

CIVIL ENGINEERING, TUNNELING & MINING

Accessories catalogue



CIVIL ENGINEERING, TUNNELING & MINING

 $Injection \cdot Waterproofing \cdot Consolidation \cdot Repair \cdot Anchoring$

The fields of application of our products in civil engineering & mining as well as in other areas of construction are the consolidation of soil, rock or raw materials, in the sealing against water, the safe and economical filling of cavities, in anchor technology and the repair of structures.

To solve these often-challenging problems, we have at our disposal not only a range of tried-and-tested grouting and repair products, we also have the necessary products for repair, we also have the necessary injection technology such as injection equipment, data recording, injection anchors and injection accessories.

We would be pleased to support you with our experience and personal know-how, when it comes to anchoring, sealing, backfilling, consolidation and repair, worldwide.





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HP TUBE

DN 10, Steck-O, Type 2 SN



Length	Article number
2 m	WIAC4-00004 WIAC4-00003
10 111	WINCTOOOOS

SECURING CLIP

DN 10, Steck-O



Article	number

WIAC4-00015

CHECK VALVE

DN 10, Steck-O, Sleeve/Nipple, flow direction Nipple



Article number

WIAC4-00016

BALL VALVE

DN 10, Steck-O, Sleeve/Nipple



Article number

WIAC4-00009

T-SLEEVE

DN 10, Steck-O



Article number

WIAC4-00014

Y-SLEEVE

DN 10, Steck-O



Article number

WIAC4-00087

MIXING PIPE

for 2K-Systems, DN 10, Steck-O Nipple - M 20 x 1.5 ET included 2 Mixing Elements (WIAC4-00052), without Screw Nipple (9515)



MIXING PIPE

for 2K-Systems, DN 10, Steck-O Nipple - M 20 x 1.5 ET included 4 Mixing Elements (WIAC4-00052), without Screw Nipple (9515)

Length	Article number
640 mm	WIAC4-00086

MIXING PIPE

for 2K systems , especially for the product WILLBOLT® , DN 10, plug-in O nipple - R 1/4" OT included 2 Mixing Elements (WIAC4-00083), without Screw Nipple (WIAC4-00037)



MIXING PIPE

for 2K-Systems, DN 10, Steck-O Nipple - M 10 x 1 ET included 2 Mixing Elements (110090SC), without Screw Nipple (WIAC4-00080)

Length	Article number
350 mm	WIAC4-00082

MIXING ELEMENT

blue, 24 elements suitable for WIAC4-00081 / WIAC4-00082

	Diameter / Length Article number	
THE STATE OF	10 mm / 235 mm WIAC4-00083 8 mm / 190 mm 110090SC	

MIXING ELEMENT

yellow, 15 elements suitable for 6559 / WIAC4-00086

	Diameter / Length	Article number
Statatatatat	12.7 mm / 155 mm	WIAC4-00052

GRID MIXER

static mixer plastic Ø 9.4 mm



Length	Article number
9.5 mm	WIAC4-00048

SCREW NIPPLE

DN 10, Steck-O



Thread	Article number
IT M 10 x 1	WIAC4-00080
IT M 20 x 1.5	9515
IT R 1/4"	WIAC4-00037

STRAIGHT SLEEVE

DN 10, Steck-O



Version	Article number
rigid	WIAC4-00019

STRAIGHT SLEEVE

steel, IT M 20 x 1.5 on both sides



Length	Article number
50 mm	WIAC4-00079

SCREW-IN NIPPLE

DN 10, Steck-O



Thread	Article number
M 20 x 1.5 ET	WIAC4-00061
R 3/8" ET	WIAC4-00062
R 1/4" ET	WIAC4-00063

