



INJECTION / BUILDING PROTECTION



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. Purely electrically operated follows the WIWA ELAN.



Dear business partners,

the renovation of structures such as bridges, tunnels, the sewer system, dams and old buildings is increasingly coming into focus. Due to climate change, the seasons are becoming more and more extreme – cracks and subsidence of the soil can be the result. Through our years of experience and close contact with material manufacturers worldwide, we are very flexible and can respond comprehensively to our customers special requests.

Our injection technology is completely designed, built and tested at our Lahnau site. We offer highly complex, automated systems and easy-to-operate equipment for efficient and trouble-free work. From small construction sites in the private sector, such as crack repair or the sealing of basements and buildings, up to underground or in tunnel construction - our WIWA INJECT series in the 1C and 2C range offer efficient solutions for every job volume.

In the following you will find our large selection of pump technology and accessories. Contact us – we will find the solution for your application and your material.

Kind regards on behalf of our entire team



Peter Turczak
General Manager

Made in Germany – Made by WIWA!



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 1- and multi-component airless paint spraying equipment, material conveying, 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 industries, in building and corrosion protection, and in passive fire protection.

Under the highest quality standards WIWA manufactures at its founding site in Lahnau, Germany, equipment and systems for the most diverse requirements.

WIWA technology proves itself in decorative and protective surface coating, surface sealing in tunnel and canal construction,

or the application of highly viscous, paste-like 2K and 3K materials on steel and concrete. The family-owned company develops, produces and sells its products in Germany. It also sells through a company-owned subsidiary in the USA and through highly experienced distributors in all parts of the world. In close cooperation with these international experts, WIWA develops and implements industry-leading special solutions.

By adapting the work processes to the strict requirements of DIN EN ISO 9001:2008 as well as the introduction of a quality management system, WIWA offers national and international customers even more transparency and investment security. WIWA holds the corresponding certifications of TÜV Rheinland and Bureau Veritas. German workmanship describes in our company the consequent highest quality and innovative solutions.

The fact that our global customers despite growing cost pressure and on „Made in Germany – Made by WIWA“ is based not least on the clear commitment to our home location in Lahnau and our more than 135 qualified employees.

It is not always recognizable technical factors that pay off for our customers day after day. Direct contact with each individual WIWA employee, often with many years of experience and competence, creates trust. Use the potential of all specialist departments of our company from design to production to final assembly, the shipping department and our service team clearly for one big goal: Your daily success!



How much „Made in Germany“ is actually still in a WIWA system?

Quite clear: almost 100%

The new dimension of injection systems

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

High-performance injection materials combined with optimal processing technology are prerequisites for successful injection measures.

This brochure presents you with a comprehensive overview of WIWA injection solutions from the 1K and 2K range for:

- Waterproofing of floor slabs
- Reinforcement and strengthening
- Crack repair / crack grouting
- Joint sealing
- Horizontal barriers
- Stopping of strong water inflows
- Structural waterproofing by curtain and surface injection
- Filling of cavities
- Consolidation and stabilization of rock and subsoil

1K INJECT SOLUTIONS

from Page 8

2K INJECT SOLUTIONS

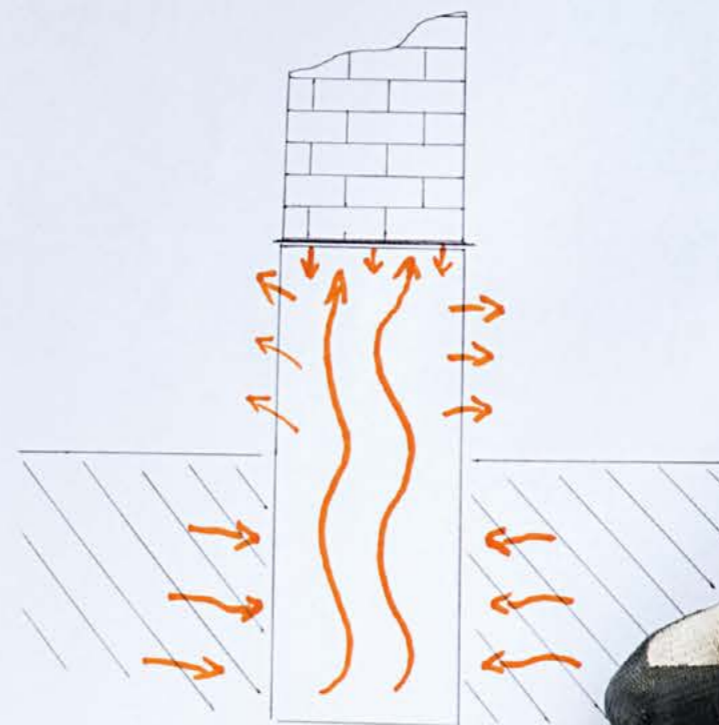
from Page 24

2K FOAM/PU SOLUTIONS

from Page 52

ACCESSORIES

from Page 60



WIWA 1K INJECT SOLUTIONS

The WIWA INJECT HD series consists of 5 versatile and high quality pneumatic piston pumps for the 1K injection range.

They are particularly suitable for injecting and injection of low viscosity epoxy or polyurethane resins and meet the requirements of the ZTV Riss.





www.wiwa.de

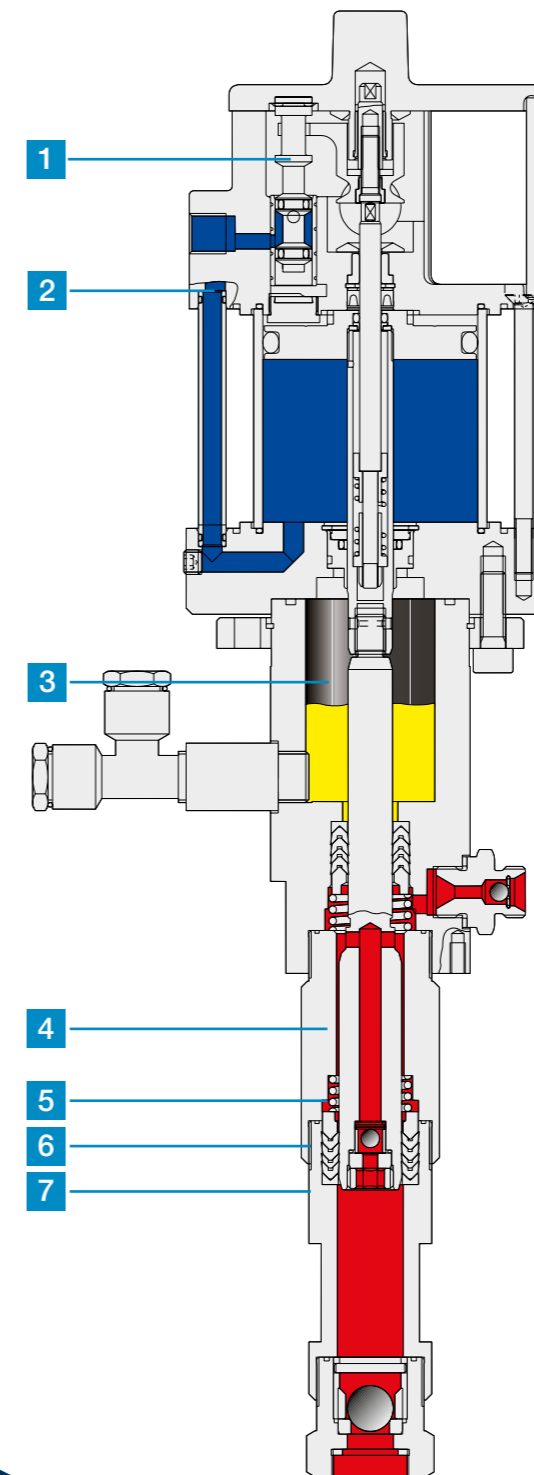
Compact · High-quality · Strong

Our 1K injection units HD 1 to HD 3 of the WIWA INJECT HD series are equipped with the powerful pneumatic WIWA PROFIT piston pumps.

Carefully selected, premium quality materials create high durability and reduce the wear and tear of all parts that come into contact with the fluid. Minimal repair costs and downtime create satisfied customers all over the world. Robust, reliable and versatile WIWA technology to your benefit.

THE ADVANTAGES:

- Portable for flexible use anywhere.
- Pulsation is barely noticeable thanks to the high stroke changeover speed.
- Spring supported, self adjusting packings reduce wear and tear.
- Quicker and simpler maintenance and assembly thanks to direct threading and wrench flats.



DESIGN FEATURES OF HD 1-3

Air motor

- 1 Pulsation is barely noticeable thanks to the high stroke changeover speed.
- 2 Low number of components make the motor easy to assemble and disassemble.

Lubrication chamber

- 3 A closed lubrication chamber separates the air motor and the material pump. The closed design prevents foreign objects such as blasting material from entering the pump system from the outside. The lubricant also prevents paint from drying onto the piston rod and protects the packings.

Material pump

Less pressure loss even with highly viscous materials due to large bores and voluminous material passages in the bottom valve.

- 4 Precision guides ensure simple and exact alignment of components and thus less wear and tear.
- 5 Better flushing due to short packing retention springs and large fluid passages.
- 6 Sealing rings located in front of the threads prevent the threads from sticking and make disassembly easier.
- 7 Pump components are quick to assemble and disassemble as they are simply screwed together.



All components of the units comply with the ATEX directives.

WIWA INJECT HD 1 / HD 2 / HD 3



Technical data	HD 1	HD 2	HD 3
Output per cycle	14 cm ³	14 cm ³	27 cm ³
Pressure ratio	33:1	33:1	33:1
Max. air inlet pressure	8 bar/116 psi	8 bar/116 psi	8 bar/116 psi
Max. operating pressure	264 bar/ 3829 psi	264 bar/ 3829 psi	264 bar/ 3829 psi
Weight	12 kg	16,3 kg	13 kg
Material feed hopper	1,5 l	6 l	1,5 l
Order No.	0644426	0644517	0669680

SECURITY FOR YOUR PROFIT

The advantage of air-operated piston pumps compared to electric membrane pumps is that the pump stops when the injection site is filled. The slower stroke speed allows the operator to see how far the injection process has progressed.

MATERIALS

- PUR injection foam resins
- PUR Combination Injection Foam Resins
- PUR Combination Injection Resins
- PUR injection resins
- EP injection resins
- Also suitable for processing 2K injection materials with longer pot life.

AREAS OF APPLICATION

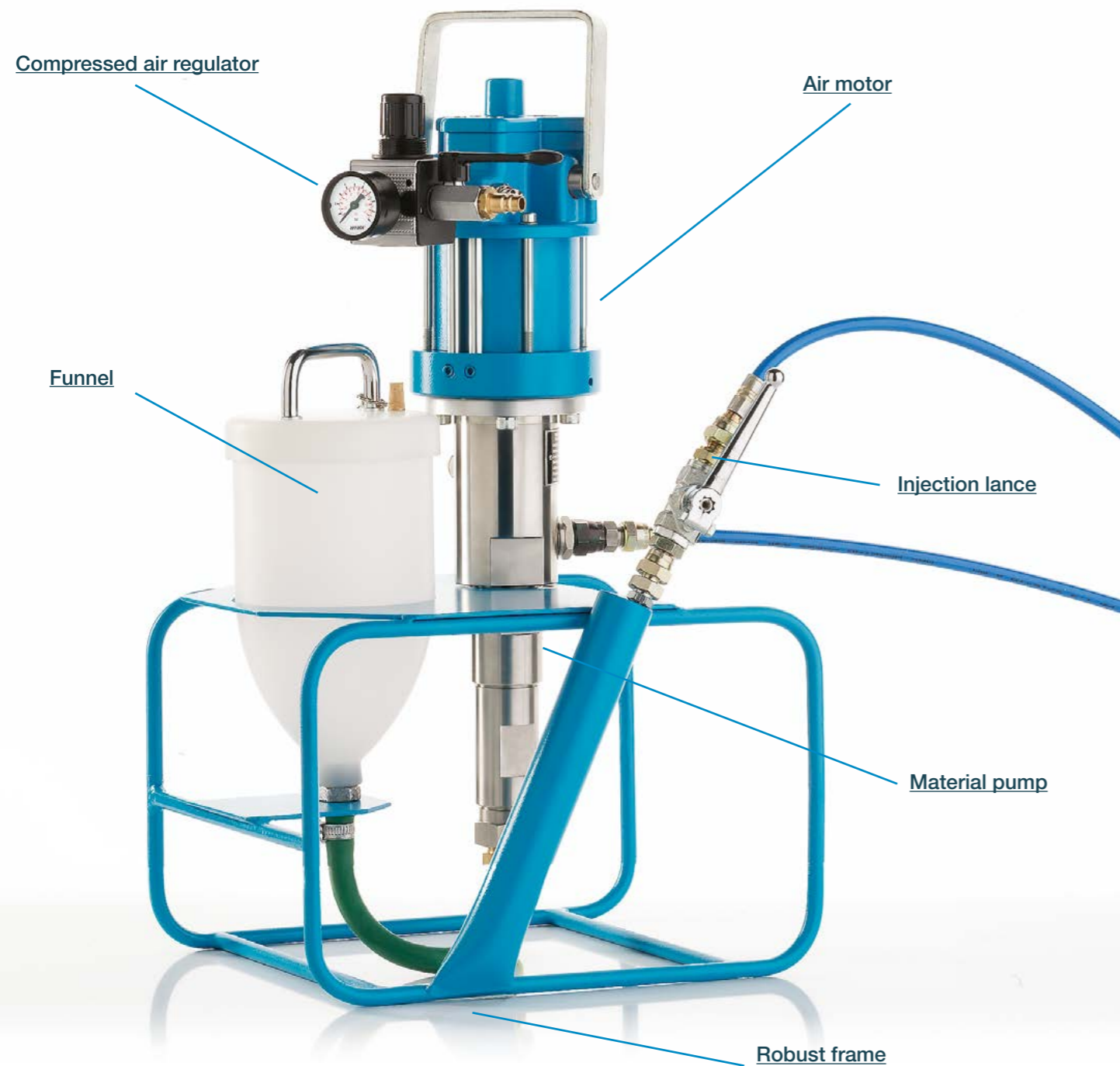
- Crack injection
- Subsequent horizontal barrier
- Grouting of injection hoses
- Filling of smaller cavities
- Sewer rehabilitation

