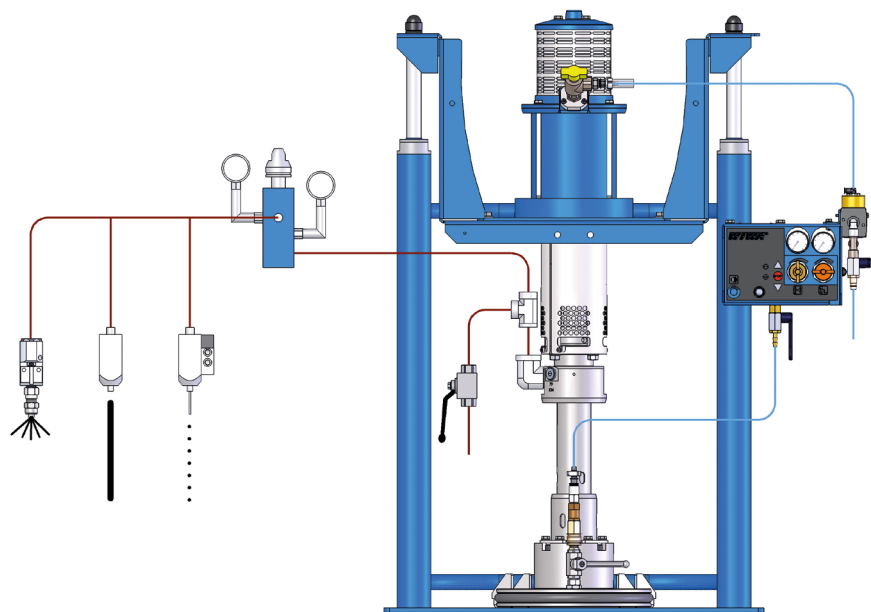
- Model 79.45
- Model 134.72
- Model 330.63
- Model 580.35

i The graphic above is for guidance only.
The actual output could differ.

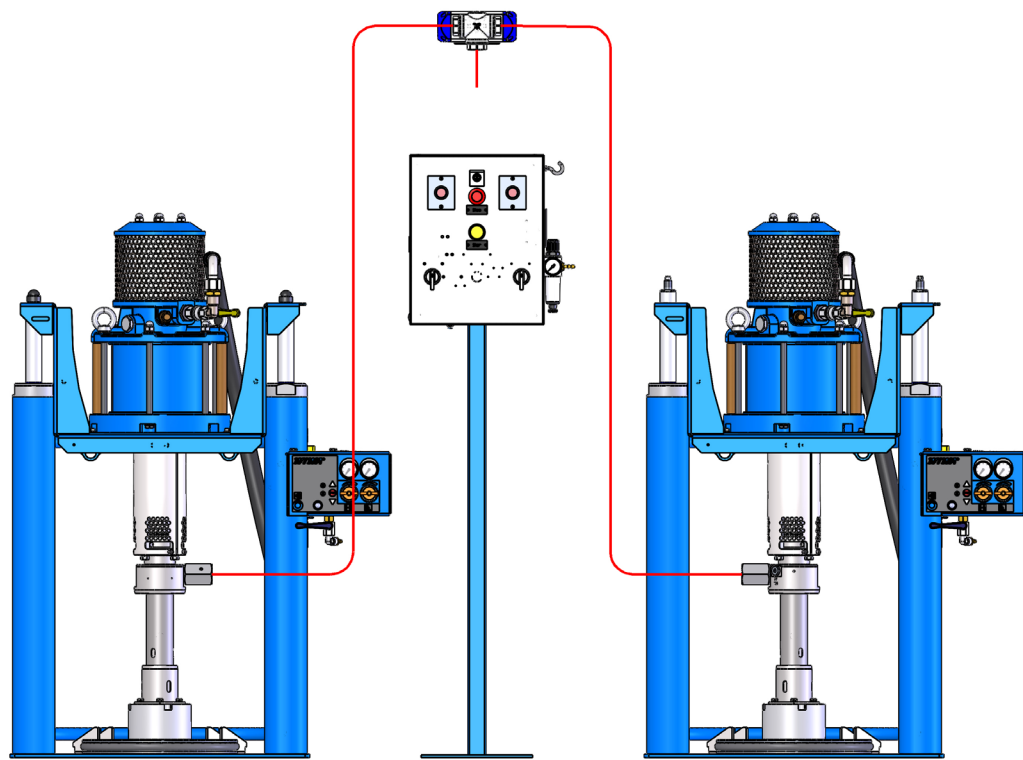
System solution for 20 liter containers

Advantages

- Easy to maintain
- Soft start of the pump with an air inlet pressure of less than 1 bar
- Longer service life of the pump because of the spring loaded upper packing