DOUBLE NIPPLE

DN 10, Steck-O



Article number

WIAC4-00017

PLUG SLEEVE

DN 10, Steck-O



Article number

WIAC4-00064

PLUG NIPPLE

DN 10, Steck-O



Article number

WIAC4-00077

WELDABLE NIPPLE

DN 10, Steck-O



Article number

WIAC4-00078

SCREW SLEEVE

DN 10, Steck-O



Thread Article number

R 1/4 IT WIAC4-00060 M 10 x 1 IT WIAC4-00084 G 3/8" IT WIAC4-00059

REDUCTION NIPPLE



Thread

Article number

1" ET - 1/2" IT WIAC4-00076 1/2" ET - 3/8" IT WIAC4-00089

INJECTION ADAPTER

DN 10, Steck-O, Nipple



Thread

Article number

Trapeze titan 30/11

T30-DN10

DN 10, Steck-O, turnable



Thread	Article	number

R 3/8" ET WIAC4-00066

RIGHT-ANGLE COUPLING

DN 10, Steck-O, Sleeve/Nipple



Article number

WIAC4-00043

O-RING

DN 10



Article number

WIAC4-00074

SUPPORT RING

DN 10



Article number

WIAC4-00075

INJECTION FEED PIPE SLEEVE

sleeve DN 10, Injection lance M 20 x 1.5 IT, pipe: 12 mm outer Diameter



Length	Article number
1 m	WIAC4-00071
2 m	WIAC4-00090
3 m	WIAC4-00091

INJECTION FEED PIPE SLEEVE WITH CROSS HANDLE

sleeve DN 10, lnjection lance M 20 x 1.5 lT, pipe: 12 mm outer Diameter with cross handle



Length	Article number	
1 m	WIAC4-00072	

INJECTION FEED PIPE

plastic, M 20 x 1.5 IT/ET, extensible



Length	Article number
1.5 m	WIAC4-00073

INJECTABLE BOREHOLE PLUG

type "HS" steel



Diameter	Article number
Ø 36 mm (Borehole Ø 38 - 51 mm)	WPAC4-00027
Ø 40 mm (Borehole Ø 42 - 55 mm)	WPAC4-00037
Ø 52 mm (Borehole Ø 54 - 80 mm)	WPAC4-00024

INJECTABLE BOREHOLE PLUG

type plastic



RAM GROUTING LANCE - BASE PIECE ML

injection pipe, length 1000 mm, with conical tip, 6 x \emptyset 5 mm exit holes per m, spacing 160 mm, inner thread on one side



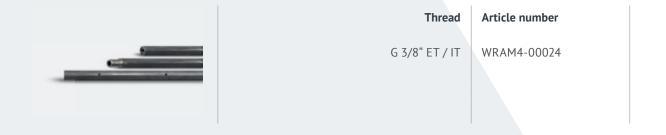
RAM GROUTING LANCE - BASE PIECE OL

injection pipe, length 1000 mm, for lost conical tip, without side exit holes, inner thread on one side



RAM GROUTING LANCE - EXTENSION ML

injection pipe, extension, length 1000 mm, 6 x Ø 5 mm exit holes per m, spacing 160 mm, inner and outer thread



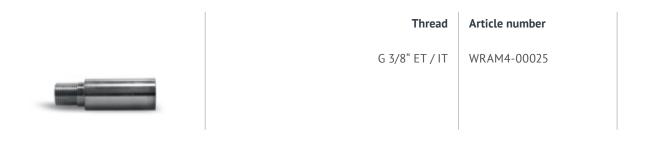
RAM GROUTING LANCE - EXTENSION OL

injection pipe, extension, length 1000 mm, without exit holes, inner and outer thread



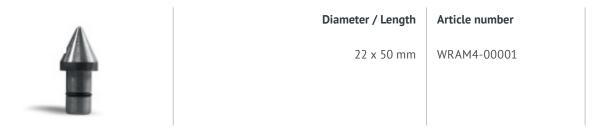
CHECK VALVE

Ø 21.3 mm, length = 67 mm, thread on both sides



LOST CONICAL TIP

injection conical point with O-Ring, shaft diameter 14.9 x 25 mm, for RAM grouting lance - Base Piece OL, WRAM4-00005