BASIC EQUIPMENT

- High pressure pump
- Compressed air regulator
- Safety valve
- Feed hopper, approx. 1.5 liters (HD 1) or feed tank, approx. 6 liters (HD 2)
- High-pressure material hose (7.5 m)
- Injection lance with 4-jaw-injection coupling
- Bottle of release agent
- Operating manual with spare parts list

- Easy to operate and transport
- The injection pressure is infinitely adjustable
- Compact, portable and powerful injection equipment with pneumatic drive

Accessories for WIWA INJECT HD 1 / HD 2 / HD 3



Accessories	Order No.	Description
Suction line	0643949	Suction hose -N- NW 9
Mounting kit funnel black 1,5 l	0645575	Funnel 1,5 Liter complete
Mounting kit funnel black 6 l	0631064	Funnel 6 Liter complete
Mounting kit funnel transparent 6 l	0668846	Funnel 6 Liter complete with lid and sieve
Hose NW4 1/4" 7,5 m	0410845	Material hose NW 4/460-1/4"-7,5 N
Compressed air regulator	0644180	Compressed air regulator G 1/4" complete
Injection lance complete	0641948	Injection lance complete
Stroke counter	0671687	Stroke counter complete with holder
Gun	0668657	Injektionspistole complete WIWA 500D with adapter 1/4" NPSM (A)
Whip 0,3 m	0631406	Material hose NW 6/410-1/4"-0,30 N
Mounting kit straight lance	0669411	Mounting kit for injection gun pipe straight 600 mm
Mounting kit bent lance	0669410	Mounting kit for injection gun pipe bent 170 mm
Mounting kit bent lance	0218820	Double nipple NPS 1/4"-M 10x1
Sliding coupling 90°	0669301	Sliding coupling angular 90°, for nipple M1 Aluminium
Sliding coupling straight	0641199	Sliding coupling gerade, for nipple M1 Aluminium
Hydraulic mouthpiece	0411302	Hydraulic mouthpiece M10x1 IG 4 jaws chrome-plated (Replacement seal 0660477)
Quick release pliers	0668559	Quick release pliers R1/4 (A), 4 mm



ATEX version: Can be used in explosion-proof areas.

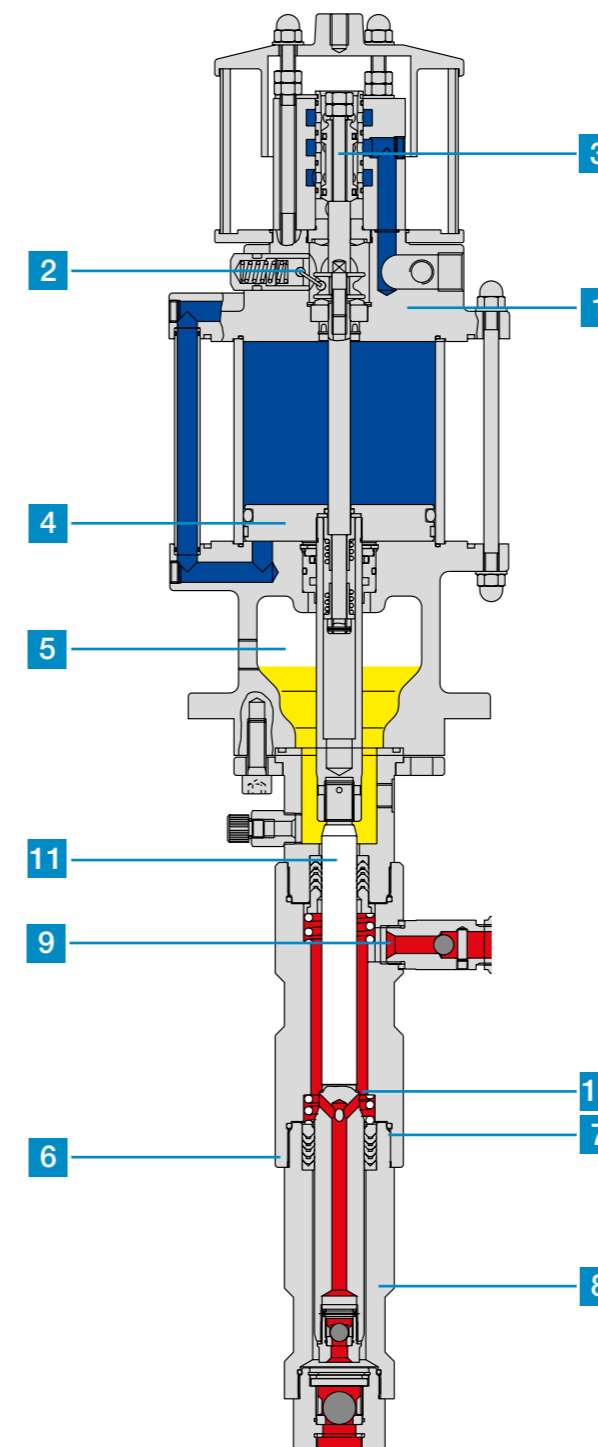
N = Normal steel galvanized, not stainless RS = Stainless steel, rust and acid resistant

Enduring Reliable Robust

Our next larger 1K injection units WIWA INJECT HD 4 and HD 5 are equipped with the high-quality pneumatic WIWA PHOENIX piston pumps.

They convince with above-average service life of all components. During daily operation, selected high-quality materials reduce wear and tear and the resulting repair costs to a

minimum. The INJECT HD series is uniquely versatile thanks to its sophisticated modular conception. If the operating conditions change, the pressure ratio and output can be easily adjusted by replacing only a few components. This avoids additional investments.



DESIGN FEATURES OF HD 4+5

Air motor

- 1 Easy disassembly and assembly due to few components.
- 2 The snips are highly visible and therefore easy to use.
- 3 Pulsation is barely noticeable thanks to the high stroke changeover speed.
- 4 Change of performance by changing the piston diameter of the air motor.

Lubrication chamber

- 5 A closed lubrication chamber separates the air motor and the material pump. The closed design prevents foreign objects such as blasting material from entering the pump system from the outside. The lubricant also prevents paint from drying onto the piston rod and protects the packings.

Material pump

- 6 Fast disassembly and assembly due to direct screw connection. During disassembly, the parts are automatically pulled apart.
- 7 Sealing rings located in front of the threads prevent the threads from sticking and make disassembly easier.
- 8 Less wear due to guided and therefore easy to assemble components.
- 9 Less pressure loss due to large bores and large-volume material passages.
- 10 Better flushing due to large material passages and short packing tensioners.
- 11 Change flow rate and pressure ratio by replacing piston rod and packings.

WIWA INJECT HD 4 / HD 5



Technical data	HD 4	HD 5	HD 5
Output per cycle	43 cm ³	72 cm ³	72 cm ³
Pressure ratio	30:1	32:1	32:1
Max. air inlet pressure	8 bar/116 psi	8 bar/116 psi	8 bar/116 psi
Max. operating pressure	240 bar/ 3480 psi	256 bar/ 3712 psi	256 bar/ 3712 psi
Weight	23 kg	33 kg	33 kg
Material filling	DAS	6 l Funnel	ASL
Order No.	0669679	0669225	0669224

COMPACT AND POWERFUL

The WIWA INJECT HD 4 and HD 5 are characterized by large valves. The spring-loaded packings make them particularly low-wear. The models are available in direct suction, suction line, funnel and with connection to a large container. By adapting an high pressure filter and nozzle, they can also be used as an airless unit.

MATERIALS

- PUR injection foam resins
- PUR Combination Injection Foam Resins
- PUR Combination Injection Resins
- PUR injection resins
- EP injection resins
- Also suitable for processing 2K injection materials with longer pot life.

AREAS OF APPLICATION

- Ideal for filling cracks and cavities
- Subsequent horizontal barrier
- Grouting of injection hoses
- Filling of smaller cavities
- Sewer renovation
- Sealing of joints
- Connecting of broken building elements
- Renovation of floor slabs

BASIC EQUIPMENT

- High pressure pump
- Compressed air regulator
- DAS = Direct suction (INJECT HD 4) or feed tank, approx. 6 Liter (INJECT HD 5), ASL = Suction line (INJECT HD 5)
- High pressure material hose (7,5 m)
- Injection lance with hydraulic mouthpiece
- Bottle of release agent
- Operating manual with spare parts list

- Also suitable for viscous materials

- Fast start-up of the pump with very low air input

- Simple handling, easy operation and simple maintenance of the plant



All material-carrying parts of the pump technology are made of stainless steel.

DAS = Direct suction

ASL = Suction line

Accessories for WIWA INJECT HD 4 / HD 5



Accessories	Order No.	Description
Suction line	0667173	Suction line 25 ltr NW20 / G 3/4" -RS-
Mounting kit funnel black	0666699	Funnel 6 l complete for PHOENIX GX, with cover and suction tube
Mounting kit funnel transparent	0668846	Funnel 6 l complete with lid and sieve, plastic white, non-conductive
Hoses NW6 1/4" 7,5 m	0410780	Material hose NW 6/410-1/4"-7,5 N
Compressed air regulator	0663775	Compressed air regulator G 1/4" complete
Injection lance complete	0641948	Injection lance complete
Ball valve	0646988	Ball valve G 1/4" I/I
Stroke counter	0671687	Stroke counter complete with holder
Injection gun	0668657	Injection gun complete WIWA 500D with adapter 1/4" NPSM (A)
Whip 0,3 m	0631406	Material hose NW 6/410-1/4"-0,30 N
Mounting kit straight lance	0669411	Mounting kit for injection gun pipe straight 600 mm
Mounting kit bent lance	0669410	Mounting kit for injection gun pipe bent 170 mm
Connection nipple	0218820	Double nipple NPS 1/4"-M 10x1
Sliding coupling 90°	0669301	Sliding coupling angular 90°, for nipple M1 Aluminium
Sliding coupling straight	0641199	Sliding coupling straight, for nipple M1 Aluminium
Hydraulic mouthpiece	0411302	Hydraulic mouthpiece M10x1 IG 4 jaws chrome-plated (Replacement seal 0660477)
Quick release pliers	0668559	Quick release pliers R1/4 (A), 4 mm
High pressure filter	0663760	High pressure filter typ 11 GX -RS-
Airless gun WIWA 250 D with swivel joint	0646997	Airless gub WIWA 250D 7/8" Insert



ATEX version: Can be used in explosion-proof areas.

N = Normal steel galvanized, not stainless RS = Stainless steel, rust and acid resistant

The WIWA INJECT HD series at a glance

Larger injection piston pumps available on request.



Technical data	HD 1	HD 2	HD 3	HD 4	HD 5
Output per Cycle	14 cm ³	14 cm ³	27 cm ³	43 cm ³	72 cm ³
Pressure ratio	33:1	33:1	33:1	30:1	32:1
Max. air inlet pressure	8 bar/116 psi	8 bar/116 psi	8 bar/116 psi	8 bar/116 psi	8 bar/116 psi
Max. operating pressure	264 bar/3829 psi	264 bar/3829 psi	264 bar/3829 psi	240 bar/3480 psi	256 bar/3712 psi
Weight	12 kg	16,3 kg	13 kg	23 kg	33 kg
Material filling	1,5 l	6 l	1,5 l	DAS = Direct suction	6 l Funnel ASL = Suction line
Order No.	0644426	0644517	0669680	0669679	0669225 0669224

WIWA PROFIT Piston pumps

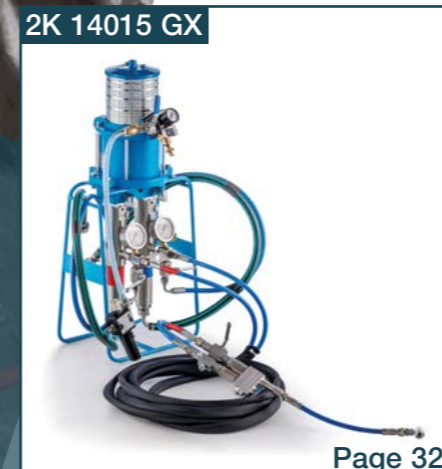
WIWA PHOENIX Piston pumps



2K INJECT SOLUTIONS

The tried and tested WIWA DUOMIX technology guarantees safe working due to the always constant mixing ratio. The great advantage: Sealing takes place from the inside to the outside. The expose of the building is not necessary.