System solution for 20 to 200 liter containers



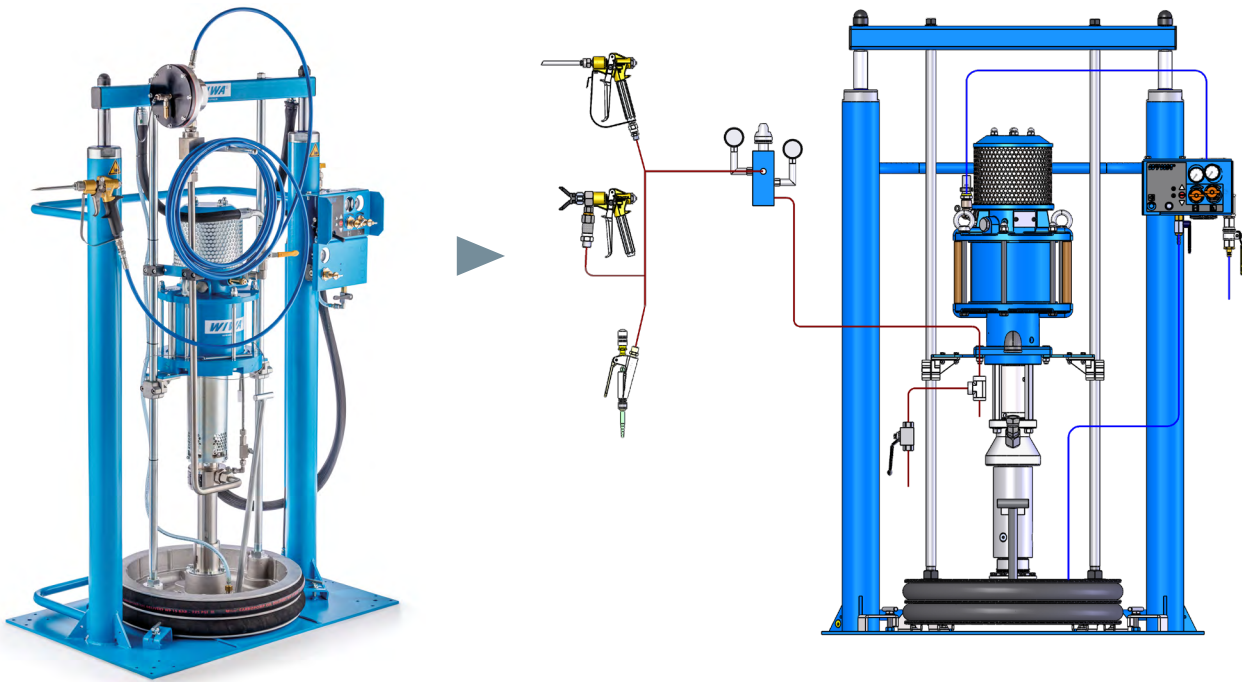
Suitable for	Components	Technical data
<ul style="list-style-type: none">• One to several delivery points	<ul style="list-style-type: none">• VULKAN GX• Material hose• Material pressure regulator• Twin post ram• Following plate• Automatic gun	<ul style="list-style-type: none">• Max. output (per 60 cycles): 4.7 - 34.8 l/min• Pressure ratio: 14:1 - 72:1

► Automatic operation ◀

Suitable for	Components	Technical data
<ul style="list-style-type: none">• Continuous conveying of higher viscosity materials	<ul style="list-style-type: none">• VULKAN 79.45• Twin post ram• Following plate• Control box• Level monitoring	<ul style="list-style-type: none">• Max. output (per 60 cycles): 4.74 l/min• Pressure ratio: 45:1

► Automatic operation ◀

System solution for 200 liter containers



Suitable for	Components	Technical data
<ul style="list-style-type: none">• One to several delivery points	<ul style="list-style-type: none">• VULKAN• Material hose• Maintenance unit• Twin post ram• Following plate• Airless gun or extrusion gun	<ul style="list-style-type: none">• Max. output (per 60 cycles): 4.7 - 34.8 l/min• Pressure ratio: 14:1 - 72:1

► Manual operation ◄



The **WIWA VULKAN** in manual use at a vehicle manufacturer in Poland - scan the QR code and learn more!

