



Your project deserves it.



INJECTION / BUILDING PROTECTION



WWW.WIWA.COM



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



Malte Weber
Commercial 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. Relocation of the 2K special construction to new company building in ABlar, Germany.
2022	With the HYDRO PX series, compressed air independent units complete the WIWA product portfolio. Purely electrically operated follows the WIWA ELAN.

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

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2K INJECT SOLUTIONS

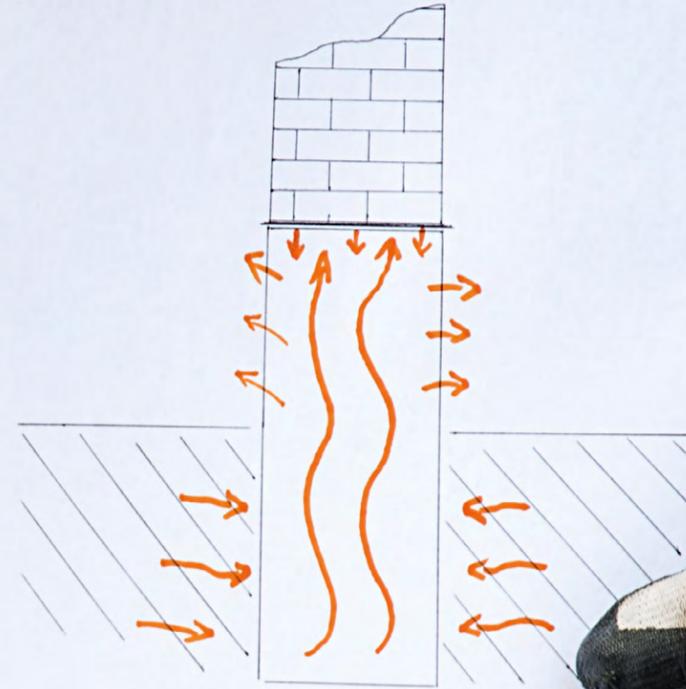
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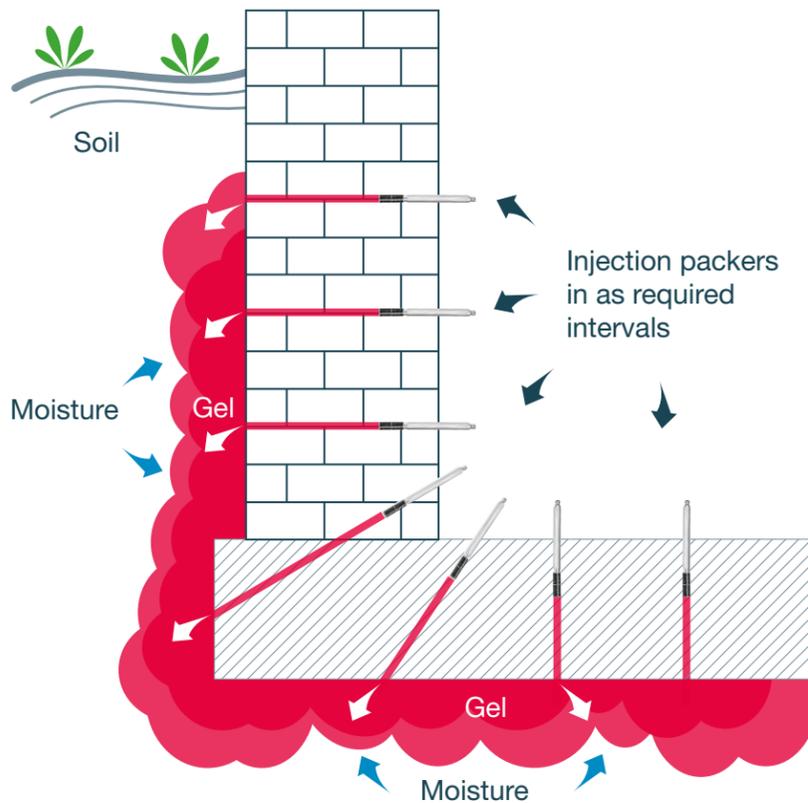
2K PU/FOAM SOLUTIONS

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ACCESSORIES

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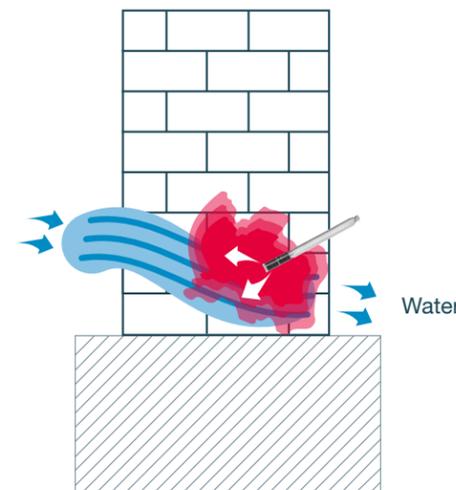


Curtain injection

This is a retrofitted waterproofing of structures in contact with the ground, such as basements, sewers, shafts and tunnels.

Sealing is carried out from the inside to the outside. Additional costs for the external uncovering of the wall can thus often be avoided. A curtain is built up on the component in contact with the ground, which repels the moisture.

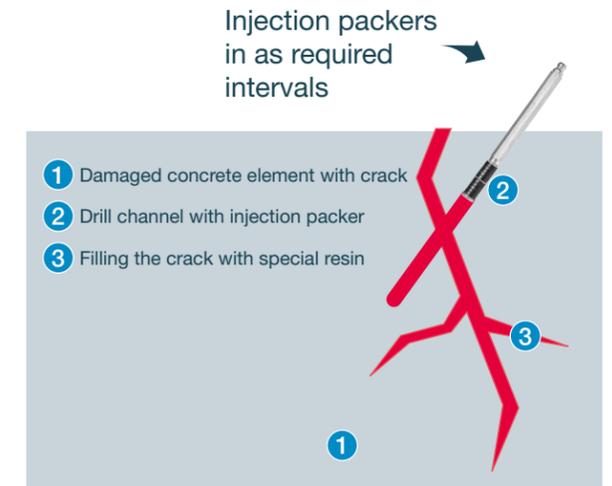
Our recommendation:
WIWA INJECT 14025 GX RS



Stop water inflows

With fast reacting 1K or 2K injection materials, the water inflow is stopped. As a rule, this is a temporary procedure, which requires subsequent sealing.

Our recommendation:
WIWA INJECT HD4
WIWA INJECT 14015 GX



Crack injection

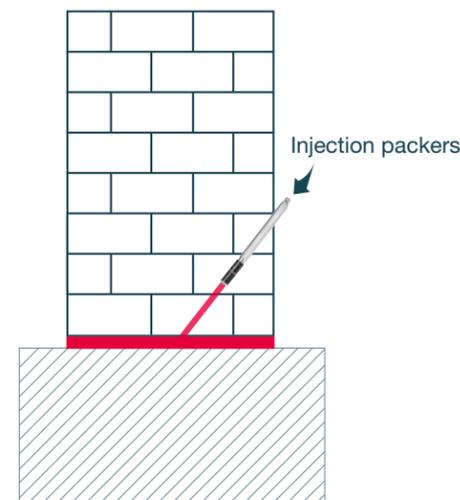
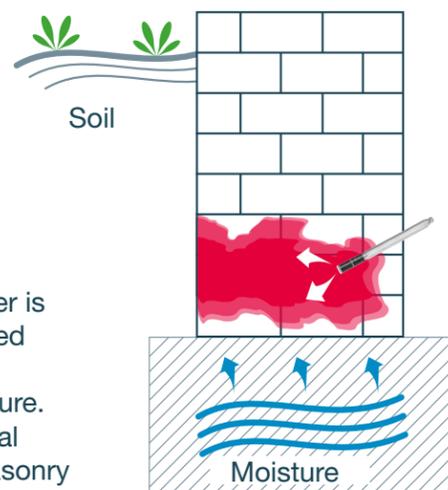
Cracks in masonry or concrete are sealed by the injection materials via packers force-fitted or expandable.

Our recommendation:
WIWA INJECT HD1
WIWA INJECT ND1

Horizontal barrier

The horizontal barrier is subsequently injected into the masonry to prevent rising moisture. The injection material impregnates the masonry so that the moisture cannot penetrate.

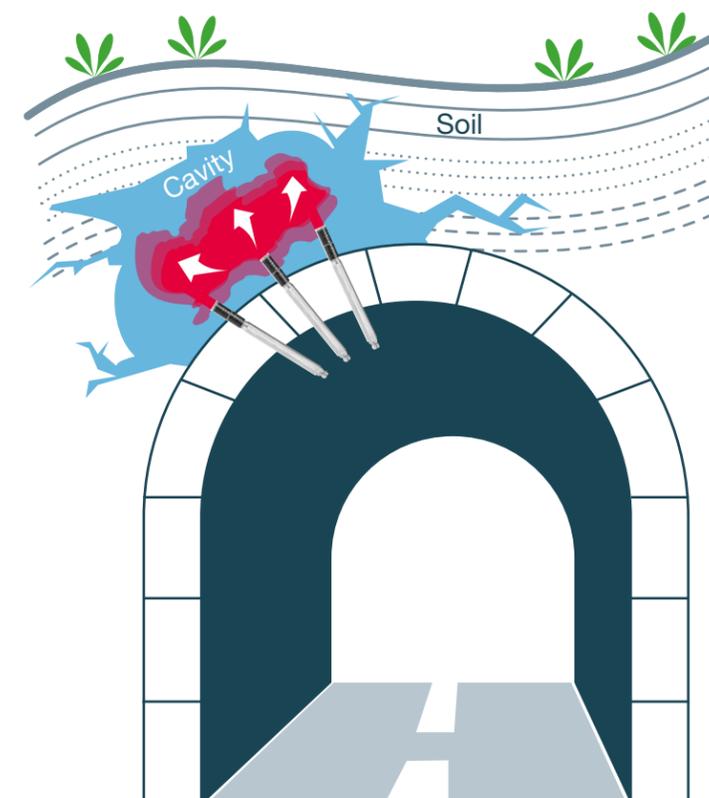
Our recommendation:
WIWA INJECT HD1
WIWA INJECT HD2
WIWA INJECT 14015 GX



Joint sealing

In this process, vertical or horizontal joints are sealed in an expandable manner.

Our recommendation:
WIWA INJECT HD4/HD5
WIWA INJECT 14025 GX



Cavity filling

Injection method for backfilling and sealing of dry or filled cavities (e.g. behind the tunnel lining, see Fig.), porous soils and rock (karst), scouring, cavities or existing tunnels and drifts.

Our recommendation:
WIWA INJECT 2 K 230
WIWA INJECT 2 K 333 GX

Do you already know the WIWA YouTube channel?

Here you can find a Playlist „Injection“ with exciting projects around the WIWA INJECT portfolio:



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.

The WIWA INJECT ND 1 is ideal for the processing of suspensions and complements the WIWA INJECT 1K portfolio in the low-pressure range.