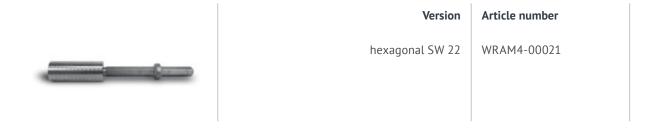
PILE DRIVER

coupling element between Ram grouting lance and Mounting tool, Ø 21.3 mm, for WRAM4-00024 or WRAM4-00006



MOUNTING TOOL

length 350 mm, \emptyset outer 50 mm, \emptyset inner 26 mm, shaft connection hexagonal for pneumatic hammer for Pile Driver WRAM4-00008



PLACING TOOL

Ø outer 45 x 220 mm, Ø inner 26 mm, SDS-Max connection for electric hammer for Pile Driver WRAM4-00008



POINTING TOOL

mounting help for Pile Driver, with hexagonal shaft for battery screwdriver



PULL AND INJECTION HEAD

help for pull of ram lances (toweye) and simultaneous inejction coupling



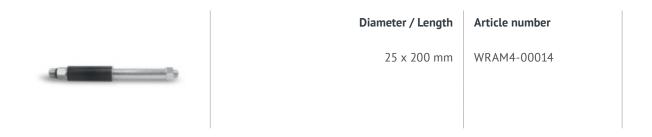
DOUBLE NIPPLE

connection between ram grouting lance and pull and injection head, with O-Ring, free passage \emptyset 8 mm, SW 19, mandatory for the use of 1/2 "Ram pull and Injection head" for Pull and Injection head WRAM4-00012

Thread	Article number	
G 3/8" ET - G 1/4" IT	WRAM4-00013	

STEEL PACKER

outer thread G 1/4", free passage Ø 8 mm, for Ram grouting lance, connection Thread G 3/8"



RAM GROUTING LANCE - BASE PIECE ML

injection pipe, length 1000 mm, with conical tip, \emptyset 4 mm exit holes per m, spacing 125 mm, outer thread on one side



RAM GROUTING LANCE - BASE PIECE OL

injection pipe, length 1000 mm, for lost conical tip, wihtout side exit holes, outer thread on one side



RAM GROUTING LANCE - EXTENSION ML

injection pipe, extension, length 1000 mm, Ø 4 mm exit holes, spacing 125 mm, outer thread on both sides



RAM GROUTING LANCE - EXTENSION OL

injection pipe, extension, length 1000 mm, without exit holes, outer thread on both sides



CHECK VALVE

length 52 mm, Ø 16 mm, inner thread on both sides



LOST CONICAL TIP

injection conical tip with O-Ring, shaft $8.9 \times 25 \text{ mm}$ for RAM grouting lance - Base Piece OL



Diameter / Length	Article number
13 x 42 mm	WRAM4-00020

COUPLING SLEEVE

Ø 16 x 28 mm, inner thread on both sides



Thread	Article number
G 1/4" IT	WRAM4-00002

RAM AND INJECTION HEAD

help for ramming lances and simultaneous inejction coupling

Thread	Article number	
G 1/4" IT	WRAM4-00026	

STEEL PACKER

outer thread M 10 x 1, Ø 18 x 170 mm, free passage Ø 6 mm, Sleeve G 1/4" IT as connection thread for Ram grouting lances



HDPE PIPE

for targeted injection of grouts in voids, cracks and cavities



Diameter	Article number
AD/ID 13/9 mm	WIAC4-00070
AD/ID 21/11 mm	WIAC4-00085

IBC CONNECTION HOSE

3 m suck and pressure hose 1", with 1" connection (Injection pump) to S 60 x 61 (IBC). System includes 1 pc. Hose adapter 1", 1 pc. Ball valve, 4 pcs. Hose clamps 1", Adapter S 60 x 61



Version	Article number
S 60 x 6 auf 1"	WSPA4-00041

MANOMETER

Diameter 63 mm, 0 - 400 bar, bottom connection



Article number
WSPA4-00002

STEEL PACKER WITH HP CONICAL HEAD NIPPLE

for injection of polyurethane and epoxy resins, for surface injection in brick masonry and for crack injection in reinforced concrete structures

pressure element 110 mm, pressure rubber 40 mm, HP conical head nipple M 6, SW 10