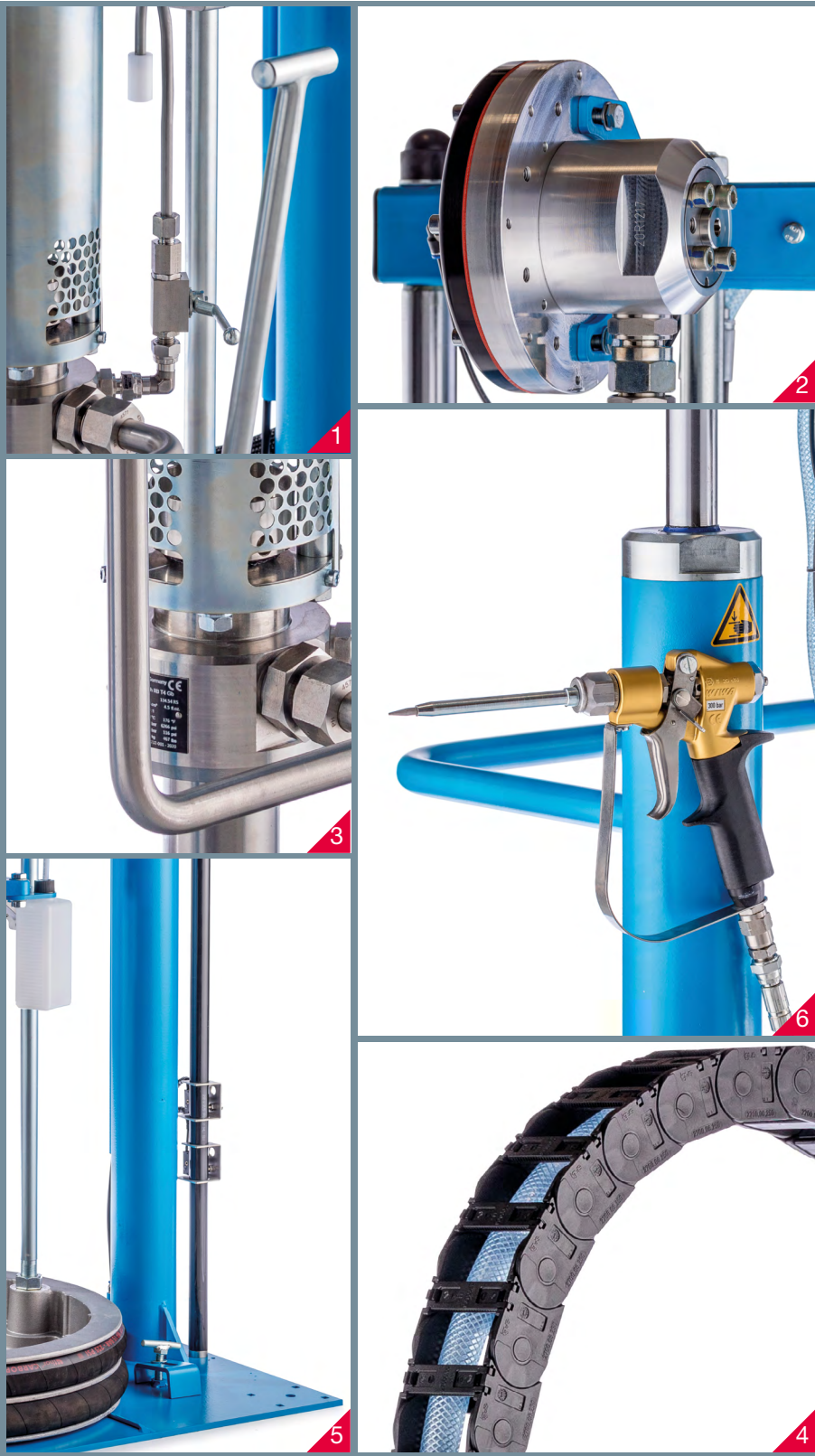
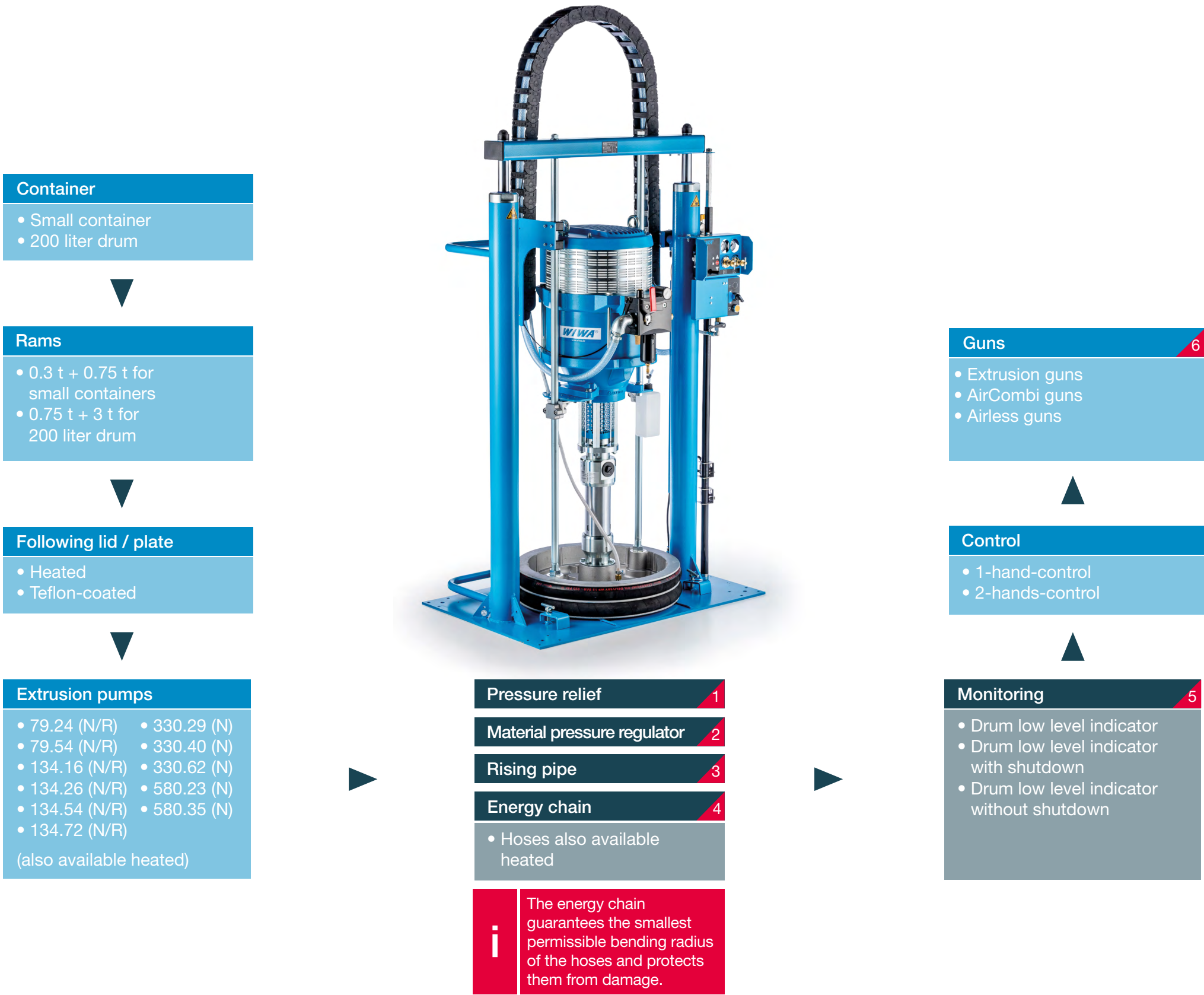
Automated material supply and application. All from a single source.