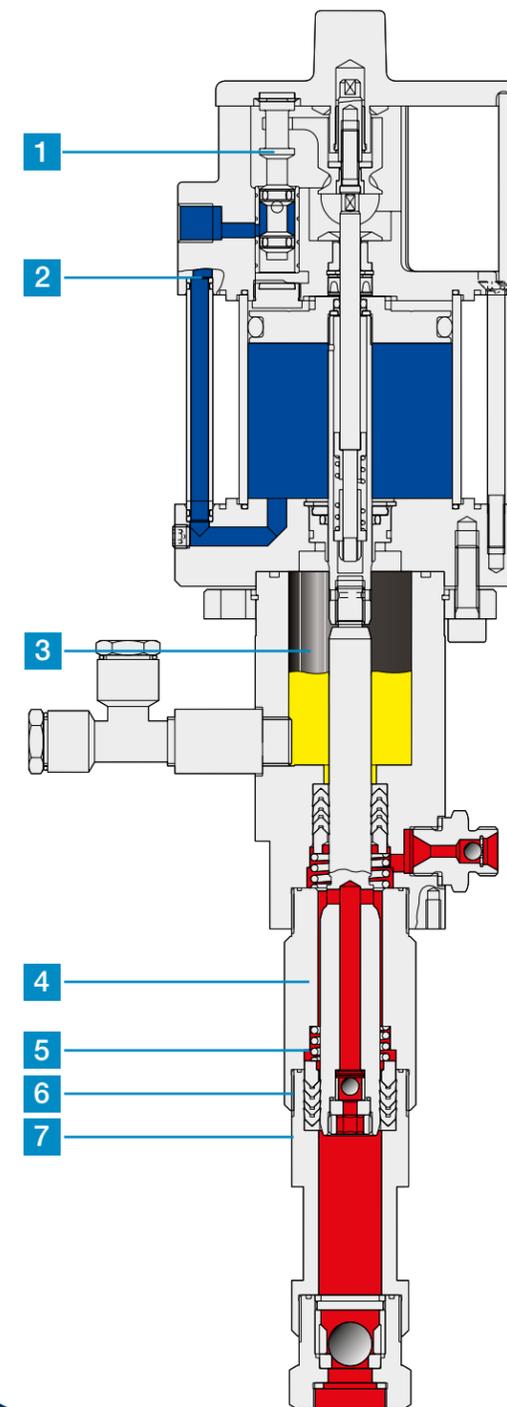
Compact · High-quality · Strong

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

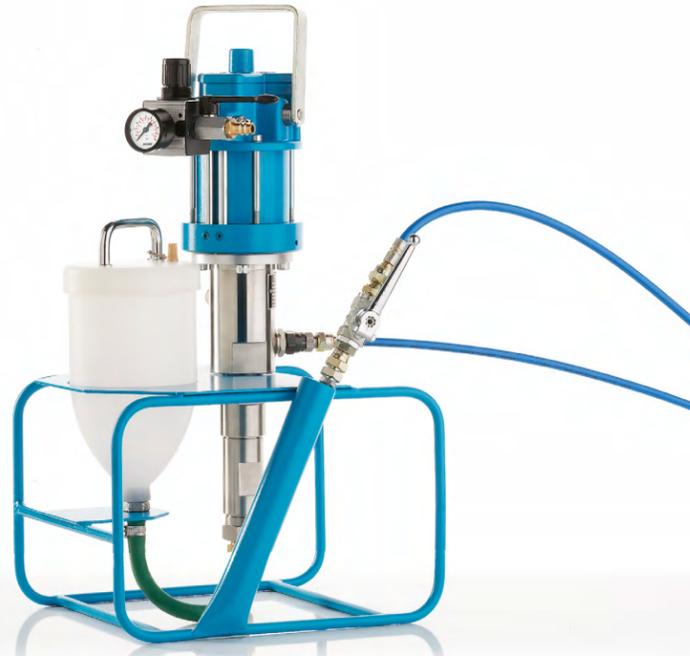
Less pressure loss even with highly viscous materials due to large bores and voluminous material passages in the bottom valve.

- 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	0.86 cu in	0.86 cu in	1.65 cu in
Pressure ratio	33:1	33:1	33:1
Max. air inlet pressure	116 psi	116 psi	116 psi
Max. operating pressure	3829 psi	3829 psi	3829 psi
Weight	26.4 lb	35.9 lb	28.7 lb
Material feed hopper	0.4 gal	1.6 gal	0.4 gal
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. In addition, pneumatic pumps do not heat up, which could have an influence on the reaction time of the material:

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 reaction time.

AREAS OF APPLICATION

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

BASIC EQUIPMENT

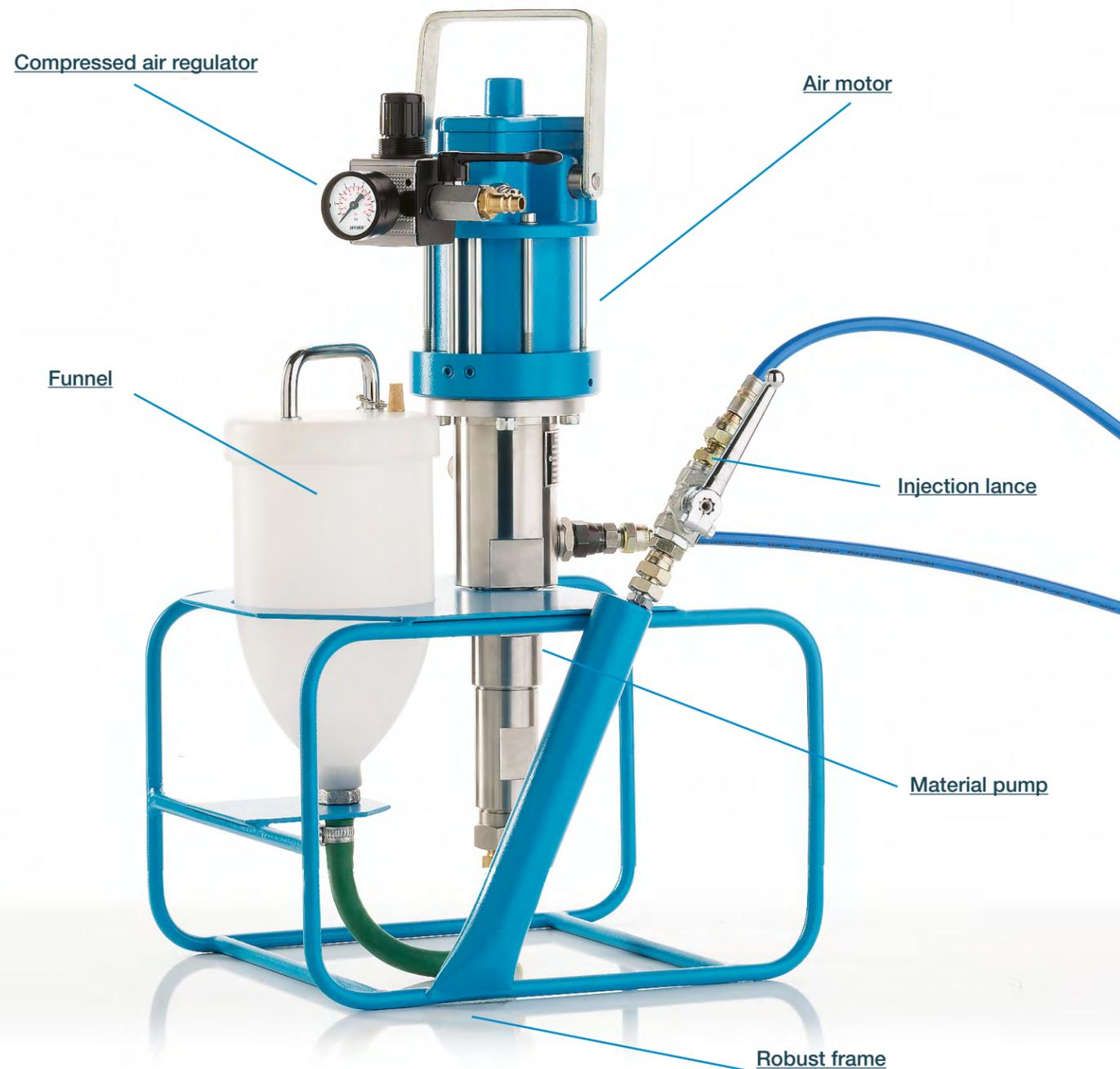
- High pressure pump
- Compressed air regulator
- Safety valve
- Feed hopper, approx. 0.4 gal (HD 1) or feed tank, approx. 1.6 gal (HD 2)
- High-pressure material hose (24.6 ft)
- Injection lance with 4-jaw-injection coupling
- Bottle of release agent
- Operating manual with spare parts list

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 0.4 gal	0645575	Funnel 0.4 gal complete
Mounting kit funnel black 1.6 gal	0631064	Funnel 1.6 gal complete
Mounting kit funnel transparent 1.6 gal	0668846	Funnel 1.6 gal complete with lid and sieve
Hose NW4 1/4" 24.6 ft	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	Injection gun complete WIWA 500 D with adapter 1/4" NPSM (A)
Whip 11.8 in	0631406	Material hose NW 6/410-1/4"-0,30 N
Mounting kit straight lance	0669411	Mounting kit for injection gun pipe straight 23.6 in
Mounting kit bent lance	0669410	Mounting kit for injection gun pipe bent 6.7 in
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 grade, 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

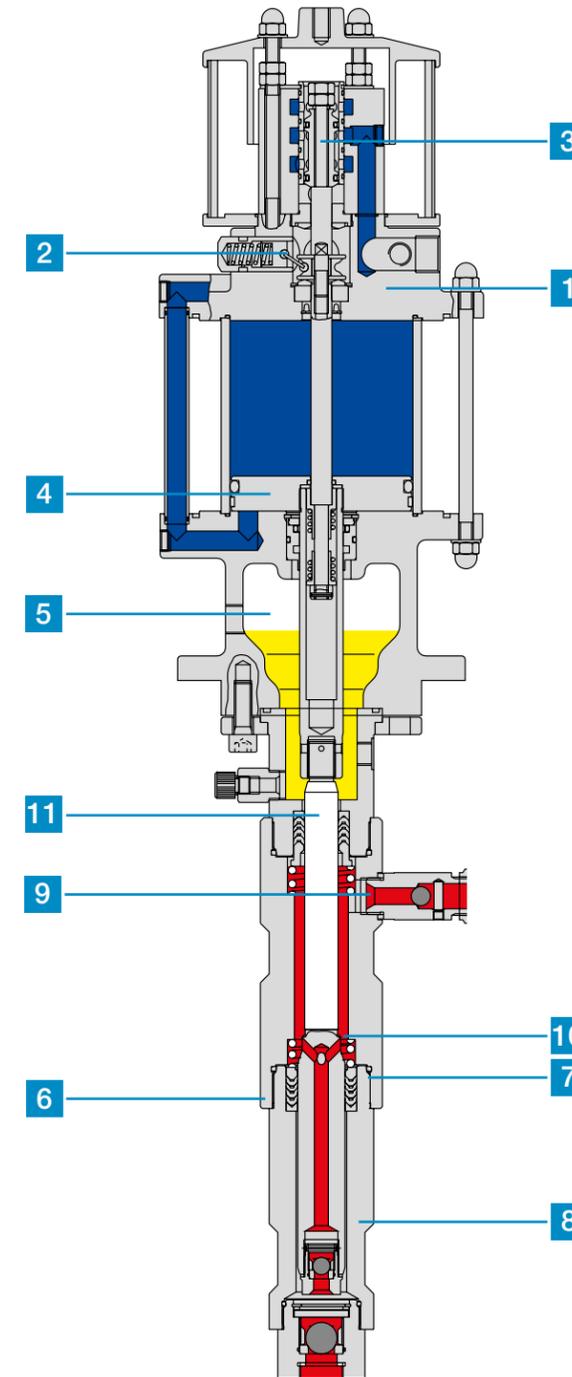
i ATEX version: Can be used in explosion-proof areas.
 N = Normal steel galvanized, not stainless RS = Stainless steel, rust and acid resistant

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	2.6 cu in	4.4 cu in	4.4 cu in
Pressure ratio	30:1	32:1	32:1
Max. air inlet pressure	116 psi	116 psi	116 psi
Max. operating pressure	3480 psi	3712 psi	3712 psi
Weight	50.7 lb	72.8 lb	72.8 lb
Material filling	DAS	1.6 gal 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 reaction time.

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. 1.6 gal (INJECT HD 5), ASL = Suction line (INJECT HD 5)
- High pressure material hose (24.6 ft)
- 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 6.6 gal NW20 / G 3/4" -RS-
Mounting kit funnel black	0666699	Funnel 1.6 gal complete for PHOENIX GX, with cover and suction tube
Mounting kit funnel transparent	0668846	Funnel 1.6 gal complete with lid and sieve, plastic white, non-conductive
Hoses NW6 1/4" 24.6 ft	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 0.9 ft	0631406	Material hose NW 6/410-1/4"-0,30 N
Mounting kit straight lance	0669411	Mounting kit for injection gun pipe straight 23.6 in
Mounting kit bent lance	0669410	Mounting kit for injection gun pipe bent 6.7 in
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), 0.2 in
High pressure filter	0663760	High pressure filter typ 11 GX -RS-
Airless gun WIWA 250 D with swivel joint	0646997	Airless gun WIWA 250D 7/8" Insert



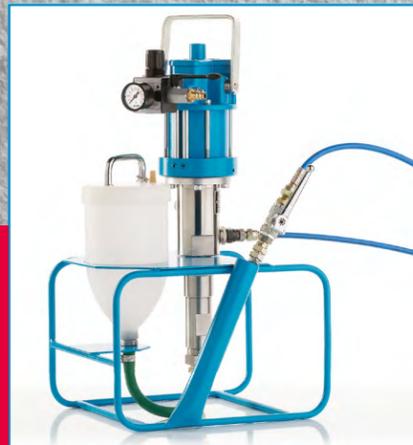
ATEX version: Can be used in explosion-proof areas.