Diameter / Length	Article number	
10 x 160 mm	WPAC4-00032	

STEEL PACKER WITH HP CONICAL HEAD NIPPLE

for injection of polyurethane and epoxy resins, for surface injection in brick masonry and for crack injection in reinforced concrete structures

pressure element 70 mm, pessure rubber 30 mm, HP conical head nipple M 6, SW 10



Diameter / Length	Article number
13 x 110 mm	WPAC4-00031

STEEL PACKER WITH HP FLAT HEAD NIPPLE

pressure element 70 mm, pressure rubber 40 mm, M 8 IT, free passage 2.5 mm with HP-Flat head nipple M 8, SW 12, without check valve

Diameter / Length	Article number	
16 x 130 mm	WPAC4-00030	

STEEL PACKER

pressure element 70 mm, pressure rubber 40 mm, R 1/4" ET, free passage 4 mm, without flat head nipple, without check valve



STEEL PACKER WITH GEL-FLAT HEAD NIPPLE

pressure rubber 40 mm, M 10×1 ET, free passage Ø 4 mm, for injection of acrylate gels in curtain and surface injection, horizontal barrier in masonry, crack injection in reinforced concrete, refurbishment of dilatation joints



STEEL PACKER

pressure rubber 70 mm, outer thread M 10 x 1, free passage Ø 6 mm, SW 17

	Diameter / Length	Article number
	20 x 300 mm	WPUR-INA-00102
-	22 x 300 mm	WPAC4-00035

1-DAY PACKER - STEEL WITH CONICAL HEAD NIPPLE

pressure element 70 mm, pressure rubber 40 mm, HP-conical head nipple M 6, check valve

Diameter / Length	Article number
10 x 120 mm 13 x 120 mm	

LAMELLA KNOCK-IN PACKER

with pneumatic quick coupling, for drill diameter Ø 18 mm



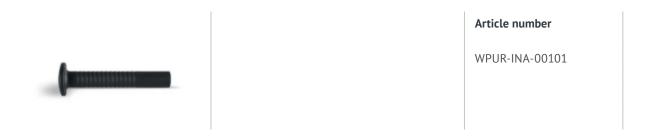
LAMELLA KNOCK-IN PACKER

with outer thread R 1/4", free passage Ø 7 mm, for drill diameter Ø 14 mm



PLACING TOOL

suitable for Lamella knock-in packer



PLASTIC-FLAT HEAD NIPPLE

with inner thread R 1/4", max. 60 bar without check valve



Article number
WPAC4-00039

GEL-FLAT HEAD NIPPLE

sealing ring, SW 17, Ø 4.5 mm passage



Thread	Article number
M 10 x 1 IT R 1/4"	WPAC4-00003 WPAC4-00018

STEEL-SWIVEL JOINT

working pressure up to 250 bar



Article number	
WIAC4-00067	

HOSE INJECTION PLUG

connection to quick release fastener, inner thread, free passage $\, \emptyset \, 7 \, \, \text{mm} \,$



Thread	Article number
R 1/4"	WIAC4-00068
M 10 x 1	WIAC4-00092

QUICK-RELEASE FASTENER

up to 100 bar, free passage 9 mm, with safety bracket



Thread	Article number
R 1/4"	WIAC4-00058

INJECTION CONNECTION HOSE («WHIP»)

version with sliding coupling for flat head Nipple, \emptyset 16 mm, sideways connection or with Grip head, HP whip 500 mm long



Version / Thread	Article number
with sliding coupling R 1/4"	WIAC4-00088
with grip head R 1/4"	WAAC4-00015

SLIDING COUPLING

for Flat head nipple sideways, with inner Thread, blue rubber seal, passage Ø 2.5 mm for WIAC4-00088