WIWA delivered a 200 liter version **VULKAN** series pump (model 134.54) as a feed pump as well as four pneumatically controlled **WIWA 250 needle outlet valves** to a system integrator manufacturing a machine for the automatic gluing of wooden door strips.



Modular diversity

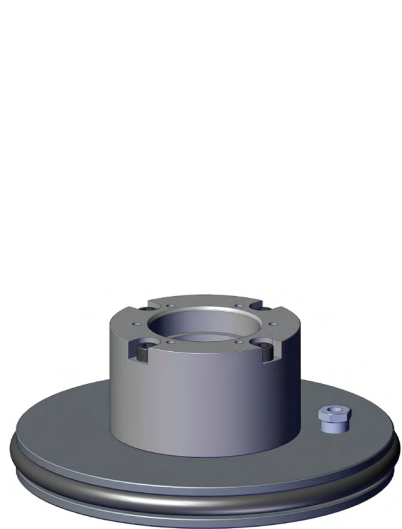
With the WIWA VULKAN GX



i Our systems are also available on wheels. If you have any questions about your individual configuration, please do not hesitate to contact us.

Use the full potential of this power series with the matching following plates ...

Following plates have an o-ring seal and fit onto cylindrical containers.
They are therefore only suitable for containers with a **specific** inner diameter.



Following plate optimized for minimal residual material for small containers



Standard following plate for large containers

Container size	Inner Ø	Heating capacity (optional)
Small containers	280 - 380 mm	1000 - 2000 W
200 liter drum	571.5 mm	2100 W

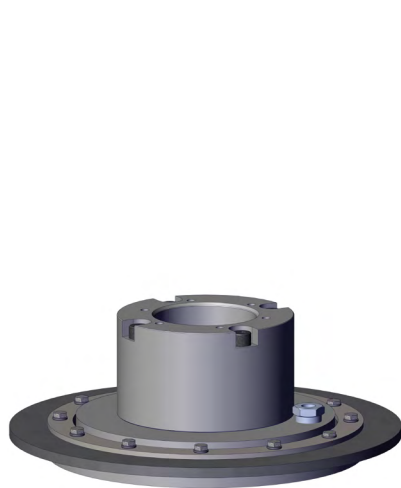
i WIWA's electrically-heated following plates enable the effective pumping of materials with very high viscosities. An overview of our heating options can be found on the following pages.

Advantages

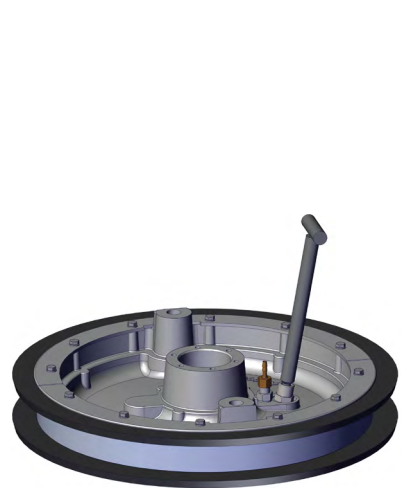
- Constant product flow by avoiding cavitation
- Electrically heated or PTFE-coated on request
- Protection of the contents of the container from moisture, dust or curing through contact with air

... and following lids

Following lids are characterized by a lip seal.
They are designed for conical containers and accordingly also for **different** container inner diameters.



Following lid optimized for minimal residual material for small containers



Following lid with double sealing lip for large containers

Container size	Inner Ø	Heating capacity (optional)
Small containers	280 - 380 mm	1000 - 2000 W
200 liter drum	571.5 mm	2100 W

i PTFE-coated equipment is easier to clean because less material remains on the extremely smooth non-stick surface. It is also extremely resistant to abrasive, alcohol-containing or oily substances.

i Of course, we can also produce other sizes on request.

Material pressure regulators for sealants, adhesives and lubricants

Generally speaking, material pressure regulators ensure that a set pressure is not exceeded on the outlet side of a system or that the required working pressure is reached, even if there are different pressures on the inlet side. They also compensate for pulsation that can occur when material is pumped by piston pumps. This ensures an even flow of material and the application quality remains stable.



Regulators for hand-operated systems



When processing self-lubricating media such as grease, oil and 1- and 2-component silicones, material pressure regulators with **pistons** are preferred. The spring chamber is sealed by a mechanical seal.

Material pressure regulators with **membranes** are used in particular for reactive, moisture-sensitive and abrasive media such as epoxy resins, polyurethanes and many other materials. The spring chamber is sealed by a membrane.