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

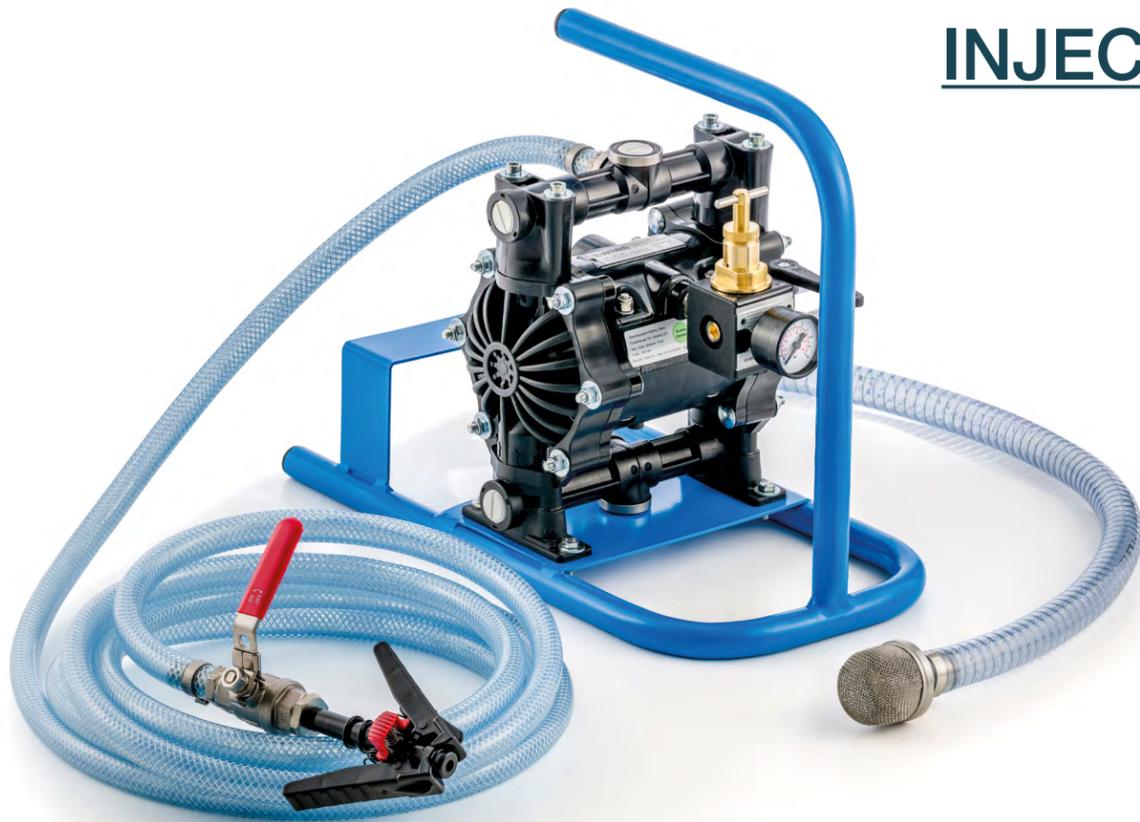
HD 5

Output per Cycle	0.9 cu in	0.9 cu in	1.7 cu in	2.6 cu in	4.4 cu in
Pressure ratio	33:1	33:1	33:1	30:1	32:1
Max. air inlet pressure	116 psi	116 psi	116 psi	116 psi	116 psi
Max. operating pressure	3829 psi	3829 psi	3829 psi	3480 psi	3712 psi
Weight	26.4 lb	36 lb	28.7 lb	50.7 lb	72.8 lb
Material filling	0.4 gal	1.6 gal	0.4 gal	DAS = Direct suction	1.6 gal Funnel ASL = Suction line
Order No.	0644426	0644517	0669680	0669679	0669225 0669224

WIWA PROFIT Piston pumps

WIWA PHOENIX Piston pumps

WIWA INJECT ND 1



HANDY AND COMPACT

The WIWA INJECT ND 1 is an pneumatically operated diaphragm pump for low-pressure applications and is particularly suitable for processing suspensions. The self-priming device is flexibly adjustable, equipped with a compressed air regulator, a 1 m suction line

with strainer and a 5 m material hose. Positive features include the low air consumption, the pressure limitation and the compact size, with which you will not feel crowded even on small construction sites.

Easily adjustable

Compact size

Low air consumption



AREAS OF APPLICATION

- Cavity filling
- Masonry filling
- Rigid connections
- Closing cracks

MATERIALS

- Suspensions

BASIC EQUIPMENT

- Air operated 1/2" plastic diaphragm pump mounted on frame
- Pressure regulator
- 3.3 ft suction line with sieve
- Material hose 16.4 ft with 1/4" ball valve with release pliers

Technical data	INJECT ND 1
Pressure ratio	1:1
Max. delivery rate	6.6 gal/min
Max. air inlet pressure	116 psi
Max. operating pressure	116 psi
Version	G
Weight	11 lb
Order No.	0671622





2K INJECT SOLUTIONS

The tried and tested WIWA DUOMIX technology guarantees safe working due to the always constant mixing ratio. With the WIWA 2K INJECT solutions you can process all common 2K injection materials.

The WIWA INJECT 2K systems are designed for your injection material (PU resin, PU foams, silicates, acrylates or phenol).

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	4.9 cu in
Pressure ratio	25:1
Max. air inlet pressure	116 psi
Max. operating pressure	2900 psi
Mixing ratio	1:1
Version	RS, F
Order No.	0669067

MATERIALS

- 2K injection resins
- Acylate gel
- Injection foams

AREAS OF APPLICATION

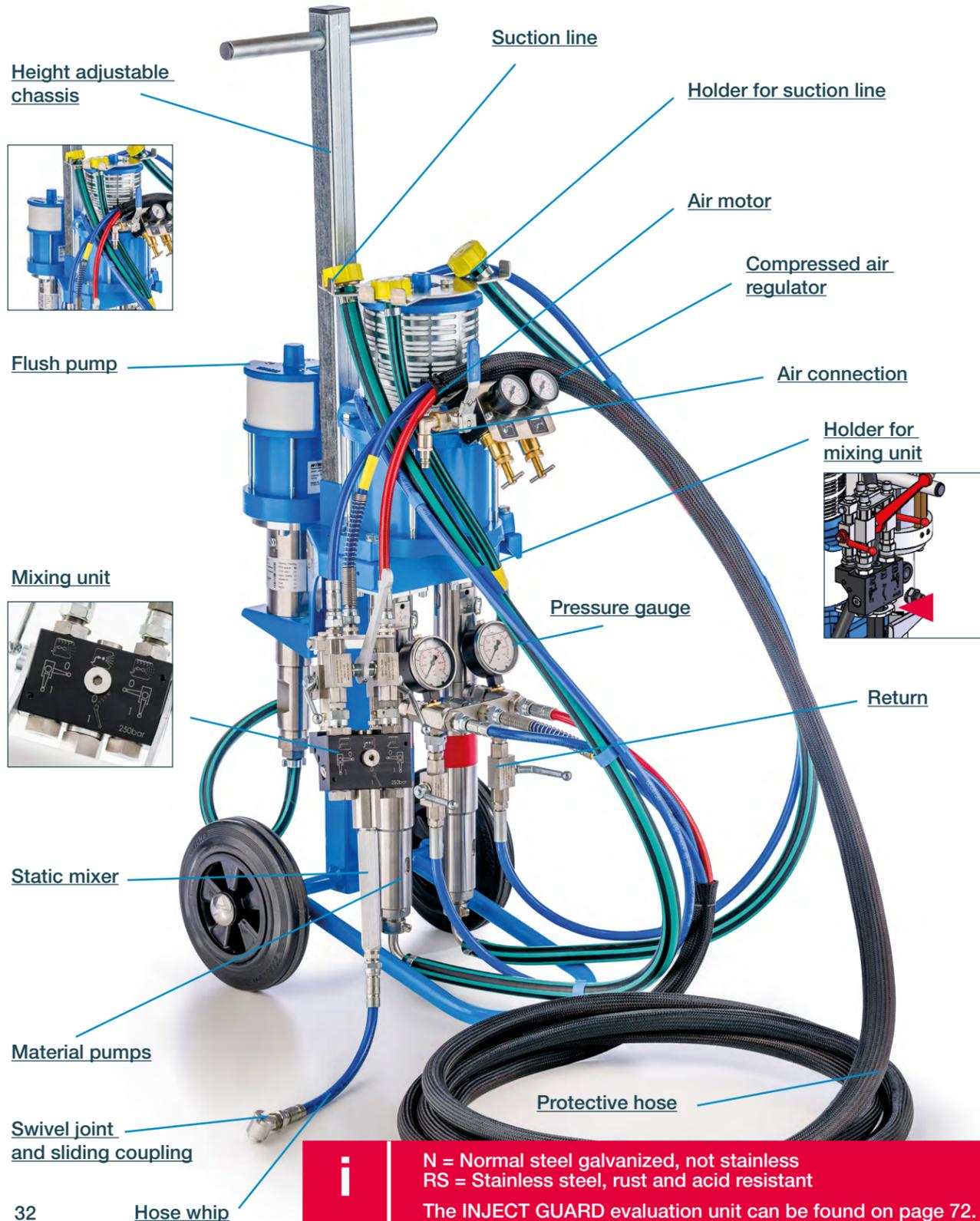
- Building pit waterproofing
- Subsoil injection/soil consolidation
- Cavity filling
- Subsequent horizontal barrier
- Sewer rehabilitation
- Curtain injection
- Area injection

BASIC EQUIPMENT

- 2K high pressure dosing pump
- Maintenance unit
- Suction system
- 2 x Pressure gauge at material outlet
- 3 x Material hoses 24.6 ft 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

i 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



i N = Normal steel galvanized, not stainless
 RS = Stainless steel, rust and acid resistant
 The INJECT GUARD evaluation unit can be found on page 72.