With the WIWA 2K INJECT solutions you can choose from three different air motor sizes (140, 230 and 333). The sizes 230 and 333 can also be configured with different mixing ratios. Depending on the required output, WIWA therefore offers the right device for every construction site.



WIWA INJECT 2K 14025 GX

THE CLASSIC VERSION OPTIMIZED

The WIWA Inject 2K 14025 GX is a pneumatic 2K piston pump in mixing ratio 1:1. The material pumps are connected to the air motor, so that no mixing errors occur due to the positive control. The unit is equipped with a flush pump for quick cleaning of the A and B components for the mixing unit.

Due to its compact design, it is particularly suitable for sealing basements and for use in inaccessible places. All material-carrying parts are made of stainless steel.

- Easy maintenance
- Easy and quick cleaning
- Particularly low wear due to fixed, pre-stressed packings



- Quick commissioning
- High mixing accuracy due to force-controlled material conveying
- Large material inlets and check valves for viscous materials

Technical data	INJECT 2K 14025 GX RS, F
Output per cycle	80 cm ³
Pressure ratio	25:1
Max. air inlet pressure	8 bar/116 psi
Max. operating pressure	200 bar/2900 psi
Mixing ratio	1:1
Version	RS, F
Order No.	0669067

MATERIALS

- 2K injection resins
- Acylate gel
- Injection foams

AREAS OF APPLICATION

- Building pit waterproofing
- Subsoil injection/soil consolidation
- Cavity filling
- Subsequent horizontal barrier
- Sewer rehabilitation
- Curtain injection
- Area injection

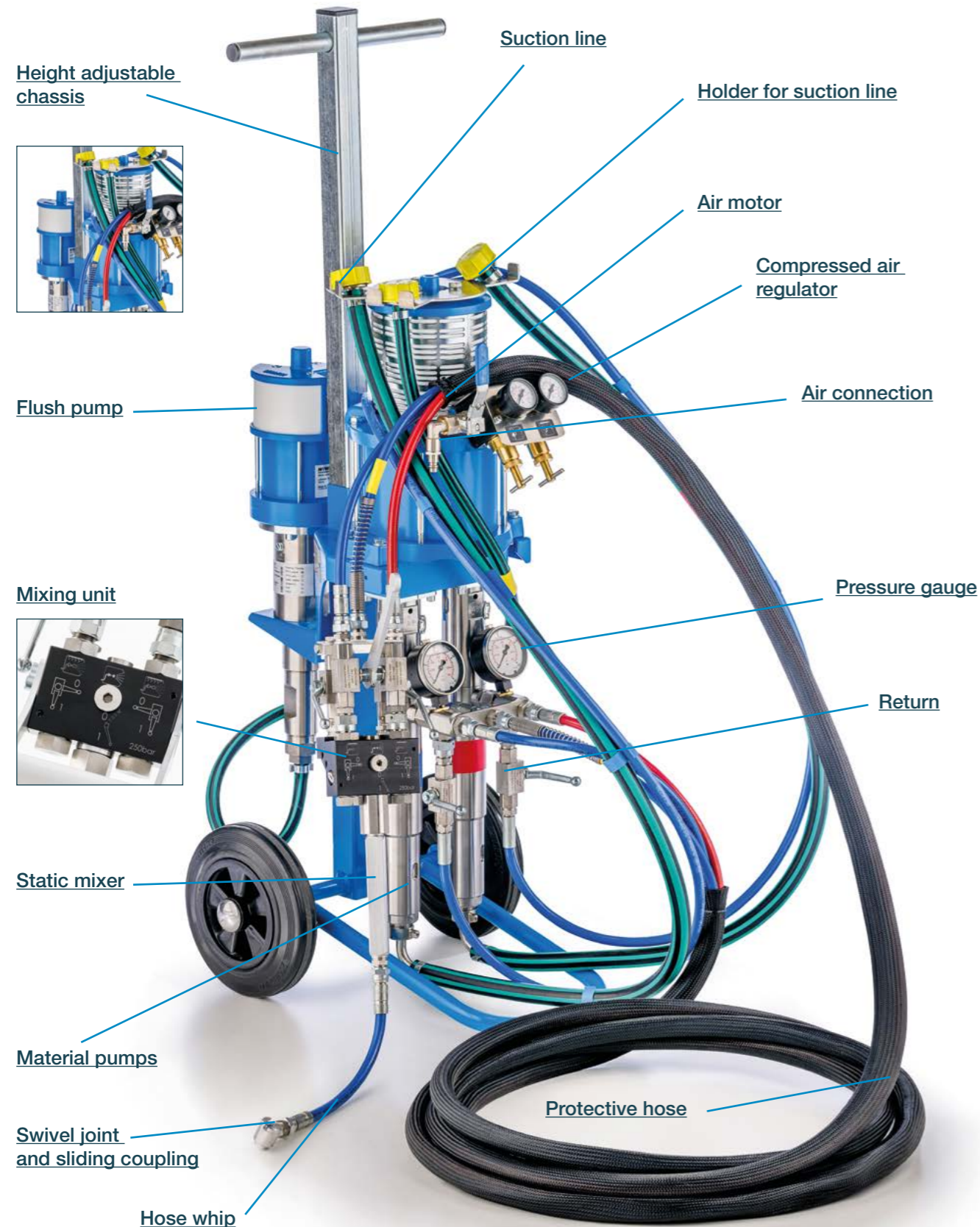
BASIC EQUIPMENT

- 2K high pressure dosing pump
- Maintenance unit
- Suction system
- 2 x Pressure gauge at material outlet
- 3 x Material hoses 7,5 m 1/4"
- Flush pump PROFIT
- Relief for A and B component
- 2K mixing unit with separate flush function for component A and B
- Bottle of release agent
- Operating manual with spare parts list



ATEX version: Can be used in the explosion-proof area.
RS = Stainless steel, rust and acid resistant F = Chassis

Overview and accessories for WIWA INJECT 2K 14025 GX



Accessories	Order No.	Description
Suction line	0669523	Suction line NW13 for double pump injection system - blue
Suction line	0671169	Suction line NW13 for double pump injection system - red
Suction line flush pump	0669524	Suction line NW10 for flushing pump gel system
Mounting kit funnel	0666699	Funnel 6 l complete für PHOENIX GX, with cover and suction tube
Flush pump (only High pressure pump)	0669066	High pressure pump 14.33 RS PROFIT above: acc. PUR / UHMW-PE below: acc. PUR / UHMW-PE
Pressure gauge	0631359	Pressure gauge, lacquered brass, glycerine filling
Double air pressure regulator	0669529	Double air pressure regulator complete G 1/4" 10 bar for gel system
Mounting kit condensate-water separator	0669329	Mounting kit filter for injection system mini
Stroke counter	0670950	Stroke counter complete with holder
Hose package	0669720	Hose package unheated 7,5 m RS 1x 1/4" NPSM blue / 1x 1/4" NPSM red 1x 1/4" NPSM NW4 blue
Hose 7,5 m 1/4" NPSM blue A-component	0613819	Material hose NW6 1/4" NPSM 7,5 m, 410 bar, RS, blue
Hose 7,5 m 1/4" NPSM red B-component	0670246	Material hose NW6 1/4" NPSM 7,5 m, 410 bar, RS, red
Hose 7,5 m 1/4" flush pump	0638610	Material hose NW 4/300-1/4" 7,5 m RS
Mixing unit	0669666	Mixing unit complete with separate flushing device for component A and B for gel system
Extension mixing section	0671626	Extension complete d=9.4 Static mixer for standard mixing unit
Whip 0,3 m	0669787	Material hose NW 6/410-1/4" - 0,30 RS
Gun	0668657	Injection gun complete WIWA 500D with adapter 1/4" NPSM (A)
Connection nipple	0218820	Double nipple NPS 1/4"-M 10x1
Sliding coupling 90°	0669301	Sliding coupling angular 90°, for nipple M1 Aluminium
Sliding coupling straight	0641199	Sliding coupling M10 x 1, straight version
Hydraulic mouthpiece	0411302	Hydraulic mouthpiece M10x1 IG 4 jaws chrome-plated (replacement seal 0660477)
Quick release pliers	0668559	Quick release pliers R1/4 (A), 4 mm



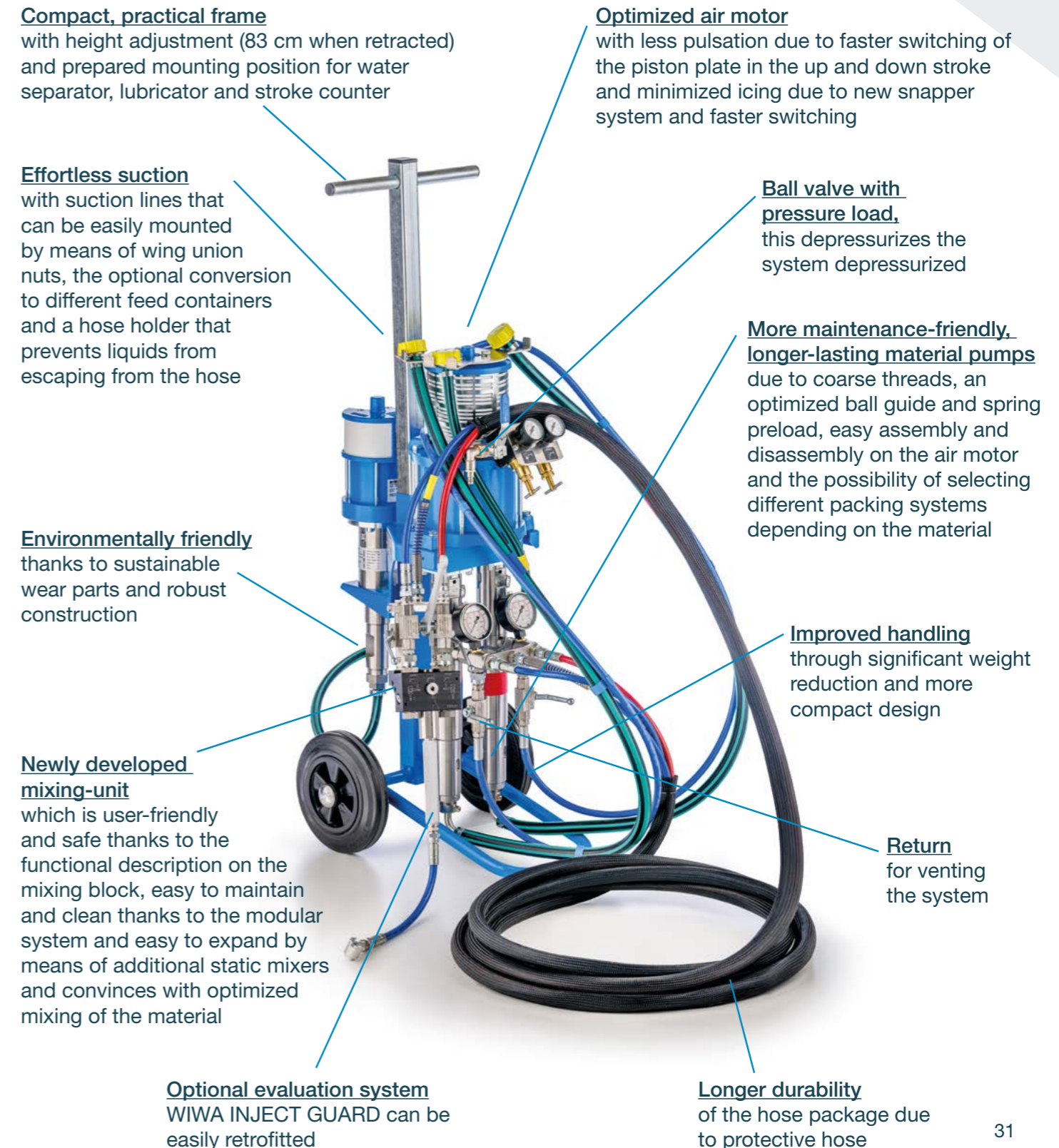
N = Normal steel galvanized, not stainless RS = Stainless steel, rust and acid resistant
The INJECT GUARD evaluation unit can be found on page 66.