Regulators for automated systems



Manual material pressure regulator

- Material inlet pressure: 100 bar (Part No.: 0651610), 250 bar (Part No.: 0651609), 400 bar (Part No.: 0643777)
- Control range: 20 - 100 bar / 20 - 250 bar / 20 - 400bar
- Material inlet: G 3/8"
- Piston version
- Suitable for low to medium viscosity materials (e.g. grease, silicone)

Manual material pressure regulator

- Part No.: 0669404
- Material inlet pressure: max. 400 bar
- Control range: 10 - 320 bar
- Material inlet: 3/4" BSPP
- Piston version
- Suitable for medium to high viscosity materials (e.g. mastic)

Pneumatic material pressure regulator

- Part No.: 0669401
- Material inlet pressure: max. 400 bar
- Material outlet pressure: 25 - 275 bar
- Material inlet: 3/4" BSPP
- Ball seat version
- Suitable for medium to high viscosity as well as moisture-sensitive materials

Manual material pressure regulator

- Material inlet pressure: max. 400 bar
- Control range: 4 - 50 bar / 15 - 150 bar
- Material inlet: 3/8" BSPP
- Membrane version (Part No.: 0669348), piston version (Part No.: 0669701)
- Suitable for low to high viscosity and abrasive materials (e.g. epoxy / PU)



All part numbers cover the material pressure regulators without attachment kits (hoses, double nipples, etc.).

Full control over all important parameters

For a successful project, it is essential to know parameters such as pressure, flow rate and temperature of the processed material at all times to be able to intervene if necessary. We provide a broad range of products for this purpose.



Control box

- With display and control
- Readout of up to three measured values possible

Control



Pressure gauge D63

- Measuring ranges: 0 - 50/100/400/600 bar
- Material inlet: G 1/2"



Pressure sensor

- Measuring range: 0 - 600 bar
- Material inlet: G 1/4"

Pressure



Stroke counter pneumatic

- Measuring range: 0 - 999.999 strokes



Stroke sensor inductive

- Available for all pumps and air motors



Flow meter

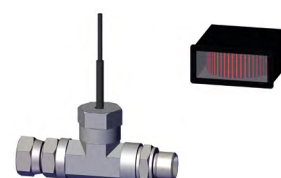
- Measuring range: 0,16 - 16 l/min
- Material inlet: G 3/8" / G 1/2"