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 1.6 gal 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" 145 psi 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 24.6 ft RS 1x 1/4" NPSM blue / 1x 1/4" NPSM red 1x 1/4" NPSM NW4 blue
Hose 24.6 ft 1/4" NPSM blue A-component	0613819	Material hose NW6 1/4" NPSM 24.6 ft, 5945 psi, RS, blue
Hose 24.6 ft 1/4" NPSM red B-component	0670246	Material hose NW6 1/4" NPSM 24.6 ft, 5945 psi, RS, red
Hose 24.6 ftm 1/4" flush pum	0638610	Material hose NW 4/300-1/4" 24.6 ft 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 0.9 ft	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 90°	0672169	Sliding coupling angular 90° for nipple M1 (0.6 in) (connection lateral) connection M10x1, with gasket blue Passage bore: 0.2 in
Sliding coupling straight	0641199	Sliding coupling M10 x 1, straight version
Sliding coupling straight	0672168	Sliding coupling straight for nipple M1 (0.6 in) (connection frontal) connection: M10x1, with gasket blue Passage bore: 0.2 in
Hydraulic mouthpiece	0411302	Hydraulic mouthpiece M10x1 IG 4 jaws chrome-plated (replacement seal 0660477)
Quick release pliers	0668559	Quick release pliers R1/4 (A), 0.2 in

The new features of the WIWA INJECT 2K 14025 GX

Compact, practical frame

with height adjustment (32.7 in 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

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

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

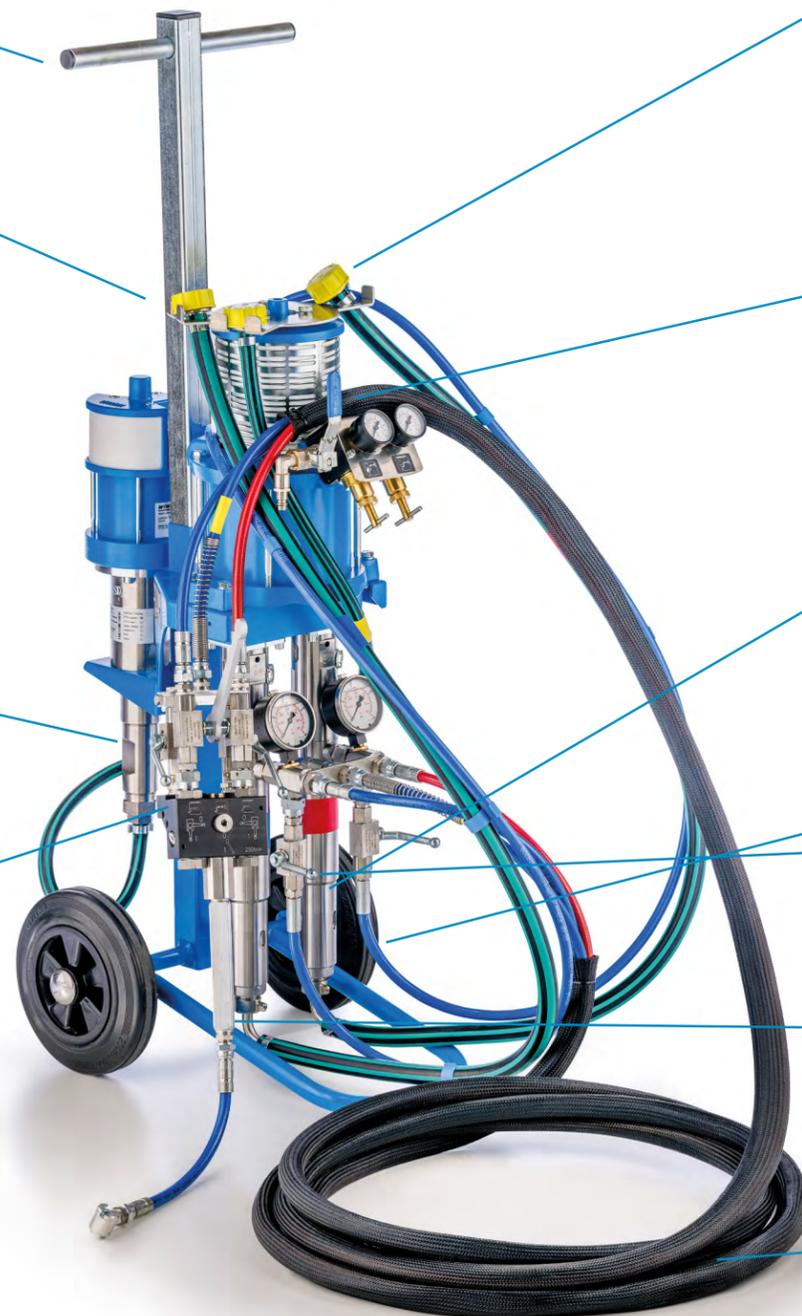
for venting the system

Optional evaluation system

WIWA INJECT GUARD can be easily retrofitted

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



Technical data	INJECT 2 K 14015 GX	INJECT 2 K 14015 GX
Output per cycle	8.8 cu in	8.8 cu in
Pressure ratio	15:1	15:1
Max. air inlet pressure	116 psi	116 psi
Max. operating pressure	1740 psi	1740 psi
Weight	57 lb	64 lb
Version	N, G	N, F
Order No.	0669323	0670489



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

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

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
- Acrylic gels (RS version)

AREAS OF APPLICATION

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

BASIC EQUIPMENT

- 2K high pressure dosing pump
- Maintenance unit
- Suction system
- 2 x Pressure gauge at material outlet
- 2 x Material hoses 24.6 ft 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 0.9 ft
- Sliding coupling and hydraulic mouthpiece
- Bottle of release agent
- Operating manual with spare parts list



Chassis, height adjustable



Chassis, height adjustable



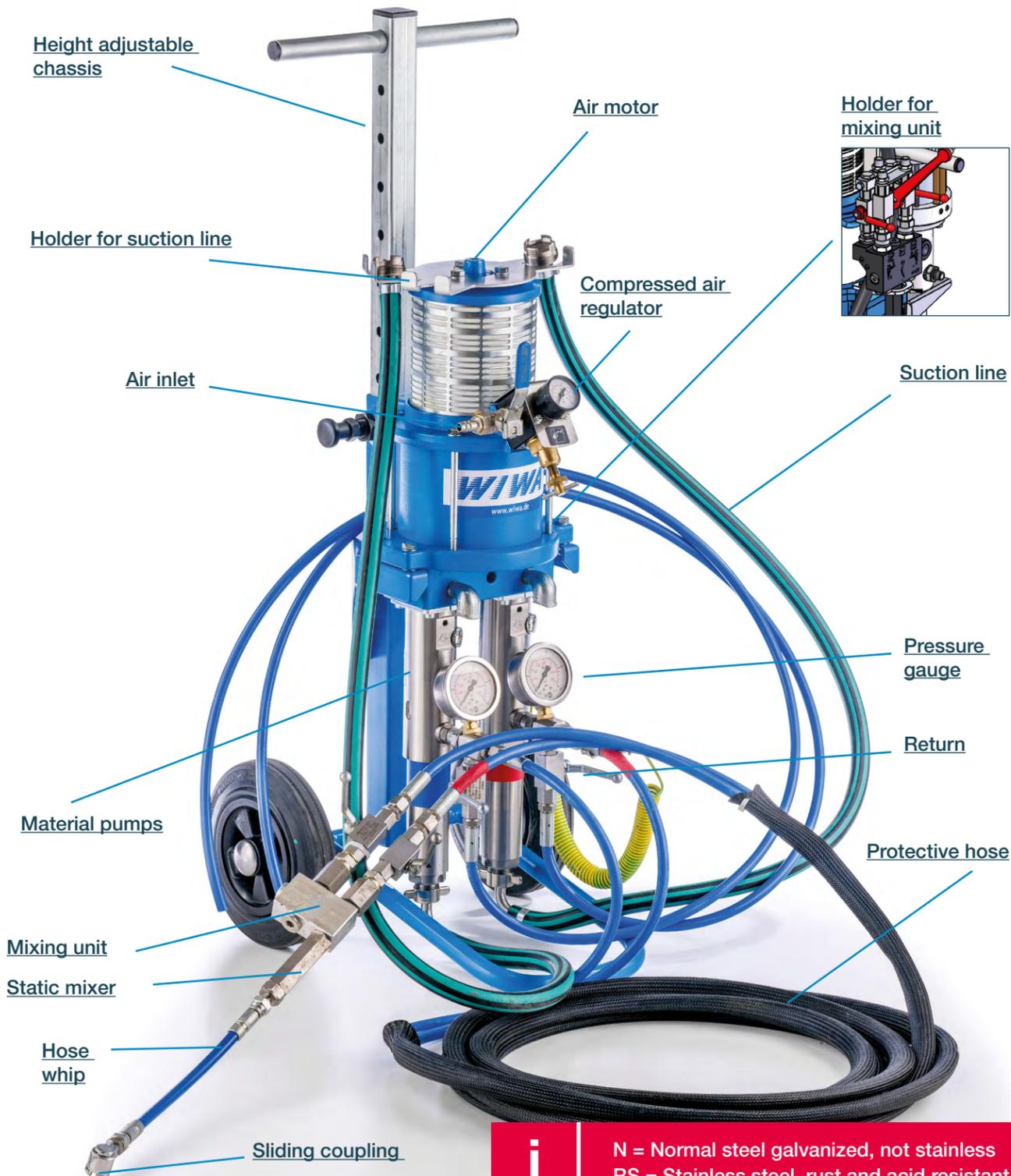
Readable injection pressures for both components

Handy and compact

Quick commissioning

High mixing accuracy due to force-controlled material conveying

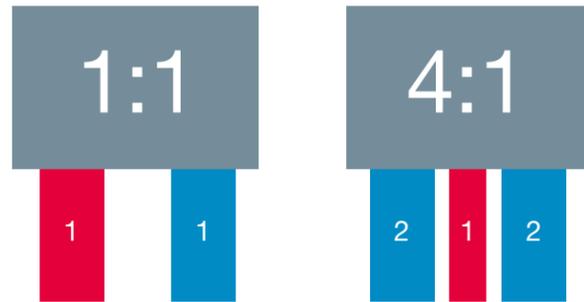
Accessories for WIWA INJECT 2K 14015 GX



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

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 24.6 ft 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 24.6 ft, 5945 psi, RS, blue
Hose 7,5 m 1/4" NPSM red B-component	0670246	Material hose NW6 1/4" NPSM 24.6 ft, 5945 psi, 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 0.9 ft	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 90°	0672169	Sliding coupling angular 90° for nipple M1 (0.6 in) (connection lateral) connection M10x1, with gasket blue passage bore: 0.2 in
Sliding coupling straight	0641199	Sliding coupling M10 x 1 straight version
Sliding coupling straight	0672168	Sliding coupling straight for nipple M1 (0.6 in) (connection frontal) connection: M10x1, with gasket blue passage bore: 0.2 in
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), 0.2 in

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

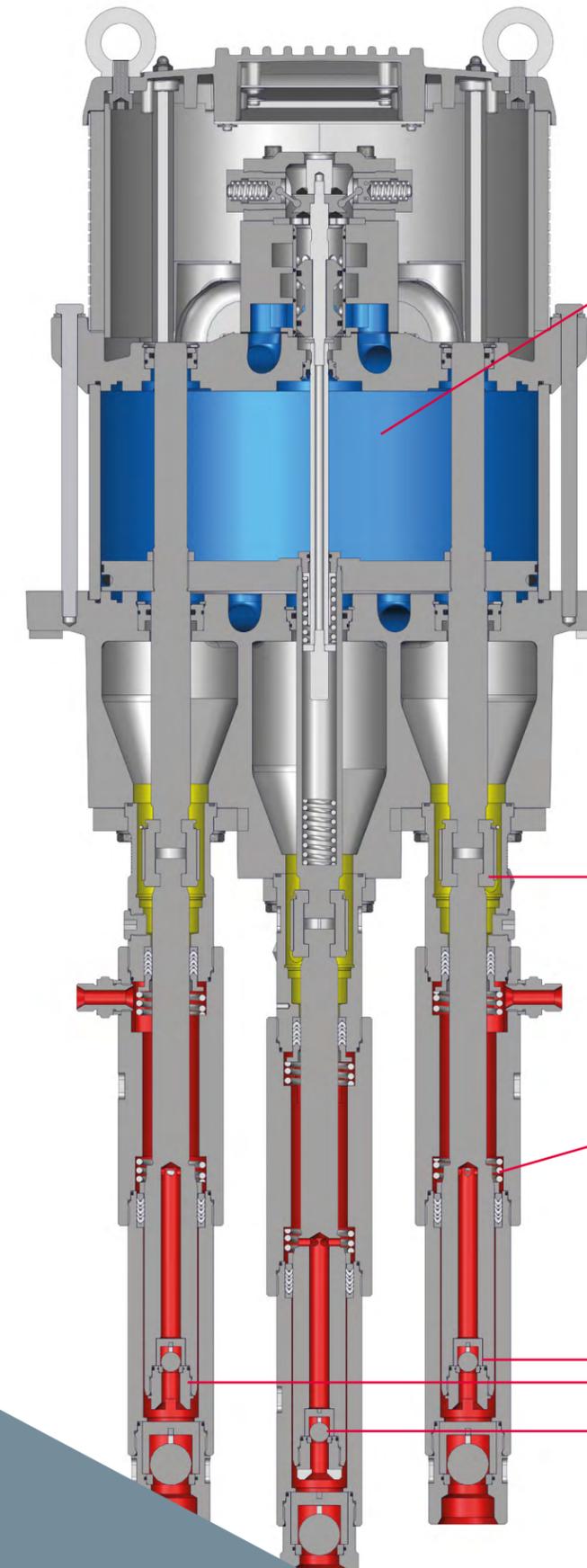
The guarantee for precise proportioning and variable mixing.