WIWA INJECT 2K 14025 VS WIWA INJECT 2K 14025 GX

Technical data	WIWA INJECT 2K 14025	WIWA INJECT 2K 14025 GX
Output per cycle	80 cm ³	
Pressure ratio	25:1	
Max. air inlet pressure	8 bar/116 psi	
Max. operating pressure	200 bar/2900 psi	
Mixing ratio	1:1	
Version	Stainless steel	
Dimensions (depth x width x height in mm)	430 x 519 x 1010	450 x 310 x 830
Weight	55 kg	45 kg



The new features of the WIWA INJECT 2K 14025 GX



- Compact, practical frame** with height adjustment (83 cm when retracted) and prepared mounting position for water separator, lubricator and stroke counter
- Effortless suction** with suction lines that can be easily mounted by means of wing union nuts, the optional conversion to different feed containers and a hose holder that prevents liquids from escaping from the hose
- Environmentally friendly** thanks to sustainable wear parts and robust construction
- Newly developed mixing-unit** which is user-friendly and safe thanks to the functional description on the mixing block, easy to maintain and clean thanks to the modular system and easy to expand by means of additional static mixers and convinces with optimized mixing of the material
- Optional evaluation system** WIWA INJECT GUARD can be easily retrofitted
- Optimized air motor** with less pulsation due to faster switching of the piston plate in the up and down stroke and minimized icing due to new snapper system and faster switching
- Ball valve with pressure load**, this depressurizes the system depressurized
- More maintenance-friendly, longer-lasting material pumps** due to coarse threads, an optimized ball guide and spring preload, easy assembly and disassembly on the air motor and the possibility of selecting different packing systems depending on the material
- Improved handling** through significant weight reduction and more compact design
- Return for venting the system**
- Longer durability** of the hose package due to protective hose

WIWA INJECT 2K 14015 GX



OUR COMPACTS

The small and compact WIWA INJECT 2K 14015 GX offers more flow rate due to the short design of the material pump. This makes it a strong alternative for 1:1 reaction resins and foams. The force-controlled system makes it process-safe even under hard conditions. As standard, it is equipped without a flush pump and the mixing unit is flushed via the A-component.

- Large material inlets and check valves for viscous materials
- Easy maintenance
- Easy and fast cleaning

MATERIALS

- 2K injection resins
- Polyurethane resins
- Silicate resins
- PUR injection foam resins
- PUR combination injection resins,
- PUR injection resins
- PUR cast foam resins
- Injection foams

BASIC EQUIPMENT

- 2K high pressure dosing pump
- Maintenance unit
- Suction system
- 2 x Pressure gauge at material outlet
- 2 x Material hoses 7,5 m 1/4"
- Relief for A and B component

2K mixing unit with flush function via component A consisting of:

- 2 x ball valve
- 2 x Large diameter check valves
- Mixing tube with 6 x grid mixer
- Whip 0,3 m
- Sliding coupling and hydraulic mouthpiece
- Bottle of release agent
- Operating manual with spare parts list

AREAS OF APPLICATION

- Building pit waterproofing
- Subsoil injection/soil consolidation
- Cavity filling
- Subsequent horizontal barrier
- Sewer rehabilitation
- Surface and curtain injection
- 2K crack injection

Technical data	INJECT 2 K 14015 GX	INJECT 2 K 14015 GX
Output per cycle	144 cm ³	144 cm ³
Pressure ratio	15:1	15:1
Max. air inlet pressure	8 bar/116 psi	8 bar/116 psi
Max. operating pressure	120 bar/1740 psi	120 bar/1740 psi
Weight	26 kg	29 kg
Version	N, G	N, F
Order No.	0669323	0670489



Chassis, height adjustable_



Chassis, height adjustable



Readable injection pressures for both components

- Handy and compact

- Quick commissioning

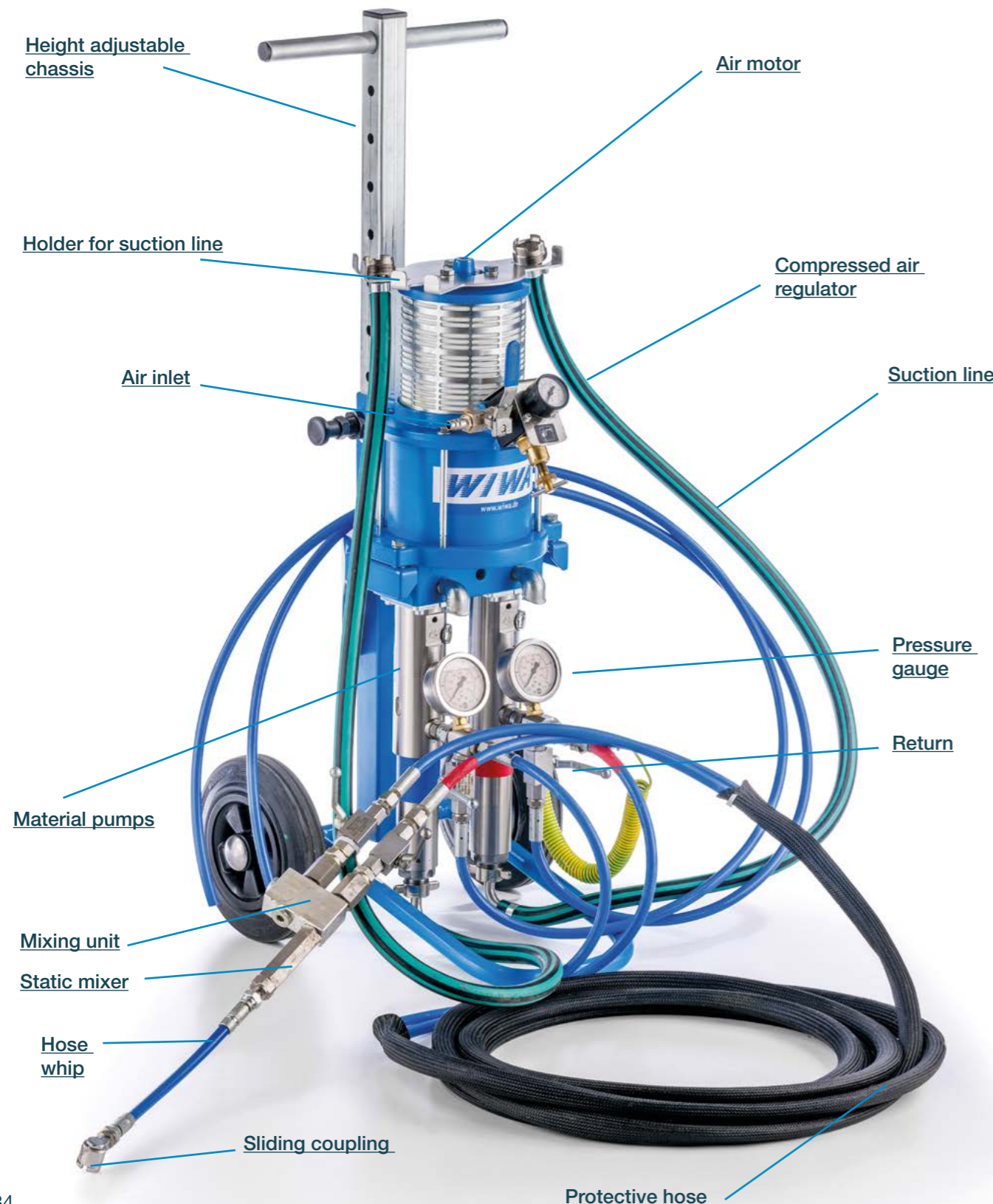
- High mixing accuracy due to force-controlled material conveying



ATEX version: Can be used in the explosion-proof area.

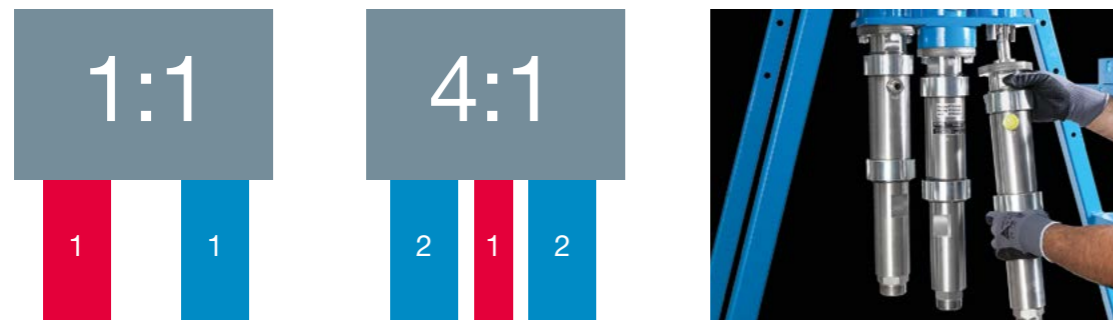
N = Normal steel galvanized, not stainless F = Chassis G = Frame

Accessories for WIWA INJECT 2K 14015 GX



Accessories	Order No.	Description
Suction line	0669523	Suction line NW13 for double pump injection system - blue
Suction line	0671169	Suction line NW13 for double pump injection system - red
Mounting kit funnel	0670546	Mounting kit feed tank for Inject
Compressed air regulator	0663775	Compressed air regulator G 1/4" complete
Mounting kit oiler / antifreeze	0671029	Mounting kit oiler for injection system
Mounting kit condensate-water separator	0668329	Mounting kit filter for injection system mini
Stroke counter	0670950	Stroke counter complete with holder
Pressure gauge	0655128	Pressure gauge V2A / neutral glycerine filling
Hose package	0669539	Hose package unheated 7,5 m RS 1x 1/4" NPSM blue / 1x 1/4" NPSM red
Hose 7,5 m 1/4" NPSM blue A-component	0613819	Material hose NW6 1/4" NPSM 7,5 m, 410 bar, RS, blue
Hose 7,5 m 1/4" NPSM red B-component	0670246	Material hose NW6 1/4" NPSM 7,5 m, 410 bar, RS, red
Mixing unit 2K N	0669555	Mixing unit G1/4" - DN6 - with static mixer
Ball valve for mixing unit 2K N	0646988	Ball valve G 1/4" I/I
Extension mixing section	0671626	Extension complete d=9.4 Static mixer for standard mixing unit
Mixing element	0645308	Mixing element plastic
Whip 0,3 m	0669787	Material hose NW 6/410-1/4" - 0,30 RS
Connection nipple	0218820	Double nipple NPS 1/4"-M 10x1
Sliding coupling 90°	0669301	Sliding coupling angular 90°, for nipple M1 Aluminium
Sliding coupling straight	0641199	Sliding coupling M10 x 1 straight version
Hydraulic mouthpiece	0411302	Hydraulic mouthpiece M10x1 IG 4 jaws chrome-plated (Replacement seal 0660477)
Gun	0668657	Injection gun complete WIWA Gun 250 D
Quick release pliers	0668559	Quick release pliers R1/4 (A), 4 mm

The simple principle: individually flexible



With just a few actions it is possible to modify the system for almost all mixing ratios within a range of 1:1 to 10:1 (also in the decimal range, such as 5.6:1) by exchanging the hardener pump.

Simple Flexible Assured

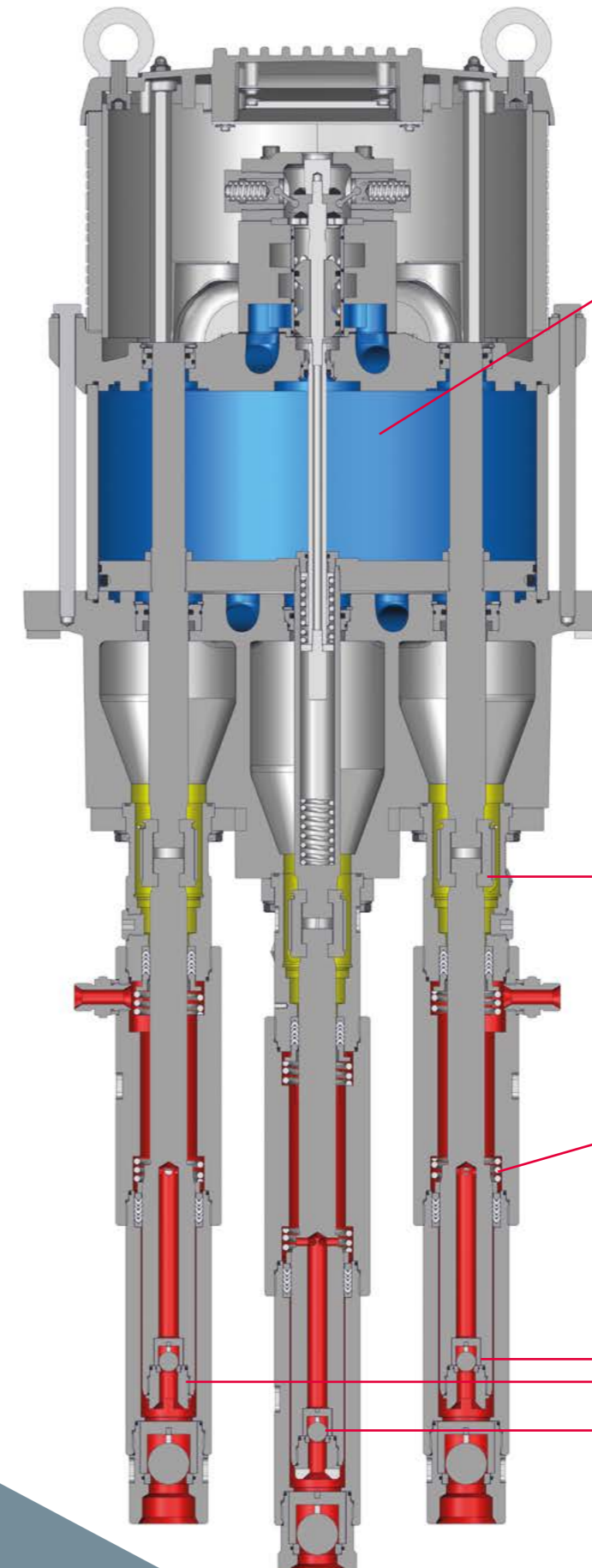
The guarantee for precise proportioning and variable mixing.