Flow rate



Thermometer with pointer

- Measuring range: -40 - 400 °C



Thermometer analog

- Measuring range: 0 - 120 °C



Thermometer digital

- Measuring range: -50 - 150 °C



Temperature sensor PT100

- Measuring range: -50 - 150 °C

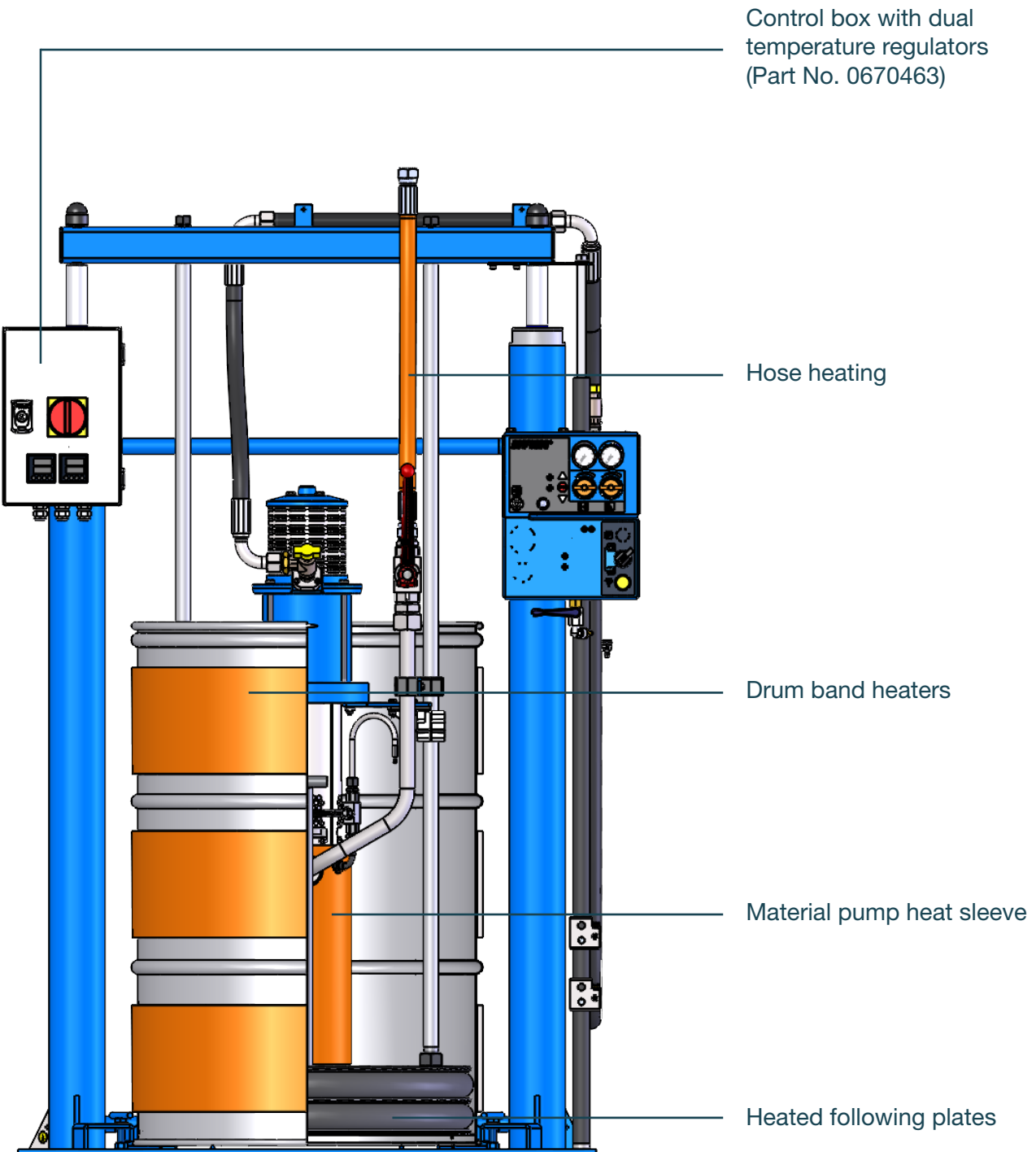
Temperature

■ Direct analog or digital display of the measured values

■ Electrically measured value acquisition and control via control box

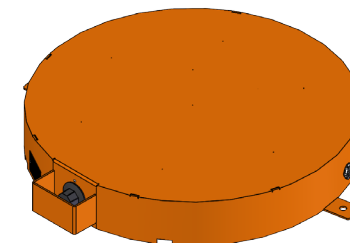
Our heating options from drum floor heaters to the outbound fluid hose

The control box comes standard with dual temperature regulators for the following plate and outbound fluid hose. If you require additional drum band heaters and/or a heated material pump, this can be arranged for as well. Be sure to mention this to us when discussing your project.



Drum floor heaters

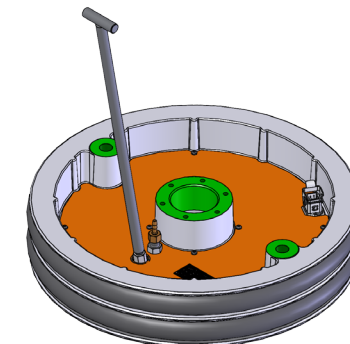
In order to preheat a new drum in advance - so that, for example, the ongoing work process does not have to be interrupted - our separate drum floor heaters are ideally suited.



Container size	Inner Ø	Voltage	Temperature	ATEX	Part No.
Small container	267/312 mm	230 V	30 - 85 °C	No	0663860
		400 V			0666309
216,5 liter drum	546 mm	230 V	0 - 110 °C	Yes	0639158
	550 - 650 mm		30 - 110 °C	No	0664500
		400 V			0665630
		480 V	max. 80 °C		0666597

Heated following plates

For even better material flow, we offer heated following plates. They enable highly viscous products to be pumped effortlessly.



Container size	Inner Ø	Voltage	Power	Temperature	Part No.
200 liter drum	571,5 mm	230 V	2100 W	max. 85 °C	0670095
					0670097
Small container	280 mm		1000 W		0670604

Drum band heaters and drum belt heaters

While drum band heaters are sized to fit a specific drum diameter, drum belt heaters can be adjusted to fit different drum sizes. Depending on the desired temperature, one or more heaters are required. We can supply other models on request.

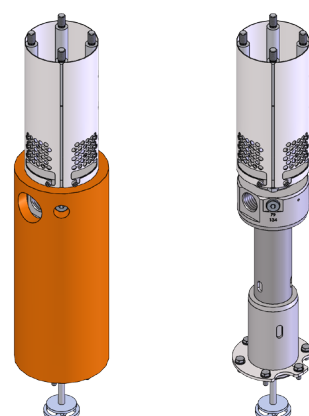
Container size	Length	Width	Voltage	Power	Temperature	Part No.
Small container	800 mm	125 mm	230 V	300 W	0 - 120 °C	0656881
	1020 mm	400 mm		200 W	0 - 90 °C	0666963
	940 mm	125 mm		500 W	0 - 120 °C	0656882
200 liter drum	1665 mm	180 mm	230 V	1500 W	0 - 120 °C	0656883
	1950 mm	800 mm		1200 W	0 - 90 °C	0667176

i A thermostat, drum retention device, cable (without plug) and ground wire are included.

Material pump heat sleeves

Our thermally insulated heating sleeves made of fiberglass can be easily and flexibly mounted and removed with the aid of a Velcro fastener. The heat sleeve ensures uniform heating of the material flowing through the pump.

Heat sleeves for all other WIWA pumps are available on request.



Pump	Ø	Length	Voltage	Power	Temperature	Part No.
LP pump 600	94 mm	325 mm	230 V	100 W	max. 60 °C	0664387

Heating hoses

Heating the outbound hoses is another way to ensure a constant material temperature and thus maintain the optimum working temperature.

Type	Max. operating pressure	Material inlet	Voltage	Power	Temperature
DN 12	200/450 bar	G 1/2"	230 V	160 W/m	max. 100 °C
DN 16	175/400 bar	G 3/4"		200 W/m	
DN 20	150/300 bar	G 1"		260 W/m	

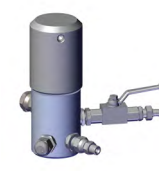
High pressure filters for a comprehensive protection of your unit

Put simply, filters have the task of preventing contamination of materials. In this way, they not only protect your system from possible damage, but also increase the efficiency of your production process by ensuring an uninterrupted flow. This effect is even stronger with double filter fittings, because even if one filter is clogged, the material can still be passed through the other one.