Thread	Article number
M 10 x 1	WPAC4-00020

RUBBER SEAL

for sliding coupling with metal ring, blue for WPAC4-00020 $\,$



Diameter	Article number
4 mm	WAAC4-00013

with 4 jaws and seal for high pressure injection for HD taper head nipple



Version	Article number
IT M 10 x 1	WAAC4-00008

UNIVERSAL MIXER



Version	Article number
60 x 400 mm	WKAT-SLA-00105 WKAT-SLA-00106
80 X 400 IIIII	WKAT-3LA-00100

MIXING BUCKET

plastic mixing bucket



Version	Article number
30 L	WAAC4-00014

PLASTIC MEASURING CUPS

PVC with handle



Version	Article number
1.0 l	WKAT-SLA-00100
2.0 l	WKAT-SLA-00101
3.0 l	WKAT-SLA-00102
5.0 L	WKAT-SLA-00103

CARTRIDGE GUN

heavy duty caulking gun for 290 - 320 ml double cartridges, for application of silicanes, acrylates, silanes and PU adhesives and sealants



Version	Article number
hand operated	WAAC4-00012
battery driven	WAAC4-00011

SAUSAGE GUN

heavy duty caulking gun for 600 ml aluminum bags, for application of silicanes, acrylates, silanes, PU, adhesives and sealants



Article number

WLAN-AG-600

WILLHOSE

PVC injection hose with corrugated surface, for sealing construction joints in concrete structures, injectable with polyurethane or epoxy resins, acrylate gels and injection cements, multiple injectable with acrylate gels and injection cements, 50 m Roll



Diameter (inner/outer) / Color	Article number
6/12 mm / Red	WJSS4-00005

PVC- FILLING AND VENTING HOSE

filling and venting hose, PVC fabric hose for assembling the injection hose WILLHOSE $50\ \mathrm{m}$ Roll



Diameter (inner/outer) / Color	Article number
6/12 mm / red	WJSS4-00008
Ø 6/12mm / green	WJSS4-00030
Ø 6/12mm / blue	WJSS4-00007

SCREW-IN GROMMET

plastic coupling piece for hoses, free passage 3 mm

	Inner diameter	Article number
	4 - 6 mm	WJSS4-00009
_		

DOUBLE GROMMET

plastic coupling piece for hoses, free passage 3 mm, with wing handles



RIGHT-ANGLE GROMMET

plastic (POM) for 6 mm inner diameter hoses



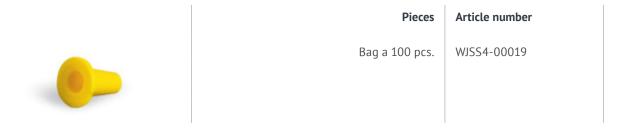
2-LOBED CLAMP

for 12 mm outer diameter hoses



SHUTTER PLUG

for sealing 6 mm inner diameter filling and venting hoses, yellow



NAIL PACKER

plastic with protection plugs, HP-conical head nipple M 8 (loosely enclosed)



EXTENSION PIPE

with HP conical head nipple M 8



FOAM COVER PLATE

for nail packer, self-adhesive 10 mm thick, gray



METAL CLAMPS

fixing clamp 13 mm for 12 mm outer diameter hoses, fixing hole diameter 6.1 mm



Pieces	Article number
Box a 100 pcs.	WJSS4-00023

NAIL AND DOWEL

nail and dowel for metal fixing clamps, 5 x 40 mm



Pieces	Article number
Box a 100 pcs.	WJSS4-00024

PLASTIC CLIPS

for pressing into the fresh concrete or into 8 mm drill holes for fixing the injection hose



Pieces	Article number
Bag a 100 pcs.	WJSS4-00011

WATERSTOP CLAMP

for fastening the injection hose to the joint plate



Pieces	Article number
Bag a 100 pcs.	WJSS4-00025

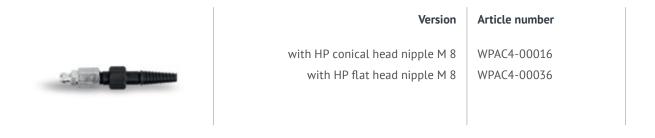
FIXING GRID

for fastening/installing injection hoses



HOSE PACKER

Plastic, for hose inner diameter 4 - 6 mm Shaft diameter 8 x 70 mm, free passage 3 mm