Flexibel: WIWA DUOMIX – the world's only 2K system that offers you the flexibility of a variably adjustable 2K system and the assurance of a fixed mixing ratio, and which can be used as a 3K system.

Simple: With just a few actions, you set the DUOMIX to the desired mixing ratio.

Time-consuming ratio checking and adjustment are superfluous, and accidental adjustment is impossible.

Assured: The fixed mixing ratio provides you with process assurance. Accidental adjustment and resultant faulty coatings are impossible.



THE BASIC MODULES

- 1 Air motor**
The air motor with de-icing system and maintenance unit in robust metal design. It is equipped with a piston rod and two guide axes, which are guided in the upper and lower section. This guarantees the non-tipping direct drive of all material pumps, whilst the wear of packing and piston rods is also minimised.
- 2 Material pump combination**
If new fields of activity should require alternative performance parameters, this is possible by only replacing the material pumps.
- 3 A closed flushing media chamber**
separates the air motor and material pumps. The flushing media prevents paint encrustation on the piston rods and protects the packing due to its lubricating effect.
- 4 All material pumps are equipped with fixed packing**, which is automatically adjusted with packing tensioners. Manual adjustment of the packing is not necessary.



Suction

- Suction line for small containers up to 200 l drum
- Suction line for IBC containers
- Suction line for 68 l plastic barrel with frame
- Feed pumps 200 l drum (quantity 2)

Version

- Chassis
- Frame standing or lying

Dosing pump

- INJECT 2K 230030 N GS
- INJECT 2K 230030 N F
- INJECT 2K 333037 GX N GS
- INJECT 2K 333037 GX N F
- INJECT 2K 230030 RS GS
- INJECT 2K 230030 RS F
- INJECT 2K 333018 GX RS GS

Hose package

- 3/8" with flushing RS
- 1/2" with flushing RS
- 3/8" with flushing Inject Guard RS
- 1/2" with flushing Inject Guard RS
- 3/8" without flushing RS
- 1/2" without flushing RS
- 3/8" without flushing Inject Guard RS
- 1/2" without flushing Inject Guard RS

Mixing units

- For Inject 2K 230
- Standard 2K 3/8" N
 - Standard 2K 3/8" with flushing RS
 - Inject Guard with flushing 3/8" RS
- For Inject 2K GX 333
- Standard 2K 1/2" N
 - Standard 2K 1/2" with flushing RS
 - Inject Guard 2K 1/2" with flushing RS

Guns

- Injection gun
- Injection lance (straight/bent)

Monitoring

- INJECT GUARD
- Stroke counter

Flush pump for version N

Protective grille for frame versions

Material flow heater



 Main components
 Versions

 Accessories
 Options

i If you have any questions about your individual configuration please do not hesitate to contact us.
 N = Normal steel galvanized, not stainless
 RS = Stainless steel, rust and acid resistant

WIWA INJECT 2K 230



ROBUST, POWERFUL, SAFE

The WIWA INJECT 2K 230 is our versatile 2K injection system with delivery rates of up to 40 l/minute and a maximum operating pressure of 240 bar. Due to the positive control and always the same switching points, you get the perfect dosage. In addition to the standard mixing ratio of 1:1, over 100 other mixing ratios are possible by exchanging the material pumps. Suitable for aqueous as well as viscous materials.

- Fast commissioning, easy maintenance, easy and quick cleaning
- Long hose lengths can be adapted
- Large flow rate
- Large material inlets and check valves for viscous materials
- Low wear due to fixed packings
- Large selection of different suction systems configurable



Version frame standing



Version frame lying



Version Chassis

MATERIALS

N-Version:

- 2K injection resins
- Polyurethane resins
- Silicate resins
- PUR injection foam resins
- PUR combination injection resins
- PUR injection resins
- PUR casting foam resins
- Injection foams

RS-Version:

- Acrylic gels
- 2K injection materials
- Injection foams

AREAS OF APPLICATION

- Building pit waterproofing
- Subsoil injection/soil consolidation
- Cavity filling
- Subsequent horizontal barrier
- Sewer rehabilitation
- Ideal for use in tunnels and underground for void filling and anchor bonding.

BASIC EQUIPMENT

- 2K high pressure dosing pump in steel galvanized or stainless steel
- Maintenance unit
- Chassis or frame standing
- 2x Pressure gauge at material outlet
- Relief for A and B component
- Operating manual with spare parts list
- The stainless steel version includes a flush pump PROFIT

Technical data	INJECT 230030	INJECT 230030	INJECT 230032	INJECT 230030	INJECT 230030	INJECT 230040
Output per cycle	194 cm ³	194 cm ³	180 cm ³	194 cm ³	194 cm ³	144 cm ³
Pressure ratio	30:1	30:1	32:1	30:1	30:1	40:1
Max. air inlet pressure	8 bar/ 116 psi	8 bar/ 116 psi	8 bar/ 116 psi	8 bar/ 116 psi	8 bar/ 116 psi	6 bar/ 87 psi
Max. operating pressure	240 bar/ 3480 bar	240 bar/ 3480 bar	256 bar/ 3712 psi	240 bar/ 3480 bar	240 bar/ 3480 bar	240 bar/ 3480 bar
Mixing ratio	1:1	1:1	4:1	1:1	1:1	1:1
Version	N, GS	N, F	RS; GS	RS, F	RS, GS	RS, GL*
Order No.	0669709	0669708	0669710	0669711	0669712	0669713
Order No. complete unit (complete unit with ASL, hose package, mixing unit)	on request	0669992	on request	0669993	on request	on request

i ATEX version: Can be used in the explosion-proof area.
 N = Normal steel galvanized, not stainless RS = Stainless steel, rust and acid resistant
 F = Chassis G = Frame standing * Without flush pump.

Accessories for WIWA INJECT 2K 230



Accessories	Order No.	Description
Suction line up to 200 l drum	0669820	Suction line complete NW25 - PVC clear - G1 1/4" > Small/large containers
Suction line IBC	0669847	Suction line complete NW25 - PVC clear - G1 1/4" -> S60 x 6 (IBC)
Suction line for 68 l plastic barrel with frame	0670111	Feed complete (1:1) with return, frame and 2 x 68 l drum, MP connection: 1 1/4"
Feed pumps 200 l drum (quantity 2)	0663455	Feed pump 146.03,7 N complete with connection hose 2,2 m
Flush pump PROFIT for N Version	0669718	Flush pump small containers 33:1 RS complete with DLR for Inject 230/333 (1 x Output)
Protective grille for frame versions	0669630	Protective grille complete for mining system (width 635 mm)
Attachment kit condensate-water separator	0670850	Attachment kit filter for injection system (with air motor 230)
Stroke counter	0646640	Stroke counter complete with holder
INJECT GUARD	0669958	Electronic recording unit for 2K Inject systems
Hose package NW10 - (3/8") RS with flushing	0671007	Hose package 15m unheated, 1 x NW 10 330 bar blue PA -RS- G3/8" (A-Comp.), 1 x NW 10 330 bar red PA -RS- G3/8" (B-Comp.), 1 x NW 6 410 bar blue PA -RS- 1/4" NPSM (flush), Protective hose
Hose package NW10 - (3/8") RS with flushing for INJECT GUARD (230er)	0671008	Hose package 15 m unheated, 1 x NW 10 330 bar blue PA -RS- G3/8" (A-Comp.), 1 x NW 10 330 bar red PA -RS- G3/8" (C-Komp.), 1 x NW 6 410 bar blue PA -RS- 1/4" NPSM (flush) with cable for sensor on the mixing unit
Hose package NW10 - (3/8") RS	0669766	Hose package 15 m unheated, 1 x NW 10 330 bar blue PA -RS- G3/8" (A-Comp.), 1 x NW 10 330 bar red PA -RS- G3/8" (B-Comp.), Protective hose
Mixing unit Standard 2K 3/8" N	0669748	Mixing unit complete -N- G3/8" - DN11 with hose and static mixer without flushing device for 2K injection system
Mixing unit Standard 2K 3/8" RS with flushing	0669611	Mixing unit complete with hose, static mixer, flushing device for component A and B for injection system
Mixing unit Inject Guard with flushing 3/8" RS	0669600	Mixing unit complete with static mixer and separate rinsing with volume recording for components A and B for 2K injection system

WIWA INJECT 2K 333 GX

IDEAL FOR LARGE CONSTRUCTION SITES

The WIWA INJECT 333 GX is the most powerful 2-component injection system in the WIWA portfolio. In addition to the proven controlled DUOMIX system and the optimized, low icing 333 GX air motor, it can pump 70 l/minute of material. Thanks to its modular design up to 100 different mixing ratios can be generated by exchanging the material pumps. Even hose lengths over 200 m can be adapted. Therefore, it is excellently suited for large construction sites, in tunnels and underground. Both watery and viscous materials can be processed.

- Large material inlets and check valves for viscous materials
- Low wear due to fixed packings
- Wide range of different suction systems configurable



Version frame standing



Version frame standing



Suction line for 68 l plastic barrel with frame

MATERIALS

N-Version:

- 2K injection resins
- Polyurethane resins
- Silicate resins
- PUR injection foam resins
- PUR combination injection resins
- PUR injection resins
- PUR Casting Foam Resins
- Injection foam

RS-Version:

- Acrylic gels
- 2K injection materials
- Injection foams

AREAS OF APPLICATION

- Building pit waterproofing
- Subsoil injection/soil consolidation
- Cavity filling
- Subsequent horizontal barrier
- Sewer rehabilitation
- Surface and curtain injections

BASIC EQUIPMENT

- 2K high pressure dosing pump
- Maintenance unit
- Frame standing or Chassis
- 2x Pressure gauge at material outlet
- Relief for A and B component
- Operating manual with spare parts list
- The stainless steel version includes a flush pump PROFIT

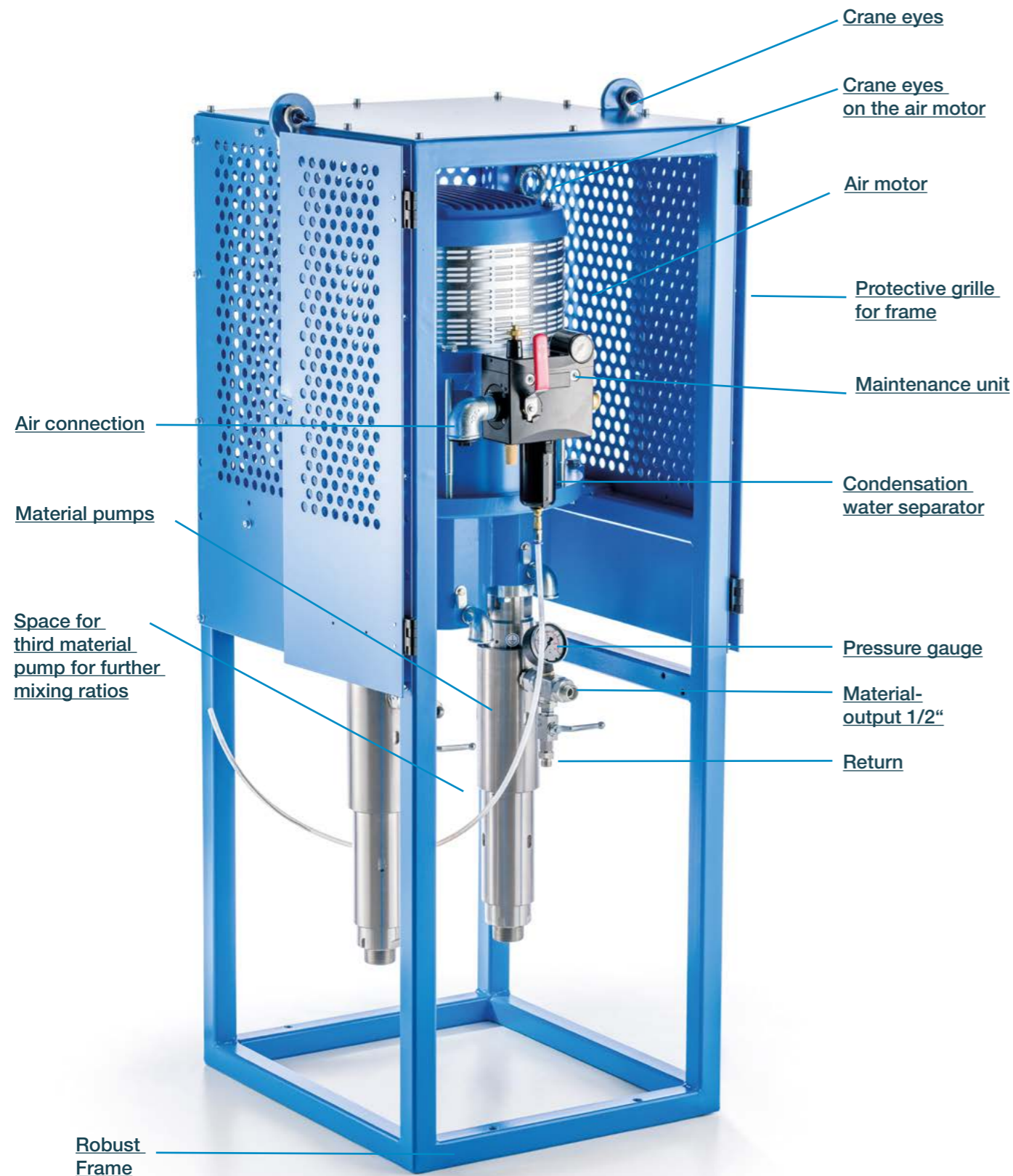
Technical data	INJECT 333037 GX	INJECT 333037 GX	INJECT 333037 GX	INJECT 333037 GX	INJECT 333018 GX
Output per cycle	536 cm ³	536 cm ³	536 cm ³	536 cm ³	1100 cm ³
Pressure ratio	37:1	37:1	37:1	37:1	18:1
Max. air inlet pressure	8 bar/116 psi	8 bar/116 psi	8 bar/116 psi	8 bar/116 psi	8 bar/116 psi
Max. operating pressure	296 bar/4293 psi	296 bar/4293 psi	296 bar/4293 psi	296 bar/4293 psi	144 bar/2088 psi
Mixing ratio	1:1	1:1	1:1	1:1	1:1
Version	N, F	RS, F	N, GS	RS, GS	RS, GS
Order No.	0669705	0670146	0669706	0670129	0669707