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 52.8 gal drum
- Suction line for IBC containers
- Suction line for 18 gal plastic barrel with frame
- 2x Feed pump 52.8 gal drum

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



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 high delivery rates and a maximum operating pressure of 3481 psi. 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
- On request also available with Steck O components available



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	11.8 cu in	11.8 cu in	11.0 cu in	11.8 cu in	11.8 cu in	8.8 cu in
Pressure ratio	30:1	30:1	32:1	30:1	30:1	40:1
Max. air inlet pressure	116 psi	87 psi				
Max. operating pressure	3480 bar	3480 bar	3712 psi	3480 bar	3480 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

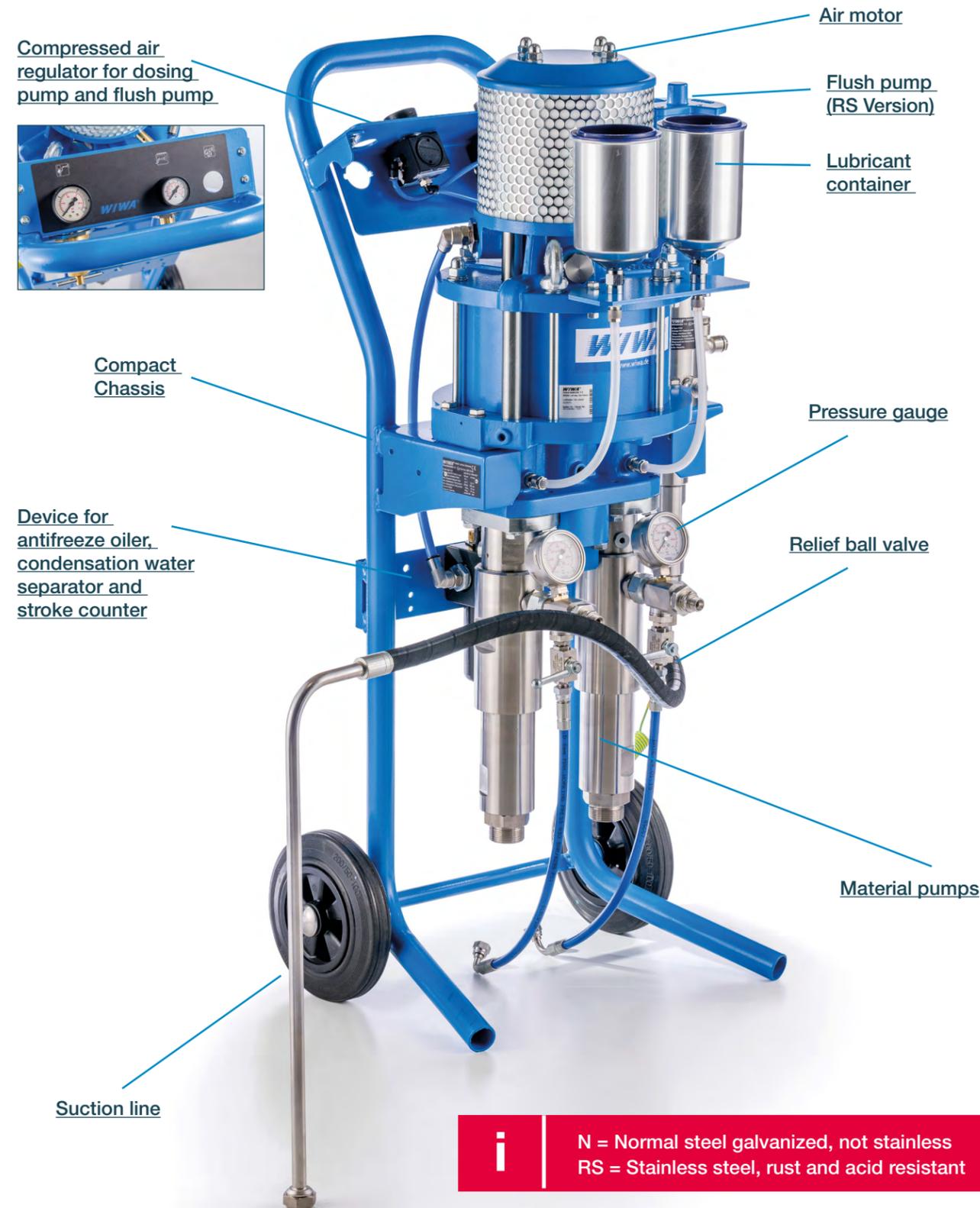


ATEX version: Can be used in the explosion-proof area.

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

F = Chassis GS = Frame standing GL = Frame lying * Without flush pump.

Accessories for WIWA INJECT 2K 230



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

Accessories	Order No.	Description
Suction line up to 52.8 gal 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 18 gal l drum, MP connection: 1 1/4"
2x Feed pump 52.8 gal drum	0663455	Feed pump 146.03,7 N complete with connection hose 7.2 ft
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 25 in 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 49.2 ft unheated, 1 x NW 10 4791 psi blue PA -RS- G3/8" (A-Comp.), 1 x NW 10 4791 psi red PA -RS- G3/8" (B-Comp.), 1 x NW 6 5945 psi 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 4791 psi blue PA -RS- G3/8" (A-Comp.), 1 x NW 10 4791 psi red PA -RS- G3/8" (C-Komp.), 1 x NW 6 5945 psi 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 4791 psi blue PA -RS- G3/8" (A-Comp.), 1 x NW 10 4791 psi 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
Sliding coupling 90°	0672169	Sliding coupling angular 90° for nipple M1 (0.6 in) (connection lateral) connection M10x1, with gasket blue passage bore: 0.2 in
Sliding coupling straight	0672168	Sliding coupling straight for nipple M1 (0.6 in) (connection frontal) connection: M10x1, with gasket blue passage bore: 0.2 in

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 18.5 gal/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 656.2 ft 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
- On request also available with Steck O components available



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 (RS-Version)
- Water Stop

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

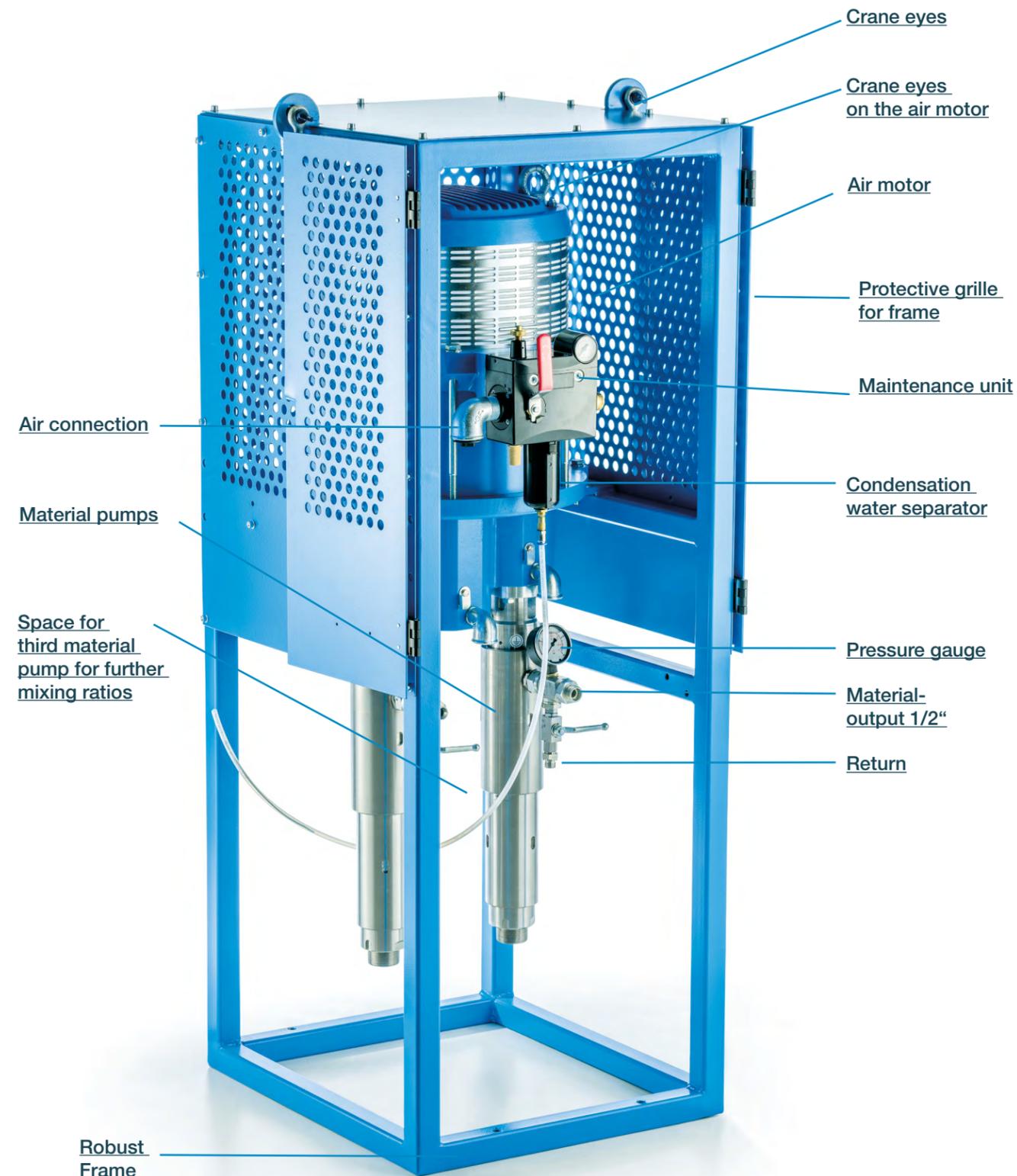
Technical data	INJECT 333037 GX	INJECT 333037 GX	INJECT 333037 GX	INJECT 333037 GX	INJECT 333018 GX
Output per cycle	32.7 cu in	32.7 cu in	32.7 cu in	32.7 cu in	67.1 cu in
Pressure ratio	37:1	37:1	37:1	37:1	18:1
Max. air inlet pressure	116 psi				
Max. operating pressure	4293 psi	4293 psi	4293 psi	4293 psi	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 52.8 gal 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 18 gal plastic barrel with frame	0670115	Feed complete (1:1) with return, frame and 2 x 18 gal 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 21.1 in)
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 49.2 ft unheated, 1 x NW 13 6804 psi blue PA -RS- G1/2" (A-Comp.), 1 x NW 13 6804 psi red PA -RS- G1/2" (B-Comp.), 1 x NW 6 5945 psi blue PA -RS- 1/4" NPSM (flush), Protective hose
Hose package NW13 - (1/2")	0669767	Hose package 49.2 ft unheated, 1 x NW 13 6804 psi blue PA -RS- G1/2" (A-Comp.), 1 x NW 13 6804 psi 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