Double filter fitting

- Material inlet: G 1"/1 1/2"
- Max. material pressure: 250/400 bar



HP filter type 11 R

- Max. material pressure: 450 bar
- Material inlet: M22 x 1,5
- Part No.: 0011800



HP filter type 13 R

- Max. material pressure: 450 bar
- Material inlet: G 1"
- Part No.: 0065285



Inline filter

- Max. material pressure: 400 bar
- Material inlet: G 1"

Our guns for manual application

Advantages

- Flexible handling
- Effortless two- or four-finger trigger
- Optimal mobility thanks to ball-bearing swivel joint



Part No. WIWA 250 D: 0015032
Part No. WIWA 500 D: 0015016

WIWA 250 D (500 D)

- Material inlet pressure: 300 bar (500 bar)
- Material inlet: 1/4" NPSM / 3/8" NPSM
- Outlet tip (Part No.: 0669649)

i Outlet tips or needles must be ordered in addition to the gun.

▶ Extrusion application ◀



Part No. WIWA 250 D: 0015032
Part No. WIWA 500 D: 0015016

WIWA 250 D (500 D)

- Material inlet pressure: 300 bar
- Material inlet: 1/4" NPSM / 3/8" NPSM
- Outlet needle (Part No.: 0669650)

▶ Extrusion application ◀



Part No.: 0520012

Extrusion gun

- Material inlet pressure: 350 bar
- Material inlet: 3/8" NPSM
- Adjustable tip (included)

▶ Extrusion application ◀



Part No. WIWA 250 D: 0015032
Part No. WIWA 500 D: 0015016

WIWA 250 D (500 D)

- Material inlet pressure: 300 bar (500 bar)
- Material inlet: 1/4" NPSM
- Live swivel (included)

▶ Spraying application ◀

Our guns for automated application

Advantages

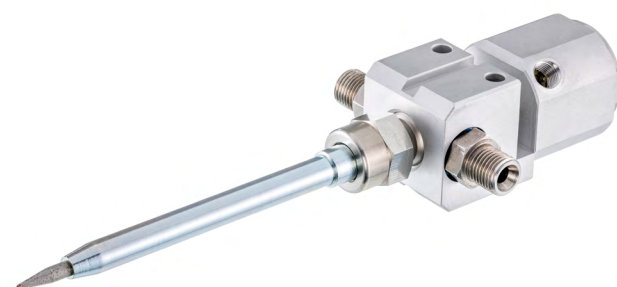
- Robust construction
- Can be used with and without circulation
- Connection option for pneumatic trigger release for even more precise, faster application



Part No.: 0630876

WIWA 250 automatic gun

- Material inlet pressure: 250 bar
- Material inlet: 1/4" NPSM
- Needle size: 4 mm



Part No.: 0646339

WIWA 225 automatic gun

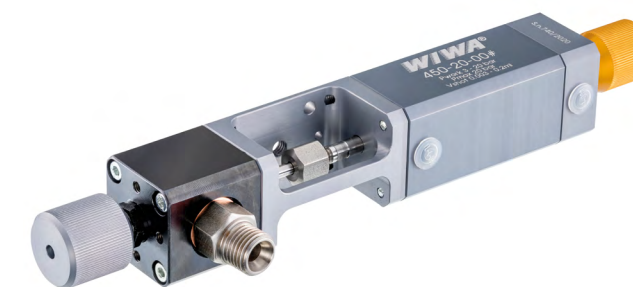
- Material inlet pressure: 225 bar
- Material inlet: 1/4" NPSM
- Needle size: 3 mm / 4 mm



Part No.: 0669171

WIWA 250 needle outlet valve

- Material inlet pressure: 250 bar
- Material inlet: 1/4" NPSM
- Needle size: 2.5 mm



WIWA dosing valve

- Material inlet pressure: 3 - 20 bar (Part No.: 0669730) / 3 - 50 bar (Part No.: 0669740)
- Material inlet: 1/4" NPSM
- Needle size: 2,5 mm (also 1 mm or 4mm available)
- Dosing range: 0.001 - 3 cm³ / 0.003 - 0,2 cm³



Overdosing practically impossible:
With the WIWA dosing valve, the output can be precisely determined before application.

► Spraying application ◀

► Extrusion application ◀

► Extrusion application ◀

► Dosing application ◀

Your project deserves the most efficient equipment.

Faster, easier and safer to the optimum application.

The highly flexible WIWA units can be adapted variably and in no time at all to the most diverse requirements. With our versatile equipment, intuitive operation and fast cleaning, we set standards worldwide in terms of efficiency and simplicity.

WIWA 2K solutions

WIWA DOSYS M	from p. 60
Project example production of machine beds	from p. 62
WIWA DOSYS XL	from p. 64

Small quantities efficiently dosed



If fillers, adhesives or sealants are mixed by hand, there is a risk that air will be stirred in. The resulting bubbles in the surface would then have to be compensated by further layers of material - a time and cost factor. In addition, the final result can vary depending on the day and the user.

With the small, mobile **WIWA DOSYS M**, bubble-free mixing with a constant mixing ratio is guaranteed, thus ensuring the consistent quality of the job. In addition, the removal from containers of different sizes makes it an environmentally friendly and cost-saving partner for any task.

Smallest quantities, even of a few milliliters, are the special target area of the user-friendly system, because for selective applications it can even be stopped in the middle of the stroke to provide the exact quantity required.