• Large output volume

• Long hose lengths can be adapted

• Quick start-up, easy maintenance, easy and quick cleaning

Accessories for WIWA INJECT 2K 333 GX



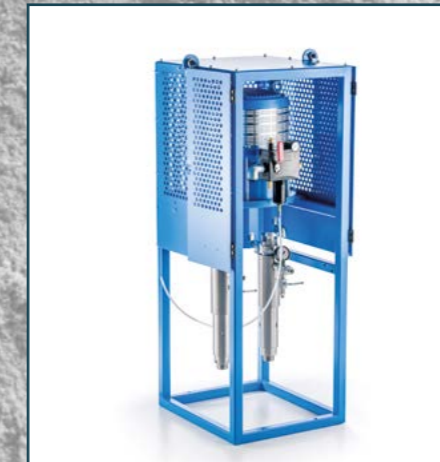
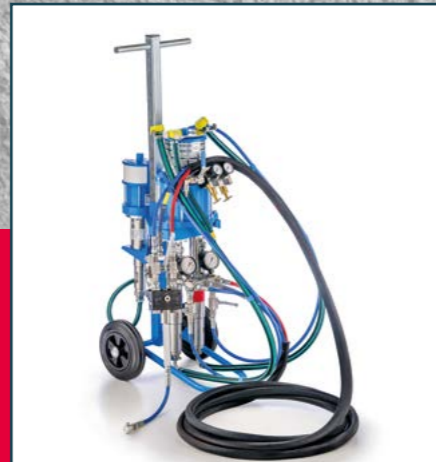
Accessories	Bestell-nummer	Description
Suction line up to 200 l drum	0669846	Suction line complete NW25 - PVC clear - G1 1/2" --> Small/large containers
Suction line IBC	0669847	Suction line complete NW25 - PVC clear - G1 1/2" --> S60x6 (IBC)
Suction line for 68 l plastic barrel with frame	0670115	Feed complete (1:1) with return, frame and 2 x 68 l drums MP connection: 1 1/2"
Flush pump PROFIT	0669718	Flush pump small containers 33:1 RS complete with DLR for Inject 230/333 (1 x Output)
Protective grille for frame versions	0669202	Protective grille complete for mining plant (width 535 mm)
Stroke counter	0646640	Stroke counter complete with holder
Mounting kit condensate-water separator	0670850	Mounting kit filter for injection system (with air motor 230)
Hose package NW13 - (1/2") with flushing	0669764	Hose package 15 m unheated, 1 x NW 13 470 bar blue PA -RS- G1/2" (A-Comp.), 1 x NW 13 470 bar red PA -RS- G1/2" (B-Comp.), 1 x NW 6 410 bar blue PA -RS- 1/4" NPSM (flush), Protective hose
Hose package NW13 - (1/2")	0669767	Hose package 15 m unheated, 1 x NW 13 470 bar blue PA -RS- G1/2" (A-Comp.), 1 x NW 13 470 bar red PA -RS- G1/2" (B-Comp.), Protective hose
Mixing unit Standard 2K 1/2"	0669620	Mixing unit G1/2" - DN12 - with static mixer
Mixing unit Standard 2K 1/2" with flushing RS	0670316	Mixing unit complete with hose, static mixer and flushing device for components A and B for injection system



ATEX version: Can be used in the explosion-proof area.
 N = Normal steel galvanized, not stainless RS = Stainless steel, rust and acid resistant

The WIWA 2K INJECT series at a glance

Our systems 2K 230 and 2K 333 GX are also available in other mixing ratios.



Technical data

2K 14025 GX

2K 14015 GX

2K 230

2K 333 GX

Technical data	2K 14025 GX	2K 14015 GX		2K 230	2K 333 GX
Output per cycle	80 cm ³	144 cm ³	144 cm ³	144 cm ³ - 194 cm ³	536 cm ³ - 1100 cm ³
Pressure ratio	25:1	15:1	15:1	40:1 / 30:1	37:1 / 18:1
Max. air inlet pressure	8 bar/116 psi	8 bar/116 psi	8 bar/116 psi	8 bar/116 psi	8 bar/116 psi
Max. operating pressure	200 bar/ 2900 psi	120 bar/ 1740 psi	120 bar/ 1740 psi	240 bar - 256 bar 3480 psi - 3712 psi	144 bar - 256 bar 2088 psi - 3712 psi
Weight	45 kg	26 kg	29 kg	120 kg up to 175 kg	185 kg up to 265 kg
Mixing ratio	1:1	1:1	1:1	1:1/4:1	1:1
Version	RS, F	N, G	N, F	at page 40	at page 46
Order No.	0669067	0669323	0670489	at page 40	at page 46

ATEX version:

Can be used in explosion-proof areas.

WIWA 2K FOAM/PU SOLUTIONS

The versatile WIWA technology is not only suitable for sealing, but also ideal for foaming. On the following pages you will find heatable WIWA systems for the processing of polyurea, PUR and injection foams.

The proven and patented WIWA heater heats the material gently and particularly economically. Only the required quantity of the individual components is efficiently and carefully brought up to the processing temperature in an extremely short time.

SPF 280



Page 52

DUOMIX PU 540



Page 56

DUOMIX PU HYDRAULIK



Page 58

WIWA SPF

SIMPLICITY AT ITS BEST!

Spray foam applications redefined. WIWA DUOMIX SPF sprayers are user-friendly. Direct display of all measuring devices, simple software settings. Connect. Switch on. Spray. Job done.

MATERIALS

- Polyurea
- PUR foams

AREAS OF APPLICATION

- Bridge waterproofing
- Concrete and building restoration
- Insulation of cavities
- Foundations
- Roof insulation and waterproofing
- Pools, natural swimming pools
- Pond linings, fish farms
- Drinking water reservoirs
- Catch basins (also chemical resistant)
- Sewage treatment plants
- Industrial floors and walls
- Hangar floors
- Parking decks
- Sound insulation of track beds
- Rail vehicle construction
- Ship and ferry decks
- Container construction
- Pipes and pipelines
- Wind energy
- Submarines
- Buoys



User friendly control



Innovative interface with easy operation

- Powerful air motor
- Individual heating for ISO, POLY and hose
- Direct display of all measuring devices, simple software settings

WIWA SPF

Simplicity, perfection, freedom

With exactly the WIWA DUOMIX SPF 280 equipment that best supports your project. Depending on how much pressure your material needs to be processed with or how much output you require, we offer two different types of equipment with the SPF 240 or 280. With both models, you can choose between the mobile frame and the stationary stand frame. For the optimum temperature, the POLY and ISO components can be heated together in the hose package and separately beforehand using material flow heaters.



i F = Cart GS = Stand frame
 The full equipment additionally includes the WIWA PU GUN 4040 with case, the hose package as well as the feed pumps including connecting hoses and attachment kit for the corresponding holder.

Model	Base (A) - POLY	Hardener (B) - ISO	Pressure ratio	Mixing ratio	Output per cycle	Max. hose length	Max. air inlet pressure	Max. operating pressure	Max. material temperature	Weight	Equipment	Order-No.
SPF 240	43 cm ³	43 cm ³	25:1	1:1	86 cm ³	64 m	8 bar/116 psi	200 bar/2900 psi	80 °C	77 kg	Basic equipment (F)	0671177
SPF 240	43 cm ³	43 cm ³	25:1	1:1	86 cm ³	64 m	8 bar/116 psi	200 bar/2900 psi	80 °C	67 kg	Basic equipment (GS)	0671176
SPF 240	43 cm ³	43 cm ³	25:1	1:1	86 cm ³	64 m	8 bar/116 psi	200 bar/2900 psi	80 °C	118 kg	Full equipment (F)	0671179
SPF 240	43 cm ³	43 cm ³	25:1	1:1	86 cm ³	64 m	8 bar/116 psi	200 bar/2900 psi	80 °C	108 kg	Full equipment (GS)	0671178
SPF 280	72 cm ³	72 cm ³	15:1	1:1	144 cm ³	64 m	8 bar/116 psi	128 bar/1856 psi	80 °C	81 kg	Basic equipment (F)	0668976
SPF 280	72 cm ³	72 cm ³	15:1	1:1	144 cm ³	64 m	8 bar/116 psi	128 bar/1856 psi	80 °C	67 kg	Basic equipment (GS)	0668975
SPF 280	72 cm ³	72 cm ³	15:1	1:1	144 cm ³	64 m	8 bar/116 psi	128 bar/1856 psi	80 °C	122 kg	Full equipment (F)	0668978
SPF 280	72 cm ³	72 cm ³	15:1	1:1	144 cm ³	64 m	8 bar/116 psi	128 bar/1856 psi	80 °C	110 kg	Full equipment (GS)	0668977

WIWA DUOMIX PU 540



The WIWA DUOMIX PU 540 is another member of the DUOMIX PU series. This pneumatic, compact, mobile and versatile unit processes almost all polyurethane foams and fast reacting polyurea.

The clearly structured design of the new WIWA DUOMIX PU 540 allows the user to work quickly and conveniently. The new design of the dosing pumps ensures an even better material flow. The large output of the WIWA DUOMIX PU 540 makes it optimally suited for high application rates.

Feed pumps can be easily transported and stored in the integrated holder. The change from the stand frame to the cart can be realized within minutes by means of a conversion kit. The WIWA DATALOGGER offers an ideal supplement for quality management. All processing parameters, setting values and the alarm history can be read out and saved customer-specifically with commercially available smartphones, tablets or PCs via Wi-Fi.

MATERIALS

- Polyurethane foams
- Polyurea
- Injection foams

PROTECT · SEAL · INSULATE

The mixing ratios can be changed by replacing the material pumps.

OPTIONAL ACCESSORIES

- Hose holder
- Holder for feed pumps
- Conversion kit to cart
- WIWA DATALOGGER
- Feed pump 146.03,7 N-L complete with connecting hose 2,2 m and suction angle
- Membrane pump G 1/2" complete with suction pipe, suction angle and connecting hose 2.2 m

AREAS OF APPLICATION

- Waste water treatment plants
- PU tank coatings and linings
- Pipes and pipelines
- Manholes and sewers
- Floors and parking decks
- Rail vehicles and covering of track beds
- Fuel storage and containment systems
- Desalination plants
- Roof coatings
- Chemical protection (biogas reactors, sewage treatment plants)
- Flat roof waterproofing

Technical data	DUOMIX PU 540
Output per cycle	264 cm ³
Theoretical pressure ratio	31:1
Mixing ratio	1:1 (others on request)
Max. air inlet pressure	8 bar/116 psi
Max. operating pressure	248 bar/3596 psi
Material flow heater	12 kW
Heating capacity hose package	47 kW
Max. hose length	138 m
Voltage / phases	400 V/3 P
Max. power consumption	16.5 kW
WIWA DUOMIX PU 540	
Description	Order No.
DUOMIX PU 540 (without accessories)	
230 V, 3-Phases, 60 Hz	0665041
400 V, 3-Phases, 50 Hz	0664250
DUOMIX PU 540 incl. 18 m hose package, PU GUN 4040 spray gun	
230 V, 3-Phases, 60 Hz	0665040
400 V, 3-Phases, 50 Hz	0664300

• Optimal for high application rate

• More than 200 different mixing ratios can be realized within minutes

• Processes almost all polyurethane foams and fast reacting polyurea

WIWA DUOMIX PU HX

PROTECT · SEAL · INSULATE

The WIWA DUOMIX PU HX completes our DUOMIX PU series with a hydraulic drive. This compact, mobile and versatile unit processes almost all polyurethane foams and fast reacting polyurea.



The WIWA DUOMIX PU HX is extremely quiet and allows the user to work comfortably without pulsation.

It is equipped with an energy-saving mode as standard. This detects the system status during coating and automatically switches off consumers that are not currently required.

The new design of the dosing pumps ensures even better material flow. The large output of the WIWA DUOMIX PU HX makes it ideal for high application rates.

Feed pumps can be easily transported and stored in the integrated holder. The change from stand frame to chassis can be realized within minutes by a conversion kit.