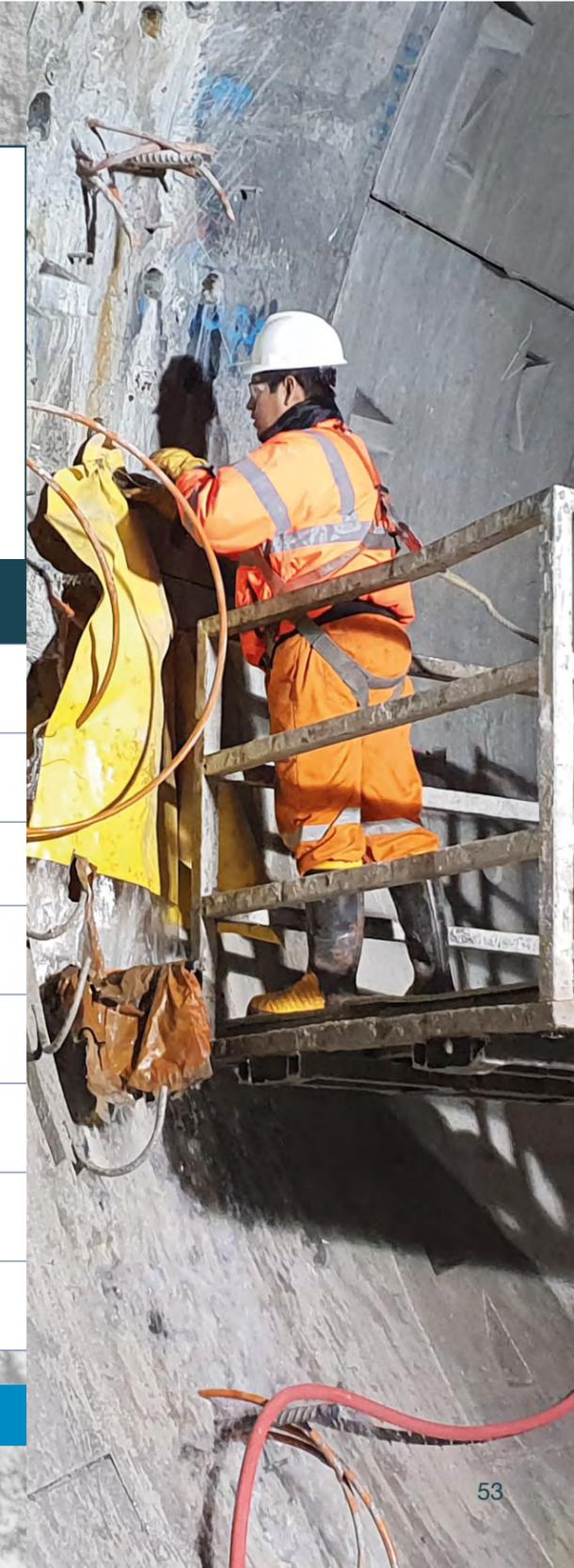
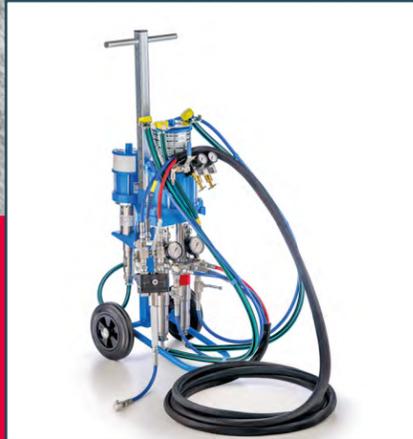
ATEX version: Can be used in the explosion-proof area.

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

Output per cycle	4.9 cu in	8.8 cu in	8.8 cu in - 11.8 cu in	32.7 cu in - 67.1 cu in
Pressure ratio	25:1	15:1	40:1 / 30:1	37:1 / 18:1
Max. air inlet pressure	116 psi	116 psi	116 psi	116 psi
Max. operating pressure	2900 psi	1740 psi	3480 psi - 3712 psi	2088 psi - 3712 psi
Weight	99 lb	57 lb	264 lb - 386 lb	408 lb - 584 lb
Mixing ratio	1:1	1:1	1:1 / 4:1	1:1
Version	RS, F	N, G	at page 44	at page 48
Order No.	0669067	0669323	at page 44	at page 48

ATEX version:

Can be used in explosion-proof areas.

WIWA 2K PU/FOAM 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 56

DUOMIX PU 540



Page 60

DUOMIX PU HYDRAULIK



Page 62

WIWA SPF

SIMPLICITY AT ITS BEST!

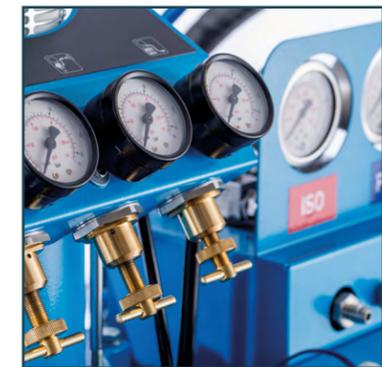
Spray foam applications redefined. WIWA DUOMIX SPF sprayers are user-friendly. Direct display of all measuring devices, simple software settings. Connect. Switch on. Spray. Job done.

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	2.6 cu in	2.6 cu in	25:1	1:1	5.2 cu in	157.5 ft	116 psi	2901 psi	176 °F	169 lb	Basic equipment (F)	0671177
SPF 240	2.6 cu in	2.6 cu in	25:1	1:1	5.2 cu in	157.5 ft	116 psi	2901 psi	176 °F	148 lb	Basic equipment (GS)	0671176
SPF 240	2.6 cu in	2.6 cu in	25:1	1:1	5.2 cu in	157.5 ft	116 psi	2901 psi	176 °F	260 lb	Full equipment (F)	0671179
SPF 240	2.6 cu in	2.6 cu in	25:1	1:1	5.2 cu in	157.5 ft	116 psi	2901 psi	176 °F	238 lb	Full equipment (GS)	0671178
SPF 280	4.4 cu in	4.4 cu in	15:1	1:1	8.8 cu in	157.5 ft	116 psi	1857 psi	176 °F	179 lb	Basic equipment (F)	0668976
SPF 280	4.4 cu in	4.4 cu in	15:1	1:1	8.8 cu in	157.5 ft	116 psi	1857 psi	176 °F	148 lb	Basic equipment (GS)	0668975
SPF 280	4.4 cu in	4.4 cu in	15:1	1:1	8.8 cu in	157.5 ft	116 psi	1857 psi	176 °F	269 lb	Full equipment (F)	0668978
SPF 280	4.4 cu in	4.4 cu in	15:1	1:1	8.8 cu in	157.5 ft	116 psi	1857 psi	176 °F	243 lb	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.

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 7.2 ft and suction angle
- Membrane pump G 1/2" complete with suction pipe, suction angle and connecting hose 7.2 ft

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	16.1 cu in
Theoretical pressure ratio	31:1
Mixing ratio	1:1 (others on request)
Max. air inlet pressure	116 psi
Max. operating pressure	3596 psi
Material flow heater	16.1 HP
Heating capacity hose package	63.3 HP
Max. hose length	452.8 ft
Voltage / phases	400 V/3 P
Max. power consumption	22.2 HP
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

PROTECT · SEAL · INSULATE

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

MATERIALS

- Polyurethane foams
- Polyurea
- Injection foams

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	11.9 cu in
Max. output	0.4 gal/min
Mixing ratio	1:1
Max. air inlet pressure	116 psi
Max. operating pressure	3625 psi
Material flow heater	16.1 HP
Max. heating capacity hose package	63.3 HP/m
Max. Hose length at 400 V	452.8 ft
Heating power hydraulic unit	5.4 HP
Voltage	230-400 V
Max. power consumption	31 HP
WIWA DUOMIX PU HX	
Description	Order No.
DUOMIX PU HX pump (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. 59.1 ft 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



i * 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.

Equipped with an energy saving mode as standard

More than 200 different mixing ratios possible

Processes almost all polyurethane foams and fast reacting polyurea

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.

Ram injection lance



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INJECT Guns



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Packers



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Agitators/agitating elements



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Stroke counter



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Hand lever injection press



Page 70

INJECT GUARD



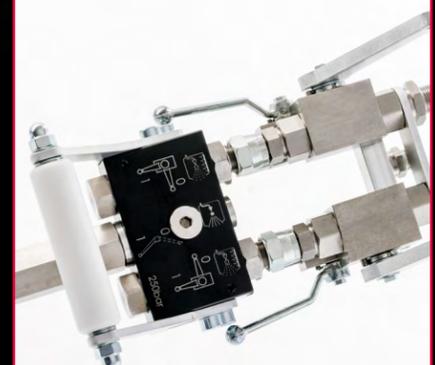
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Material fluid heaters



Page 76

Mixing units



Page 78

Pneumatic container agitators				
6.6 gal feed container		13.2 and 18.5 gal feed containers	25.1 gal container / 7.9 gal barrel	
Agitator	Propeller	Propeller	Inclined blade	2x inclined blade
Agitator Ø (in)	5.9	5.9	11.8	11.8
Power (W)	700	700	700	1250
Speed (rpm)	220	220	220	218
ATEX inside + outside Zone 1	0668049	-	0666063	-
ATEX inside zone 0 * ATEX outside zone 1**	0674320	0674321	0666064	0668380

Pneumatic container agitators			
31.7 gal PE drum		57.2 gal barrel	
Agitator	Disc	2x inclined blade	Disc
Agitator Ø (in)	10.2	15.7	10.2
Power (W)	700	700	700
Speed (rpm)	220	220	220
ATEX inside + outside Zone 1	-	0666061	-
ATEX inside zone 0 * ATEX outside zone 1**	0674322	0666062	0674323

*ATEX Zone 0 = II1GcIIBT3
**ATEX Zone 1 = II2GcIIBT3



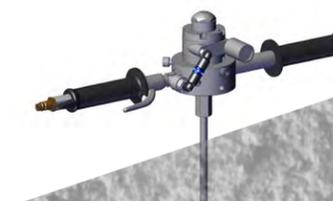
i ATEX zone 0 refers to the inner part of the agitator, which is limited by the mounting flange. ATEX zone 1 refers to the area around the motor, including the gearbox and flange.

Pneumatic container agitators				
5.3 gal drum		57.2 gal barrel	57.2 gal barrel bung hole	
Agitator	Stirring basket	Propeller	Paddle screw	Foldable mixing blade
Agitator Ø (in)	3.5	5.9	50	7.9
Power (W)	300	700	700	700
Speed (rpm)	500 - 6000	300 - 3000	300 - 3000	300 - 3000
ATEX inside + outside Zone 1	0665248	0667331	0665618	0665721

i Here you will find our range of agitators with higher speeds.

*ATEX Zone 0 = II1GcIIBT3
**ATEX Zone 1 = II2GcIIBT3

Pneumatic container agitators			
264.2 gal IBC			264.2 gal container
Agitator	Foldable mixing blade	Foldable disc	Inclined blade
Agitator Ø (in)	13.8/5.5	19.7	15.7
Power (W)	700	700	700
Speed (rpm)	220	220	220
ATEX inside + outside Zone 1	0666065	-	-
ATEX inside zone 0 * ATEX outside zone 1**	0666066	0663028	0665053



Pneumatic hand agitators		
Agitator	Stirring basket	
Agitator Ø (in)	4.3	3.5
Power (W)	700	300
Speed (rpm)	300 - 3000	500 - 6000
ATEX Zone 1		
Part No.	0664911	0664918

Pneumatic agitator mounting kit for chassis - open containers					
Pump type	18066 - 45046 PROFESSIONAL 24026 - 28064	18066 - 45046 PROFESSIONAL 38032 - 44032	HERKULES	10066 + 15042	HERKULES GX
Agitator	Stirring basket				
Agitator Ø (in)	4.3	4.3	4.3	4.3	4.3
Power (W)	700	700	700	700	700
Speed (rpm)	300 - 3000	300 - 3000	300 - 3000	300 - 3000	300 - 3000
ATEX Zone 1					
Part No.	0634416	0658707	0642709	0627723	0660322

Mounting kits for forklift trucks available on request



Electric container agitators 400 V					
57.2 gal barrel					
Agitator	Inclined blade	Inclined blade	Inclined blade	Disc	Propeller
Agitator Ø (in)	15.7	15.7	15.7	10.2	13.8
Power (W)	370	750	750	95	95
Speed (rpm)	95	300	50-300	370	370
Without ATEX	-	-	0666550	-	-
ATEX inside + outside Zone 1	0666355	0666358	-	-	0641291
ATEX inside zone 0 * ATEX outside zone 1**	0665049	0666359	0666551	0660551	0661873

Electric container agitators 400 V				
264.2 gal IBC				264.2 gal container
Agitator	Foldable inclined blade	Foldable inclined blade	Foldable Disc	Inclined blade
Agitator Ø (in)	13.8/5.5	13.8/5.5	19.7	15.7
Power (W)	750	1500	750	750
Speed (rpm)	170	95 - 300	170	170
Without ATEX	-	0666552	-	-
ATEX inside zone 0 * ATEX outside zone 1**	0666356	0666360	0663027	0665055

*ATEX Zone 0 = II1GcIIBT3
**ATEX Zone 1 = II2GcIIBT3

WIWA INJECT agitator elements

The WIWA agitator elements are suitable for mixing epoxy resin, PU resin and acrylic gel. There are three different sizes and lengths.



