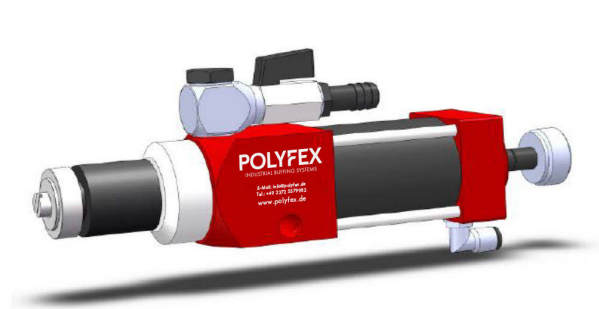


Polyfex 5000

Oesestr. 68
58675 Hemer
Germany
Tel.: +49 2372 5579982
info@polyfex.de
www.polyfex.de

Product discription



Polyfex 5000 is a high-pressure dosing gun, specially developed for applying abrasive media. In polishing machines, these dosing devices are used to apply liquid brush and polishing emulsions. The primary goal in developing the Polyfex 5000 dosing guns was easy handling and application-specific design while maintaining low susceptibility to malfunctions.

Speacial features:

- high injection pressure to penetrate the 'window draft'
- precise dosing through fast-closing injection valve
- optimized adaptation to the required injection quantity through two gun sizes
- optimized maintenance through replaceable spray head
- easy nozzle change
- uncomplicated venting
- optional external spray head with flexible extension
- prepared for the installation of electronic function monitoring

Implementations:

- Polyfex 5000 for universal use (up to 4.0 cm³)

Technical Values

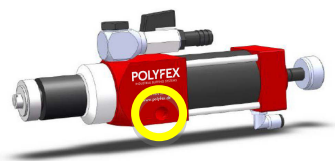
- Control: 3/2-way valve (G 1/4)
- Air pressure: 4-6 bar
- Air connection: G 1/4" – Hose 8/6 mm
- Paste pressure: 4-6 bar
- Paste connection: 13 mm
- Dispensing quantity: 1,2 – 4,0 cm³



Attention: Always observe the safety instructions on the last page!

Installation

In any interaction such as assembly, commissioning, disassembly, and cleaning, the drawing including the parts list must be used.



On the pistol body, there is a through hole Ø 12 mm for attachment.

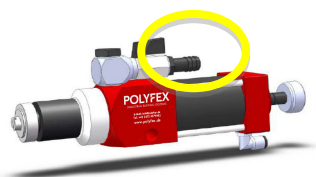


For the compressed air supply, a pneumatic hose is connected to the Air-connection (27) Ø 8/6 mm.

Pneumatic actuation via a 3/2-way valve:

- Normally closed when de-energized with electromagnetic actuation
- Opening time at least 0.5 seconds
- Pause time at least 1.5 seconds.

The valve must be located as close as possible to the pistol.



The hose connection (38) is factory-set for a hose with an inner diameter of 12 mm.

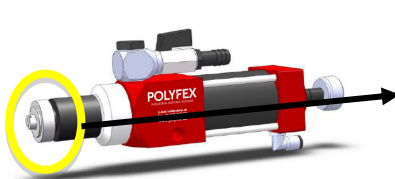


Attention: Always observe the safety instructions on the last page!

Commissioning

In any interaction such as assembly, commissioning, disassembly, and cleaning, the drawing including the parts list must be used.

The spray gun must be adjusted to the respective application.

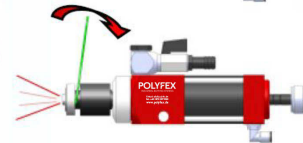


Inserting the required material nozzle into the spray head.

1.



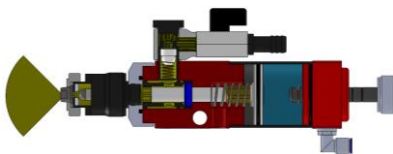
2.