The WIWA DATALOGGER offers an ideal supplement for quality management. All processing parameters, setting values and the alarm history can be read out and saved customer-specifically with commercially available smartphones, tablets or PCs via Wi-Fi.

MATERIALS

- Polyurethane foams
- Polyurea
- Injection foams

AREAS OF APPLICATION

- Sewage treatment plants
- Pipe and tank coatings
- Pipes and pipelines
- Manholes and sewers
- Parking decks
- Fuel storage and retention systems desalination plants
- Roof coatings
- Ship and ferry decks
- Shipbuilding
- Chemical protection (biogas reactors, sewage treatment plants)
- Machine and vehicle construction
- Water parks and playgrounds

Technical data	DUOMIX PU HX
Delivery rate per cycle	194 cm ³
Max. output	6,6 l/min.
Mixing ratio	1:1
Max. air inlet pressure	8 bar/116 psi
Max. operating pressure	250 bar/3625 psi
Material flow heater	12 kW
Max. heating capacity hose package	47 W/m
Max. Hose length at 400 V	138 m
Heating power hydraulic unit	4 kW/5 Ps
Voltage	230-400 V
Max. power consumption	23 kW
WIWA DUOMIX PU HX	
Description	Order No.
DUOMIX PU HX Pumpe (without accessories)	
230 V, 3-Phases, 60 Hz	0664247
380 V, 3-Phases, 60 Hz	0664258
400 V, 3-Phases, 50 Hz*	0664150
DUOMIX PU HX pump incl. 18 m hose package, PU GUN 4040 spray gun	
230 V, 3-Phases, 60 Hz	0664421
380 V, 3-Phases, 60 Hz	0664200
400 V, 3-Phases, 50 Hz*	0664210

• Equipped with an energy saving mode as standard

• More than 200 different mixing ratios possible

• Processes almost all polyurethane foams and fast reacting polyurea



* For 400 V versions, neutral and ground wires (five wires total) are required. Note: In the standard version, the WIWA DUOMIX PU HX is only suitable for 50 Hz. 60 Hz versions are also available on request.



WIWA INJECT ACCESSORIES

In analogy to the modular design of our injection equipment, we also offer an extensive range of high-quality accessories. You will find a selection on the following pages:

From the agitator to our evaluation unit INJECT GUARD to the economical material fluid heater, the mixing unit to the injection gun and a large selection of packers.

WIWA offers the right, durable equipment for every challenge.



WIWA INJECT AGITATORS



Agitator for 20 l drum
Order No. 0665248



Agitator for 216 l drum
Order No. 0665618



Agitator for 216 l drum
Order No. 0630657



Agitator for 216 l drum
Order No. 0665721

TAILOR-MADE SOLUTIONS FOR ALL MATERIALS TO BE AGITATED

Return-on-investment and reliability of agitators always come first, regardless of size and complexity. From the broad portfolio of our highly efficient mixers, you will always find the optimal mixing system for almost every mixing task.

We are continuously working on expanding our product range. The regular influx of increased performance requirements compels us to further optimize our products. All wetted parts are made of stainless steel.

Pneumatic tank agitators				
	25 l feed tank	50 + 70 l feed tank	95 l container / 30 l drum	
Agitator	Propeller	Propeller	Inclined blade	Inclined blade
Agitator diameter (mm)	150	150	300	300
Speed (rpm)	max. 170	max. 170	max. 170	max. 220
Power (watt)	400	400	400	700
ATEX (inside + outside) zone 1**	-	-	0666352	0666063
ATEX (inside) zone 0* ATEX (outside) zone 1**	0665088	0665089	0665200	0666064

Pneumatic tank agitators

	216 l drum			1000 l IBC		1000 l container
Agitator	Inclined blade	Inclined blade	Disc	Inclined, blade hinged	Disc	Inclined blade
Agitator diameter (mm)	400	400	260	350/140	500	400
Speed (rpm)	max. 170	max. 220	max. 170	max. 220	max. 220	max. 220
Power (watt)	400	700	400	700	700	700
ATEX (inside + outside) zone 1**	0666354	0666061	-	0666065	-	-
ATEX (inside) zone 0* ATEX (outside) zone 1**	0663560	0666062	0660506	0666066	0663028	0665053

Pneumatic tank agitators

	20 l drum	20 l + 30 l Small containers	216 l drum	216 l drum bung hole	
Agitator	Helix spiral	Propeller	Propeller	Corkscrew	Inclined, hinged blade
Agitator diameter (mm)	90	150	150	50	200
Speed (rpm)	500-6000	220	300-3000	300-3000	300-3000
Power (watt)	300	700	700	700	700
ATEX zone 1**					
Order No.	0665248	0668049	0667331	0665618	0665721

Pneumatic hand mixers

Agitator	Helix spiral	
Agitator diameter (mm)	110	90
Speed (rpm)	300-3000	500-6000
Power (watt)	700	300
ATEX zone 1**		
Order No.	0664911	0664918



ATEX Zone 0 refers to the inner part of the agitator that is limited by the mounting flange.
ATEX Zone 1 describes the area around the motor including the gear box and flange.
*ATEX Zone 0 = II1GclIBT3 **ATEX Zone 1 = II2GclIBT3

WIWA INJECT AGITATORS



Agitator for 216 l drum
Order No. 0666355



Agitator for 216 l drum
Order No. 0661873



Agitator for 1000 l IBC
Order No. 0663027

Electric tank agitators 400 V

Agitator	216 l drum				
	Inclined blade			Disc	Propeller
Agitator diameter (mm)	400	400	400	260	350
Speed (rpm)	95	300	50-300	95	95
Power (watt)	370	750	750	370	370
ATEX (inside + outside) zone 1**	-	-	0666550	-	-
ATEX (inside) zone 0* ATEX (outside) zone 1**	0666355	0666358	-	-	0641291
ATEX (innen Zone 0* ATEX (außen) Zone 1**	0665049	0666359	0666551	0666551	0661873

Electric tank agitators 400 V

Agitator	800 l IBC	1000 l IBC		1000 l Container
	Inclined blade	Inclined blade	Disc foldable	Inclined blade
Agitator diameter (mm)	350/140	350/140	350/140	400
Speed (rpm)	170	170	95-300	170
Power (watt)	750	750	1500	750
ATEX (inside + outside) zone 1**	-	-	0666552	-
ATEX (inside) zone 0* ATEX (outside) zone 1**	-	-	-	-
ATEX (innen Zone 0* ATEX (außen) Zone 1**	0667065	0666356	0666360	0663027



ATEX Zone 0 refers to the inner part of the agitator that is limited by the mounting flange.
ATEX Zone 1 describes the area around the motor including the gear box and flange.

*ATEX Zone 0 = II1GcIIBT3

**ATEX Zone 1 = II2GcIIBT3

WIWA INJECT GUARD



FULL COST CONTROL

Provides you with process reliability and cost optimization by recording and documenting injection processes.

The INJECT GUARD monitors set parameters and documents them. In addition to recording pressures and volumes per packer, the system warns of malfunctions or shifts in the mixing ratio. The data can be displayed directly on the 4" Siemens display or directly via the browser of a WLAN-enabled end device.

To protect your sensitive data, the end device and INJECT GUARD communicate via a password-protected WLAN connection, so that only authorized employees can change and view the parameters.



- Optimized workflows
- Suitable for all WIWA 2K injection units
- For injections up to 400 bar

DOCUMENTATION OF:

- Volume per packer
- Volume per packer A and B
- Pressure per packer
- Charge numbers for A and B
- Volume per batch and day
- Date
- Time

SCOPE OF DELIVERY

- Control cabinet with control and touch display
- Datalogger (documents the specified parameters)
- Flow cells up to 400 bar/5801 psi
- Pressure sensor

Technical Data	
Rated voltage	230 V
Frequency	50/60 Hz
Number of phases	1
Rated current	1,6 A
Wide	369 mm
Height	494 mm
Depth	557 mm
Weight	33 kg
Max. operating pressure	400 bar/5801 psi
Max. air inlet pressure	8 bar/116 psi

WIWA INJECT GUARD Basic unit	Order No.
Electronic recording unit for 2K INJECT systems	0671606
WIWA INJECT GUARD for INJECT 2K 140	Order No.
INJECT GUARD complete - Electronic recording unit for 2K INJECT systems for INJECT 2K 140	0671607
Hose package	0671605
Mixing unit	0670750
WIWA INJECT GUARD for INJECT 2K 230	Order No.
INJECT GUARD complete - Electronic recording unit for 2K INJECT systems for INJECT 2K 230	0669958
Hose package	0671008
Mixing unit	0669600



WIWA INJECT GUARD

When a previously defined pressure or volume is reached, this is indicated to the operator by a light signal. The operator can stop the injection process and switch to the next packer. This has the advantage that the craftsman can continue working continuously and the system remains in operation.

In addition to the pressure per packer, the volume per packer and post-injections, volumes of component A and B, the product charge of the injected material, the operator, the time and the duration of the injections are recorded. The temperature of the material can also be displayed.

The reports can be retrieved depending on the previous definition of a trade, such as a tunnel section. The documentation of the work of the day or the entire construction section are continuous.

Documentation example	18.05.2021		
Number of injections	6		
Total consumption	25,10 l		
Duration of the injection	00:03:00		
Trade protocol (site A)			
Borehole/Packer	1	2	3
Date	2021-05-18	2021-05-18	2021-05-18
Start time	09:08:32	09:10:32	09:12:32
Duration of the injection	00:01:00	00:01:00	00:01:00
Consumption component A	5,30 l	3,20 l	4,00 l
Consumption component B	5,29 l	3,22 l	4,09 l
Consumption component A + B	10,59 l	6,42 l	8,09 l
Injection pressure (bar)	50.0,60.0	43.0,50.0	20.0,50.0
Number of injections	2	2	2
Charge	1.0,1.0	1.0,1.0	1.0,1.0
Operator	1.0,1.0	1.0,2.0	2.0,2.0

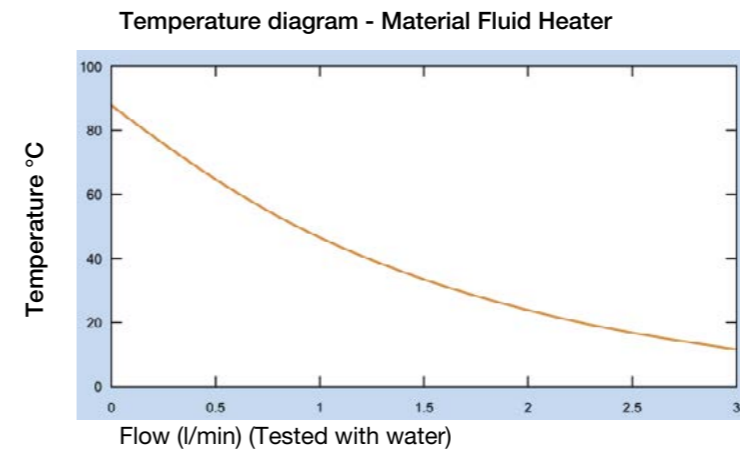
Construction stage (trade)	1		
Duration of the injection	00:30:00		
Daily protocol			
Date	2021-05-11	2021-05-12	2021-05-13
Duration of the injection	00:10:00	00:10:00	00:10:00
Consumption component A	5,30 l	3,20 l	4,00 l
Consumption component B	5,29 l	3,22 l	4,09 l
Consumption component A + B	10,59 l	6,42 l	8,09 l
Number of injections	8	2	2
Construction stage (trade)	1	1	1
Operator	1.0,1.0	1.0,2.0	2.0,2.0

WIWA MATERIAL FLUID HEATER



The WIWA material fluid heater with ATEX approval is the optimal addition for cold working environments. It ensures a constant temperature of the injection materials and can bring the container to be processed up to temperature by means of optional circulation. If required, heat can be used to the material to a shorter reaction time and thus accelerate the injection process.

Preheating of the material at the construction site is saved.



FEATURES

- Extended application possibilities in outdoor area
- Replacing the heat exchanger is simple and easy
- Operating voltages up to 690 V for ATEX Zone I
- T4 temperature classification
- Includes air passages to heat air for spray guns
- Approved to ATEX Directive 2014/34/EU
- Max. pressure 500 bar / 7250 psi
- Insulation jacket available
- Remote thermostat control optional
- All fluid wetted parts in stainless steel

OPTIMAL PROCESSING OF THE MATERIAL FOR:

- Higher efficiency
- Energy savings
- Reduced use of solvents
- The shortest possible drying times
- Problem-free processing of high viscosity materials
- A smooth uniform layer even on vertical surfaces
- Outstanding surface finish

ACCESSORIES

- Support frame with all necessary attachments
- Return control valve
- Temperature display
- Wall bracket
- Attachment kit air heating (on request)
- External control for 440 V ATEX versions (on request)
- External temperature controller RFA (on request)

Technical Data	Power Rating	Phasen	Ampere (A)	Order No. Standard inside ø		Order No. RFA inside ø	
				9 mm	14 mm	9 mm	14 mm
115	1800	1	16	0663917	0663923	-	-
230	3500	1	16	0663907	0663908	0663918	0663919
230	3800	3	10	0663915	0663916	-	-
230	2000	1	9	0664671	-	-	-
400	3800	3	6	0663909	0663910	0663920	0663921
440**	3500	1	8	0663911	0663912	-	-
440* **	3500	3	5	0663913	0663914	-	-

* Available without ATEX - external control not required.