They are simply inserted into a standard drill.

WIWA INJECT agitator elements	Order No.
Disc agitator Ø 1.8 in with shaft 0.3 x 11.8 in	0672479
Disc agitator Ø 1.8 in with shaft 0.3 x 19.7 in	0672480
Disc agitator Ø 75mm with shaft 0.3 x 11.8 in	0672481
Disc agitator Ø 75mm with shaft 0.3 x 19.7 in	0672482
Disc agitator Ø 100mm with shaft 0.4 x 11.8 in	0672483
Disc agitator Ø 100mm with shaft 0.4 x 19.7 in	0672484
Disc agitator Ø 1.8 in	0672475
Disc agitator Ø 3 in	0672476
Disc agitator Ø 3.9 in	0672477
Shaft 0.3 x 11.8 in	0672471
Shaft 0.3 x 19.7 in	0672472
Shaft 0.4 x 11.8 in	0672473
Shaft 0.4 x 19.7 in	0672474

WIWA Hand lever Injection press



FOR CRACK INJECTION AND GROUTING

The WIWA high-pressure hand press was specially developed for grouting cracks. It is suitable for epoxy and PU resins.

Technical data	
Output per stroke	0.085 cu in
Max. pressure	5801.5 psi
Container capacity	30.5 cu in
Length	15.7 in
Connection thread	M10x1
Description	Order No.
Hand lever injection press	0672466
Hand lever injection press with 11.8 in hose and grip coupling	0672467
Hand lever injection press with pressure gauge, 19.7 in hose and grip coupling	0672468



Pumping station with low-wear seal



Sturdy steel design



Hydraulic coupling



High pressure armored hose



High pressure armored hose hydraulic coupling

WIWA Stroke counter



THE OUTPUT ALWAYS IN VIEW

In order to be able to conveniently read off the strokes during injection tasks, we offer 3 versions of WIWA stroke counters: directly on the rack, on the mixing unit or with 9.8 ft cable and hooks for hanging up on a packer, for example.



Description	Suitable for	Order No.
Mounting kit stroke counter (on mixing unit injection)	INJECT 2K 14025 GX, INJECT 2K 14015 GX	0671513
Mounting kit wall bracket for cycle counter (for mixing unit injection)	INJECT 2K 14025 GX, INJECT 2K 14015 GX	0672111
Stroke counter ABS for Inject 1K attachments and mechanical counter without pneumatic reset	INJECT HD 1, HD 2, HD 3, HD 4, HD5	0671687
Stroke counter ABS for Inject 140 attachments and mechanical counter without pneumatic reset	INJECT 2K 14025 GX, INJECT 2K 14015 GX	0670950
Stroke counter ABS for DUOMIX 230 Attachments and mechanical counter without pneumatic reset	INJECT 2K 230, INJECT 2K 333 GX	0646640

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 5801.5 psi

DOCUMENTATION OF:

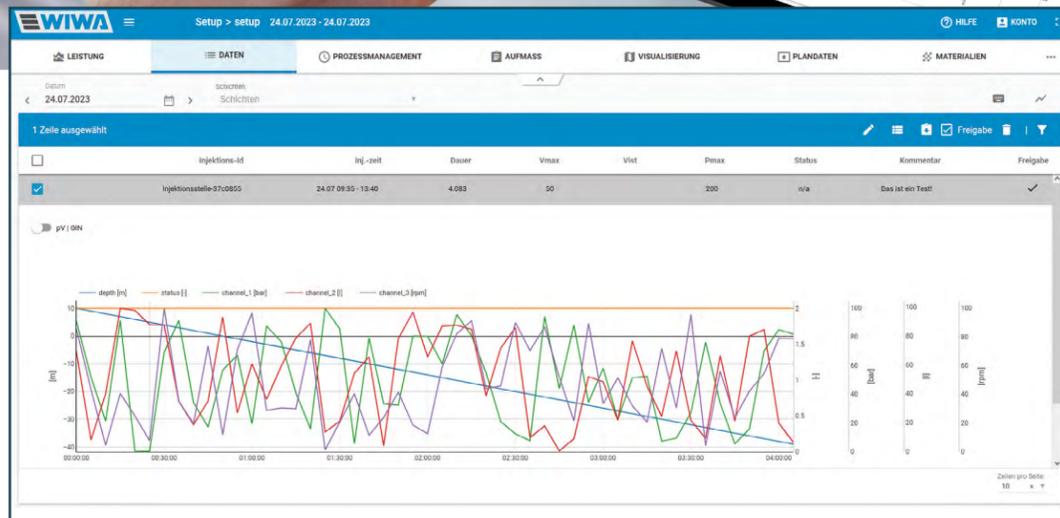
- Volume per packer
- Volume per packer A and B
- Pressure per packer
- Charge numbers for A and B
- Volume per batch and day
- Date
- Time

SCOPE OF DELIVERY

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

Technical Data	
Rated voltage	230 V
Frequency	50/60 Hz
Number of phases	1
Rated current	1,6 A
Wide	14.5 in
Height	19.5 in
Depth	21.9 in
Weight	72.8 lb
Max. operating pressure	5801 psi
Max. air inlet pressure	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 or the unit switches off on request. The operator can terminate the end of the injection process and switch to the next packer. This has the advantage that the operator can continue working and the unit 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 batch of

the injected material, the user, the time and the duration of the injections. 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	6.7 gal		
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	1.4 gal	0.8 gal	1.1 gal
Consumption component B	1.4 gal	0.8 gal	1.1 gal
Consumption component A + B	2.8 gal	1.7 gal	2.1 gal
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	1.4 gal	0.8 gal	1.1 gal
Consumption component B	1.4 gal	0.8 gal	1.1 gal
Consumption component A + B	2.8 gal	1.7 gal	2.1 gal
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

i On request you can configure a pressure hold function.

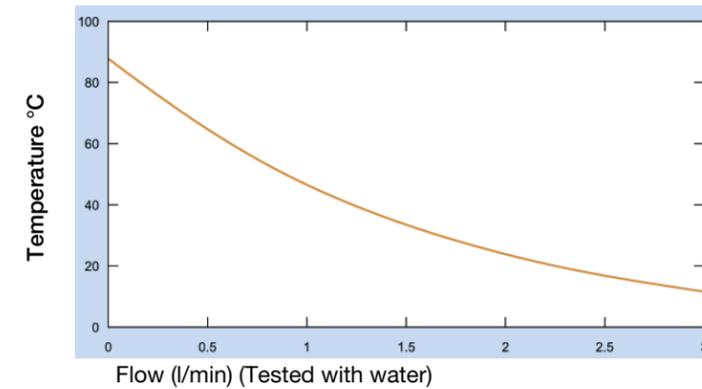
WIWA MATERIAL FLUID HEATER



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.

Temperature diagram - Material Fluid Heater



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 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	Phases	Ampere (A)	Order No. Standard inside ø		Order No. RFA inside ø	
				0.35 in	0.55 in	0.35 in	0.55 in
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 248 °F possible without ATEX

Helps save energy, reduces material consumption

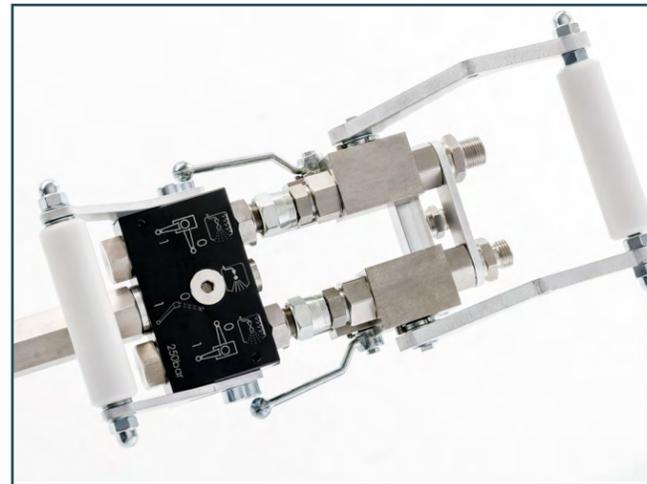
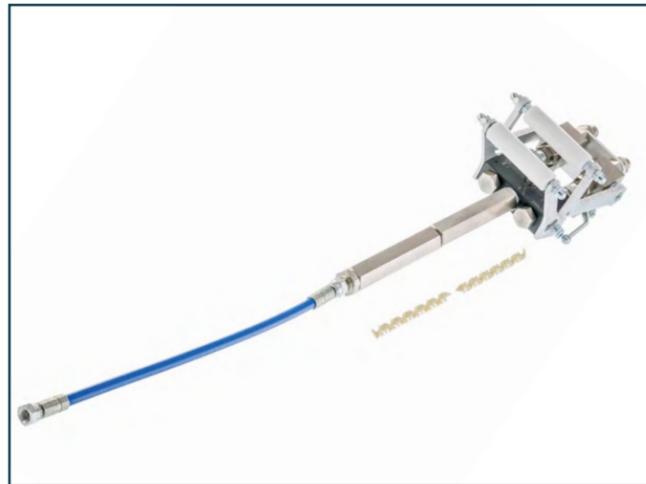
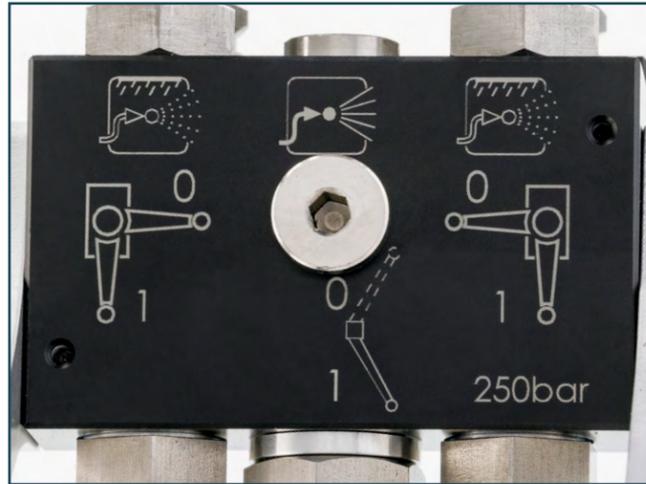
WIWA 2K INJECT MIXING UNITS

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.

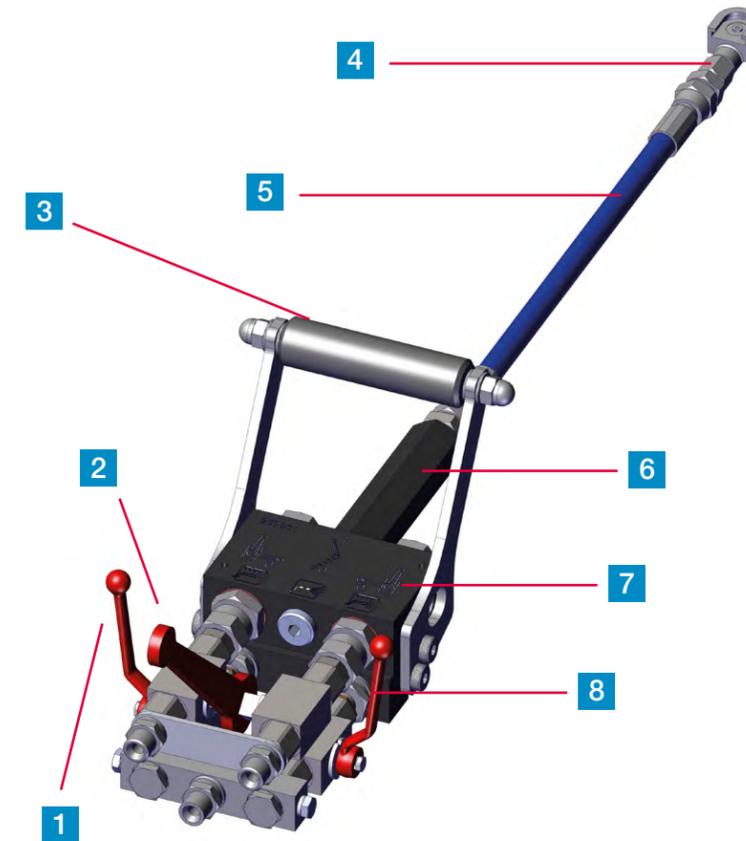
Adaptation of the WIWA INJECT GUARD kit is possible.