Even more successful projects with our special solutions

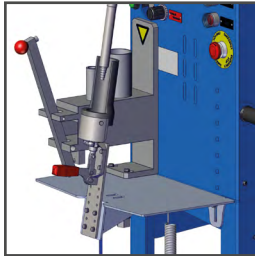
Technical data	Example systems WIWA DOSYS M			
Mixing ratio	100:100	100:50	100:10	100:3
Output per stroke comp. A	412.34 cm³	412.34 cm³	288.66 cm³	412.34 cm³
Output per stroke comp. B	412.34 cm³	206.17 cm³	28.85 cm³	12.37 cm³
Max. operating pressure	18 bar	23,8 bar	63.6 bar	34 bar
Max. air inlet pressure	6 bar			
Optional features (others on request)	14 liter pressure tank Cartridge filling device Extreme mixing ratio			
Part No.	0666500	0667905	0669960	0666910



Start-stop function
via foot control



Feeding via
pressure tank



Cartridge filling
device



Simply scan the QR
code and learn more
about the features
and benefits of this
optional accessory!

i Based on the standard version, we have customized systems for individual customer requirements. How can we adapt the WIWA DOSYS M for your application?



Areas of application

- (Rail) vehicle construction
- Shipbuilding
- Production of machine beds
- Industrial bonding
- Construction
- Spot dosing of rather small material quantities (e.g. cartridge filling)

Materials

- Filler materials based on epoxy resin, polyurethane or peroxide
- Adhesives
- Sealants
- Thickeners
- Mastics
- Insulating materials

Advantages

- Simple operation
- Hazardous location rated (no electronics, purely pneumatic control)
- Precise conveying at the push of a button even of the smallest quantities

Simple operation, enormous benefit.

Since 2018, a German manufacturer for machine beds and components based on granite or concrete has been working with one of our **WIWA DOSYS M**.

To fasten stainless steel threaded bushings to machine beds, it is used to fill smaller quantities of a 2K epoxy resin adhesive about 10 times a day and apply it by hand. The customer particularly appreciates the absolutely error-free mixing (here at a ratio of 1:1), the simple operation and the fact that his employees can always dose the material exactly as required. Waste and costs are therefore reduced.



High output without interruptions



With the larger, more stationary **WIWA DOSYS XL**, too, results that vary depending on the day and the user, unevenness in the material surface, and expensive and time-consuming leveling work are a thing of the past.

The system, equipped with either pedestals or rollers, was developed especially for large-area industrial coatings where a continuous delivery rate is required.

With the **WIWA DOSYS XL**, you can count on bubble-free mixing with a constant mixing ratio and therefore on consistent quality of your job. The removal from different sized containers makes it an environmentally friendly and economical partner for every project.

Even more successful projects with our special solutions

Technical data	Example systems WIWA DOSYS XL		
Mixing ratio	1:1	1:1	5:1
Output per cycle	2106 cm ³	2106 cm ³	1263 cm ³
Max. operating pressure	208 bar	270 bar	192 bar
Max. air inlet pressure	8 bar		
Max. lifting force A-side	7200 N	4400 N	7200 N
Max. lifting force B-side	7200 N	4400 N	4400 N
Part No.	0671751	0671752	0671758

i In addition to the models listed here, many more can be configured with different delivery rates, mixing ratios or feed variants. We will be happy to advise you!



Areas of application

- Industry
- Vehicle industry
- Aircraft industry
- Wind power industry
- Wagon construction
- Shipbuilding
- Apparatus and mechanical engineering
- Concrete construction

Materials

- Filler materials based on epoxy resins, polyurethane or peroxide
- Adhesives
- Sealants
- Thickeners
- Mastics
- Insulating materials

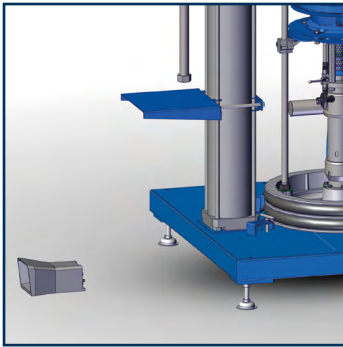
Feeding via
large containers



Swivel arm
with gun mount



Start-stop function
via foot control



Advantages

- Precision and performance
- Countless customized configurations due to modular design
- Environmental friendliness and cost savings through removal from large containers

Not enough of WIWA yet?



Protective Coatings

Regular maintenance and repair are important for the long-term use of structures. Injection systems make a sustainable contribution to this.

High-performance injection materials, combined with optimum processing technology, are prerequisites for the success of injection projects. Our injection solutions in the single and plural component range are second to none. We are leaders in customizing our system technologies to find the best solution for your application. WIWA is your optimal partner for every project.

Coatings can perform various functions for surfaces they are applied upon.

From forming a protective layer to providing a decorative finish, they reimagine the surface's face and characteristics. Protection from weathering, defense against mechanical stress and even performance as a flame and fire retardant are all possible functions coatings can provide as they maintain the value of the coated object. WIWA equipment and systems provide the perfect finish you are looking for. More than 70 years of expertise in applying paint, varnish, stain and industrial coatings are proof of the quality and professionalism that goes into our products, giving peace of mind even under the most difficult application conditions.



Injection / Building Protection



www.wiwa.de/en/newsletter

The WIWA website leaves no questions unanswered!

On our website you will find all products for the three WIWA business units Protective Coatings, Injection/Building Protection and Extrusion/Material Handling clearly presented. To ensure that you do not miss any of our news, you can also register there for our WIWA NEWS newsletter.


However, should you have any questions, you can contact a WIWA employee directly via chat on the website.



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