** With ATEX version - external control required.

• For high viscosity / high solids products

• Output temperatures up to 120° C possible without ATEX

• Helps save energy, reduces material consumption

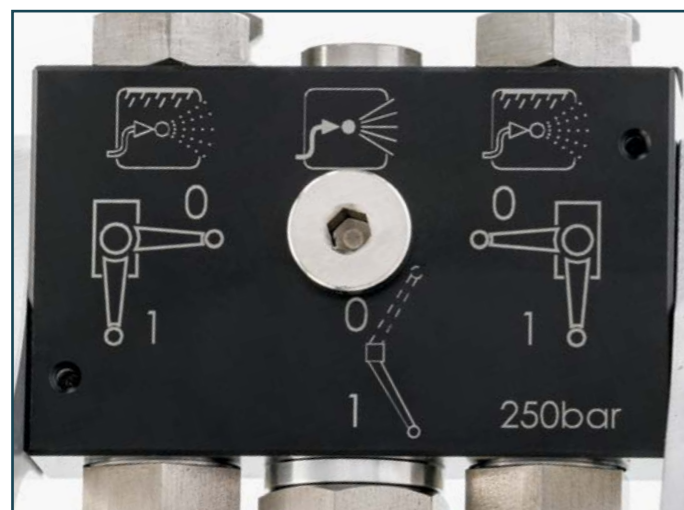
WIWA 2K INJECT MIXING UNITS

OPTIMAL MIXTURE

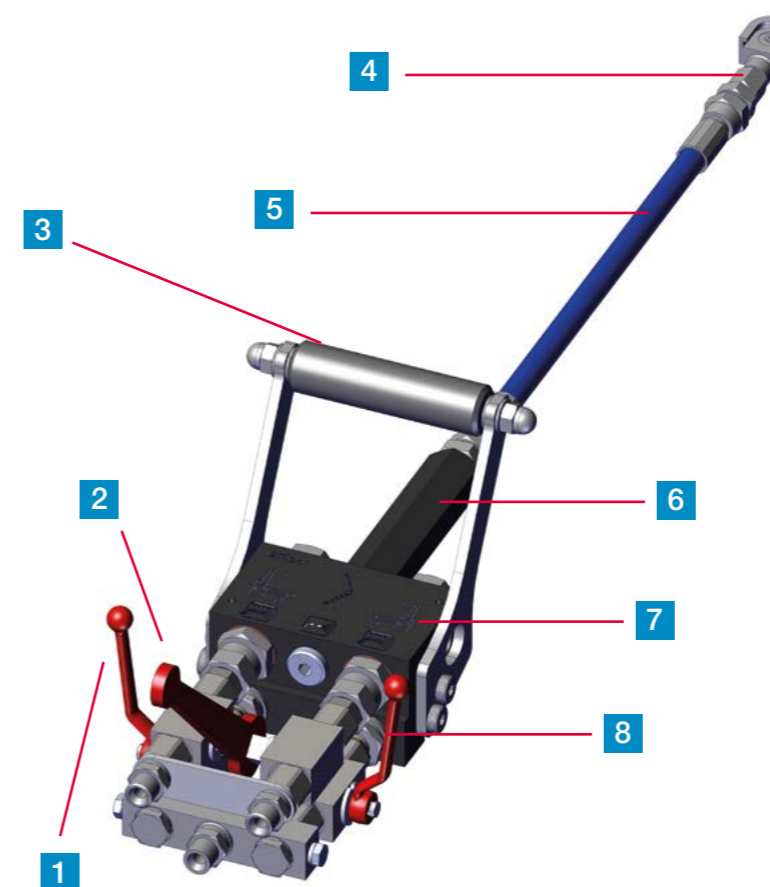
Operation of the newly developed mixing unit is very simple thanks to the function description on the mixing block and thus offers you process reliability in your daily work.

The mixing of the material has been optimized. Large check valves reduce wear and allow easy cleaning.

Adaptation of the WIWA INJECT GUARD kit is possible.



- Large passages
- Completely dismountable for easy maintenance
- Simple extension of the mixing section by adding further static mixers

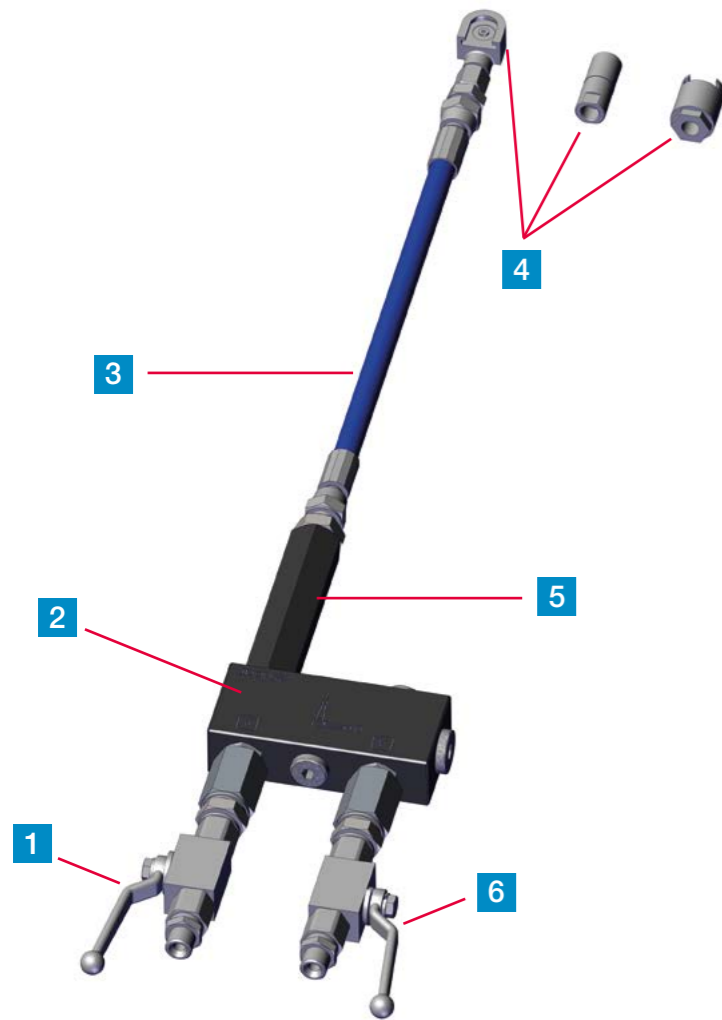


WITH SEPARATE FLUSHING DEVICE

- 1 Ball valve for starting and stopping of the material flow of component B
- 2 One-hand lever for starting and stop the injection process
- 3 Grab handle (optional)
- 4 Coupling pieces for packer connection (optional)
- 5 Hose whip
- 6 Mixing tube
- 7 Mixing block
- 8 Ball valve for starting and stopping of the material flow of component A

Accessories	Order No.	Description
Mixing unit 2K 14025 GX	0669666	Mixing unit complete with separate rinsing device for component A and B for gel plant
Mixing unit standard 2K 3/8" with flushing RS	0669611	Mixing unit complete with hose, static mixer, flushing device for component A and B for Injection unit
Mixing unit standard 2K 1/2" with flushing RS	0670316	Mixing unit complete with hose, static mixer and flushing device unit for components A and B for injection unit

WIWA 2K INJECT MIXING UNITS



WITHOUT SEPARATE FLUSHING DEVICE

- 1** Ball valve for starting and stopping of the material flow of component B
- 2** Mixing block
- 3** Hose whip
- 4** Coupling pieces for packer connection
- 5** Mixing tube
- 6** Ball valve for starting and stopping of the material flow of component A

Accessories	Order No.	Description
Mixing unit 2K N	0669555	Mixing unit G1/4" - DN6 - with static mixer
Mixing unit standard 2K 3/8" N	0669748	Mixing unit complete -N- G3/8" - DN11 with hose and static mixer without flushing device for 2K injection system
Mixing unit standard 2K 1/2"	0669620	Mixing unit G1/2" - DN12 - with static mixer



- Large passages

- Completely dismountable for easy maintenance

- Simple extension of the mixing section by adding further static mixers



Order No.	Description attachments	Gun (0668657)	Lance (0641948)
0631406	Whip 0.3 m	■	■
0669411	Mounting Kit straight lance	■	■
0669410	Mounting kit bent lance	■	■
0218820	Connection nipple	■	■
0669301	Sliding coupling 90	■	■
0641199	Sliding coupling straight	■	■
0411302	Hydraulic mouthpiece	■	■
0668559	Quick release pliers	■	■
0646988	Ball valve ¼" N		■

WIWA INJECT GUNS



WIWA INJECT GUNS

The WIWA injection gun is designed for 300 bar. All material-carrying parts are made of stainless steel. It is equipped with swivel joint, pressure gauge, hose whip 0.3 m, a 4-jaw

hydraulic mouthpiece and a 90° sliding coupling.

You can select further attachments from the table.



WIWA INJECTION LANCE

The WIWA injection lance is made of steel and consists of a ¼" ball valve, a bent lance and a 4-jaw hydraulic mouthpiece.

You can select further attachments from the table.

- Suitable for all injections

- Designed for injections up to 300 bar

- Extensive range of attachment kits available

WIWA INJECT PACKER



FOR BUILDING RENOVATION

On the following pages you will find a comprehensive overview of our high-quality plastic packers and steel packers.

WIWA INJECT PACKER are used in both the 1K and the 2K range, depending on the model.

AREAS OF APPLICATION

- Wood consolidation
- Sponge protection
- Pest control
- Horizontal barriers
- Silicification
- Borehole suspension
- Microcement
- Anchor mortar
- Milk of lime
- Packers for mineral fillers



Lamella impact packer, Order No. 0668433



Locking piece, Order No. 0668437



Quick release pliers, Order No. 0668559



Lamella impact packer, Order No. 0668430



Progressive packer, Order No. 0668431



Progressive packer, Order No. 0668432



Progressive packer, Order No. 0668011



Lamella impact packer, Order No. 0668436

WIWA INJECT PLASTIC PACKER

Order No.	Description	Size
0668433	Lamella impact packer SSV with sealing lip valve, connection Quick snap closure	18 x 120 mm
0668437	Locking piece with cross slide, internal thread R ¼	
0668559	Quick release pliers 17 Connection R ¼, max. passage 4 mm	
0668430	Lamella impact packer made of plastic with screwed-in HP conical nipple	10 x 100 mm
0668431	Progressive packer made of plastic With screwed-in HP conical nipple	10 x 75 mm
0668432	Progressive packer made of plastic With screwed-in HP conical nipple	12 x 75mm
0668011	Lamella impact packer Flat head nipple 16 mm, with cross slider, passage 4 mm	14 x 100 mm
0668436	Lamella impact packer external thread R ¼, free passage 7 mm	14 x 100 mm

• Plastic and steel packers

• Extensive selection available

• Designed for 1K and 2 K injections

WIWA INJECT PACKER



WIWA INJECT PLASTIC PACKER

Order No.	Description	Size
0668012	Lamella impact packer Flat head nipple 16 mm, with cross slider, passage 4 mm	18 x 120 mm
0668441	Gel tube 10 x 1.5 mm, HDPE	300 mm
0668442	Gel tube 10 x 1.5 mm, HDPE	500 mm
0668438	Gel pipe manifold 18 Threaded clamp for gel pipe 10 mm	M 15 x 1,5mm
0668439	Clamping nut for gel tube 10 mm	
0668429	Adhesive packer Ø 50 with internal thread M8	Height 26 mm

WIWA INJECT ALUMINIUM AND STEEL PACKERS

Order No.	Description	Size
0668726	Aluminium packer with single adhesive rubber and conical nipple	13 x 80 mm
0668727	Aluminium packer with double adhesive rubber and conical nipple	10 x 115 mm
0668727	Steel packer with flat head nipple	10 x 115 mm
0668718	Steel packer with flat head nipple	10 x 115 mm
0668719	Steel packer with flat head nipple	13 x 115 mm
0668720	Steel day packer with cone nipple	10 x 115 mm
0668721	Steel day packer with cone nipple	13 x 115 mm
0668722	Steel packer with flat head nipple	10 x 115 mm
0668723	Steel packer with flat head nipple	13 x 115 mm
0668724	Steel day packer with flat head nipple	10 x 115 mm
0668725	Steel day packer with flat head nipple	13 x 115 mm



Day packers have a foot valve. Therefore, immediately after the injection, the pressure piece can be removed and the and the borehole can be closed. This saves time and money!



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. 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.

For bonding and sealing, as well as conveying highly viscous materials, speed and precision are particularly important.

With the robust and user-friendly systems designed by WIWA, these applications can be achieved easily. Custom solutions are also possible to meet individual customer requirements. Let our expertise benefit you in ensuring the reliability of your process and enable trouble-free, pinpoint application.



EXTRUSION / MATERIAL HANDLING









The WIWA website leaves no questions unanswered

On our website you will find all three WIWA business units Protective Coatings, Injection/Building Protection and Extrusion/Material Handling. So that you do not miss any WIWA news, you can also register there for our WIWA News newsletter.

If you have any questions, you have the possibility to contact a WIWA employee directly via chat.



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