Large passages

Completely dismountable for easy maintenance

Simple extension of the mixing section by adding further static mixers

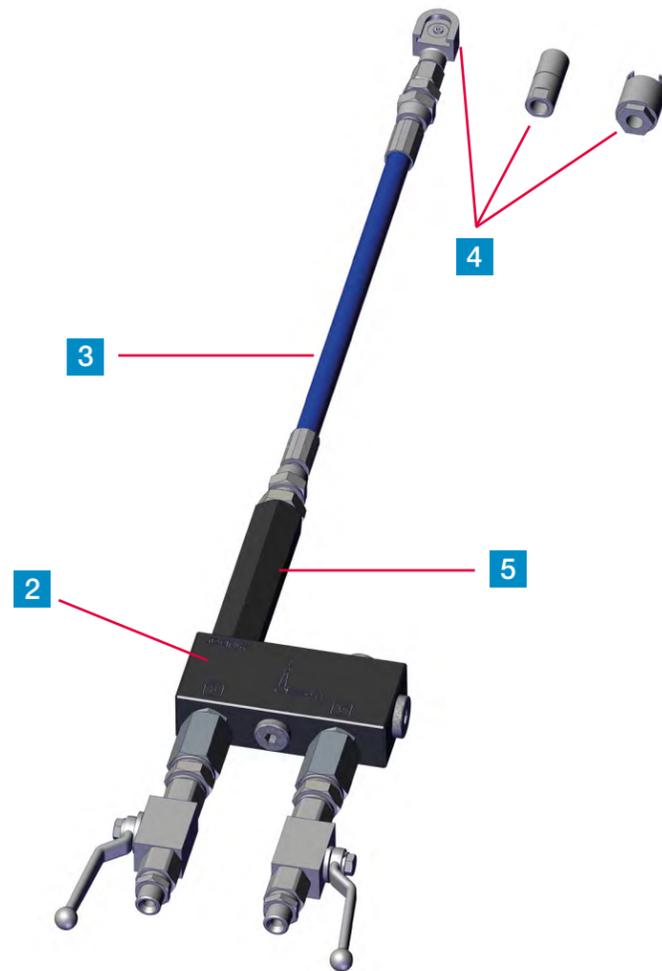


WITH SEPARATE FLUSHING DEVICE

- 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 0.9 ft	■	■
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 1/4" N		■

WIWA INJECT GUNS



WIWA INJECT GUNS

The WIWA injection gun is designed for 4351 psi. All material-carrying parts are made of stainless steel. It is equipped with swivel joint, pressure gauge, hose whip 0.9 ft, 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 1/4" 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 4351 psi

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

WIWA INJECT PLASTIC PACKER

Order No.	Description	Size
0668433	Lamella impact packer SSV with sealing lip valve, connection Quick snap closure	0.7 in x 4.7 in
0668437	Locking piece with cross slide, internal thread R ¼	
0668559	Quick release pliers 17 Connection R ¼, max. passage 0.2 in	
0668430	Lamella impact packer made of plastic with screwed-in HP conical nipple	0.4 in x 3.9 in
0668431	Progressive packer made of plastic With screwed-in HP conical nipple	0.4 in x 3 in
0668432	Progressive packer made of plastic With screwed-in HP conical nipple	0.5 in x 3 in
0668011	Lamella impact packer Flat head nipple 0.6 in, with cross slider, passage 0.2 in	0.6 in x 3.9 in
0668436	Lamella impact packer external thread R ¼, free passage 0.3 in	0.6 in x 3.9 in



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

Plastic and steel packers

Extensive selection available

Suitable for 1K and 2K injections

WIWA INJECT PACKER



WIWA INJECT PLASTIC PACKER

Order No.	Description	Size
0668012	Lamella impact packer Flat head nipple 0.6 in, with cross slider, passage 0.2 in	0.7 x 4.7 in
0668441	Gel tube 0.4 in x 0.06 in, HDPE	11.8 in
0668442	Gel tube 0.4 in x 0.06 in, HDPE	19.7 in
0668438	Gel pipe manifold 18 Threaded clamp for gel pipe 0.4 in	M 0.6 x 0.06 in
0668439	Clamping nut for gel tube 0.4 in	
0668429	Adhesive packer Ø 50 with internal thread M8	1 in

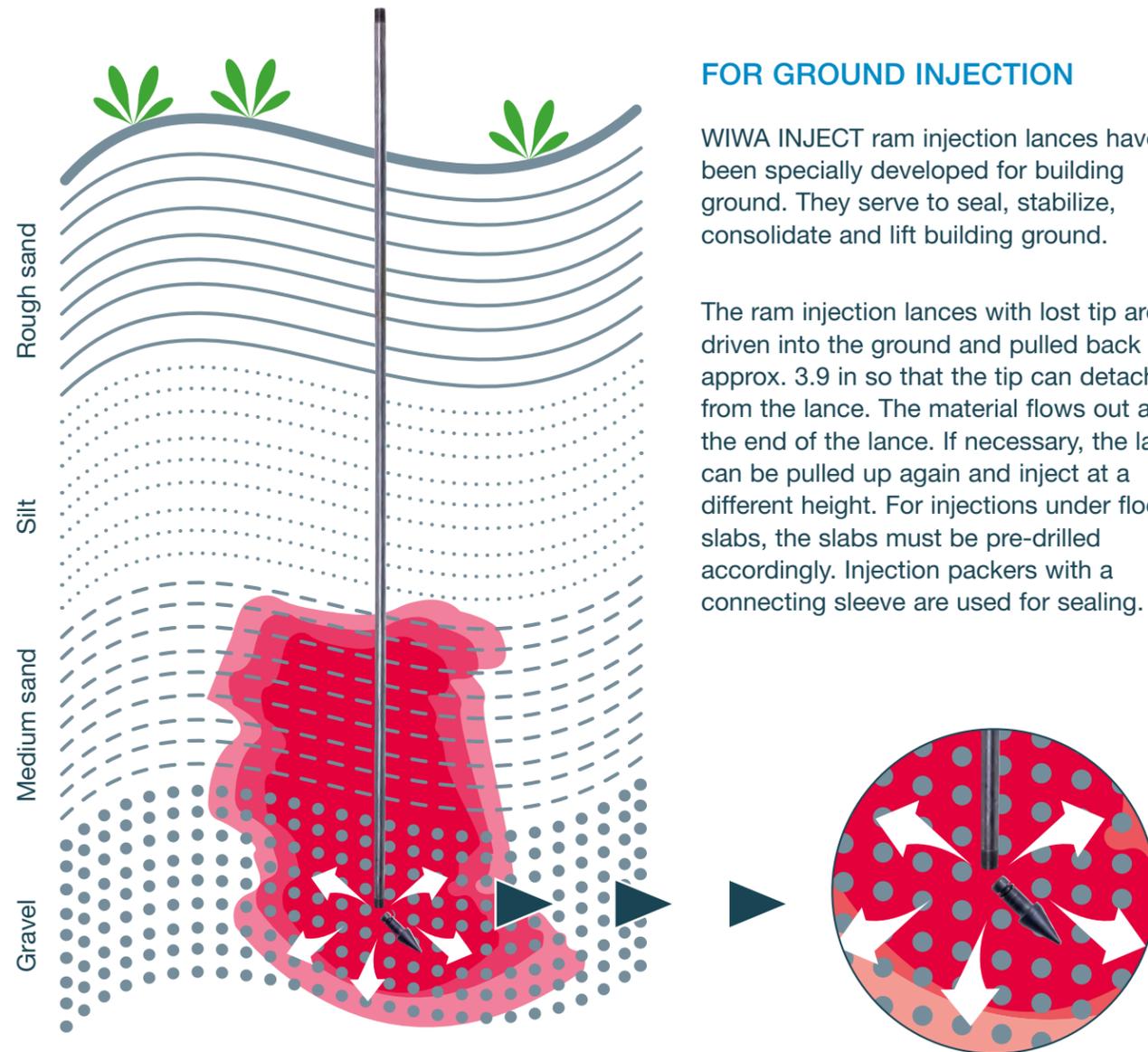
WIWA INJECT ALUMINIUM AND STEEL PACKERS

Order No.	Description	Size
0668726	Aluminium packer with single adhesive rubber and conical nipple	0.5 x 3.1 in
0668727	Aluminium packer with double adhesive rubber and conical nipple	0.4 x 4.5 in
0668727	Steel packer with flat head nipple	0.4 x 4.5 in
0668718	Steel packer with flat head nipple	0.4 x 4.5 in
0668719	Steel packer with flat head nipple	0.5 x 4.5 in
0668720	Steel day packer with cone nipple	0.4 x 4.5 in
0668721	Steel day packer with cone nipple	0.5 x 4.5 in
0668722	Steel packer with flat head nipple	0.4 x 4.5 in
0668723	Steel packer with flat head nipple	0.5 x 4.5 in
0668724	Steel day packer with flat head nipple	0.4 x 4.5 in
0668725	Steel day packer with flat head nipple	0.5 x 4.5 in



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

WIWA INJECT RAMM INJECTION LANCES



FOR GROUND INJECTION

WIWA INJECT ram injection lances have been specially developed for building ground. They serve to seal, stabilize, consolidate and lift building ground.

The ram injection lances with lost tip are driven into the ground and pulled back approx. 3.9 in so that the tip can detach from the lance. The material flows out at the end of the lance. If necessary, the lance can be pulled up again and inject at a different height. For injections under floor slabs, the slabs must be pre-drilled accordingly. Injection packers with a connecting sleeve are used for sealing.

The method is suitable for shallow depths in easily penetrable soils. Ram injection lances can be individually assembled depending on the injection depth. There is no annular gap on the outer diameter during penetration, thus no uncontrolled leakage of injection material.

MATERIALS

- Mineral fillers
- PU and silicate resins
- Acrylic gels

AREAS OF APPLICATION

- Subsoil rehabilitation for existing objects, drinking water tanks, etc.
- Fill cavities and fissures
- Increase the load-bearing capacity of the foundation soil
- Close fissures and cracks in the subsoil for near-surface, underground construction measures
- Lifting of building ground

Technical data	
Version	Steel
Length	39.4 in
Diameter	NW6
Thread	1/4"
1 Order No.	0672446
Accessories	
2 Connecting sleeve 1/4"	0672447
3 Lost tip with O-ring for ram grouting lance with 1/4"	0672448
Flat head nipple Connection 1/4" Opening pressure max. 7 bar, ball 0.2 in, with O-ring	0672189

i Perforated ram injection lances on request.



- Stepwise injection feasible
- Easy handling without the use of large machines
- Targeted injection at a defined depth can be implemented

Not enough of WIWA yet?



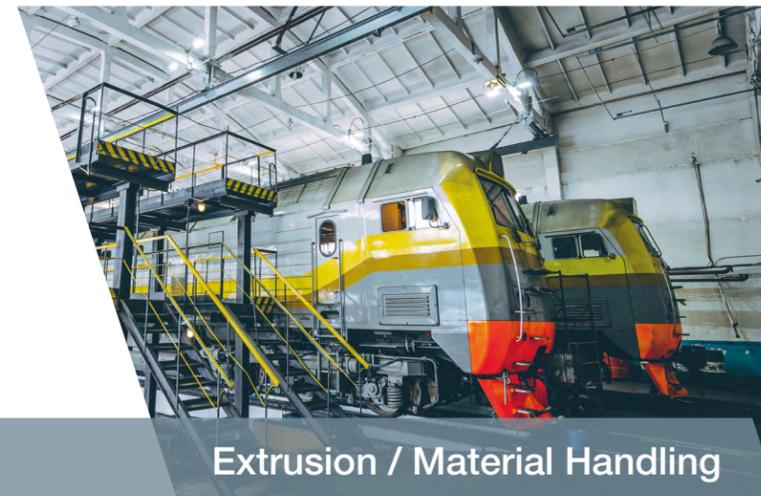
Protective Coatings

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.

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



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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