WILLSWELL

water swellable rubber profile with incorporated hydrophilic resin



WILLPUMP ERM 1

1K Diaphragm pump, electric, complete with 5 m high pressure hose, ball valve M 10 x 1.5, 6 liter hopper, connection 220 V, delivery max. 2.2 l/min for PUR/EP



Height x Width x Length / Weight	Article number
500 x 440 x 400 mm / 20 kg	WPUM4-00013

WILLPUMP ARK 1

1K Piston pump, pneumatic, complete with 7.5 m high pressure hose with mouthpiece, 6 liter funnel, drive power 2 to 6 bar, delivery max. 2 l/min for PUR/EP



Height x Width x Length / Weight A

Article number

500 x 440 x 400 mm / 16 kg

1K-IG-31800-00003

WILLPUMP ARK S 2

2K Piston pump, pneumatic, complete with 2x HP 10 m delivery hoses (WIAC4-00003), 2x HP 2 m flushing hoses (WIAC4-00004), 2x suction hoses 3/4", 2x check valve (WIAC4-00016), 2x Ball valve DN 10 Steck-O (WIAC4-00009), 4x Plug Sleeven (WIAC4-00064), Securing clip DN 10 (WIAC4-00015), 1x adapter 3/4" cord bayonet, alternatively adapter RD 32 to quick coupling compressed air can, drive power 4 to 6 bar, delivery max. 4 to 5 l/min for PUR/SIL



Height x Width x Length / Weight

Article number

320 x 200 x 630 mm / 28 kg

WPUM4-00018

WILLPUMP ARK B 2

2K Piston pump, pneumatic, complete with 2x HP 10 m delivery hoses (WIAC4-00003), 2x HP 2 m flushing hoses (WIAC4-00004), 2x suction hoses 1", 2x check valve (WIAC4-00016), 2x Ball valve DN 10 Plug-O (WIAC4-00009), 4x Plug Sleeven (WIAC4-00064), Securing clip DN 10 (WIAC4-00015), 1x Adapter 3/4" cord bayonet, Drive power 4 to 6 bar, Delivery max. 20 l/min for PUR/SIL



Height x Width x Length / Weight

Article number

420 x 450 x 1000 mm / 82 kg

WPUM4-00017

WILLPUMP ETK 3

3K Piston pump, pneumatic, complete with 3x 7.5 m material high pressure hoses and 3K mixing head, drive power 4 to 6 bar, delivery max. 14 l/min for AC



Height x Width x Length / Weight	Article number
450 x 310 x 830 mm / 45 kg	WPUM4-00016

WILLPUMP EZR 2

 $2\mbox{K}$ Gear pump electric, drive power 440 V - 60 Hz, maximum delivery 27 l/min for PUR/SIL



Height x Width x Length / Weight	Article number
1120 x 522 x 612 mm / 122 kg	WPUM4-00002

WILLPUMP AZR 2

2K Gear pump Pneumatic Drive power 5 - 7 bar, 4 to 6 m³/min, maximum delivery 27 l/min for PUR/SIL



Article number
WPUM4-00001

WILLPUMP APH 2

3K Piston pump Pneumatic, mixing ratio 4:1 (A:B), delivery distance 800 m, maximum operating pressure 240 bar, maximum delivery 10 l/min (= 2x 4 l component A + 2 l component B) for PHENOL



Height x Width x Length / Weight	Article number
1500 x 535 x 600 mm / 150 kg	WPUM4-00011

NOTES







COATINGS

F. Willich GmbH + Co. KG Planetenfeldstrasse 120 44379 Dortmund Germany





TÜVNORD TÜV NORD CERT GHIBH ISO 9001