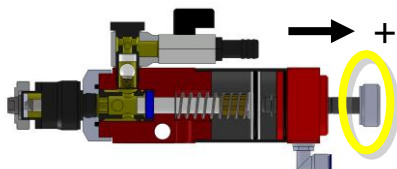
Open the stop valve(37),

1. to bleed, insert a screwdriver into the gap between the nozzle nut and the injection head and

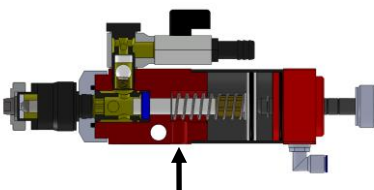
2. Push the retaining nut (02) forward until all the air has escaped. The material chamber is thus filled with medium.



By operating the pneumatic valve, the medium immediately flows out under high pressure! See picture Yellow = Medium



Adjust the spray quantities at the dosing screw (32).



Keep the venting path open, do not use a silencer.



Attention: Always observe the safety instructions on the last page!

Possible sources of error

In any interaction such as assembly, commissioning, disassembly, and cleaning, the drawing including the parts list must be used.

No / too little material is spraying from the nozzle

- **Air in the material chamber / paste line**
 - ⇒ Bleed as described under 'Commissioning' until paste comes out
- The nozzle is clogged
 - ⇒ Unscrew the retaining nut (02), remove the nozzle (01) and clean or replace it. When reassembling, tighten the retaining nut (02) 'by hand'.
- Injection nozzle defective
 - ⇒ If the injection head cannot be vented (mechanically stiff)
 - a) Injection nozzle is clogged
 - ⇒ clean according to test instructions
 - b) Variant with OW-Head
 - ⇒ OW-Head must be replaced
- Check valve (34) does not close properly
 - ⇒ Check the operation of the non-return valve:
 1. Fill pistol chamber with medium =>Vent
 2. Close stop valve (37)
 3. Actuate pneumatic valve

Now sprays medium out, the check valve (34) is defective, it needs to be cleaned or replaced.
- Too low paste pressure
 - ⇒ Bleed (see 'Commissioning'), neither air nor medium escapes, increase pressure in the paste line
- Medium supply line clogged
 - ⇒ Bleed (see "Commissioning"), neither air nor medium escapes, clean the supply line
- Pneumatic piston does not move forward, pneumatic cylinder tube (25) is dirty
 - ⇒ Open and clean cylinder

- Air pressure for pneumatic cylinder too low
⇒ Increase the air pressure in the supply line.
The setpoint is 4-6 bar.

OW-Head leaking

- Droplets from the nozzle,
- material exits from the vent holes (see back of the head)
⇒ The OW-Head must be replaced.

Paste leakage at the vent hole in the pistol housing

- Cup seal (17) defective
⇒ Pull out the sleeve (15) with a hex key (SW12) and replace the cup seal (17)
Attention: Be sure to pay attention to the installation position of the rod seal! When replacing the cup seal (17) on the Polyfex 5000, the plunger (19) must also be replaced!
- Plunger (19) defective
⇒ Replacement of the plunger
 1. remove the cylinder bottom by removing the four cylinder screws (39)
 2. separate the plunger (19) from the pneumatic piston (22)
 3. a simultaneous replacement of the cup seal (17) is recommended

Wear parts to be stocked

<u>Designation</u>	<u>Position</u>	<u>Order number</u>
OW-Head	55	5000 - 55
Cup seal	17	5000 - 17
Plunger	19	5000 - 19
Compression spring	20	5000 - 20
Check valve	34	5000 - 34



Safety Instructions

The following instructions must be observed when commissioning, maintaining, or performing other activities on the spray gun:

- The spray gun must never be aimed at a person
- Always wear safety goggles
- Always depressurize the system, both on the air and paste sides
- Close the shut-off valve of the paste supply
- Before commissioning and after any repair or maintenance work, check the correct seating of screws and nuts as well as the correct connection of all supply lines.
- Use only original parts
- Obey all warnings and instructions from the polishing compound manufacturer

Changes in the interest of improvements and technical progress are reserved.

WEITERGABE SOWIE VIELFÄLTIGUNG DIESER UNTERLAGE, VERWERTUNG UND MITTEILUNG IHRES INHALTS NICHT GESTATTET, SOWEIT NICHT AUSDRÜCKLICH ZUGESTANDEN. ZUWIDERHANDLUNGEN VERPFLICHTEN ZU SCHADENERSATZ. ALLE RECHTE FÜR DEN FALL DER PATENT-, GEBRAUCHSMUSTEREINTRAGUNG VORBEHALTEN.

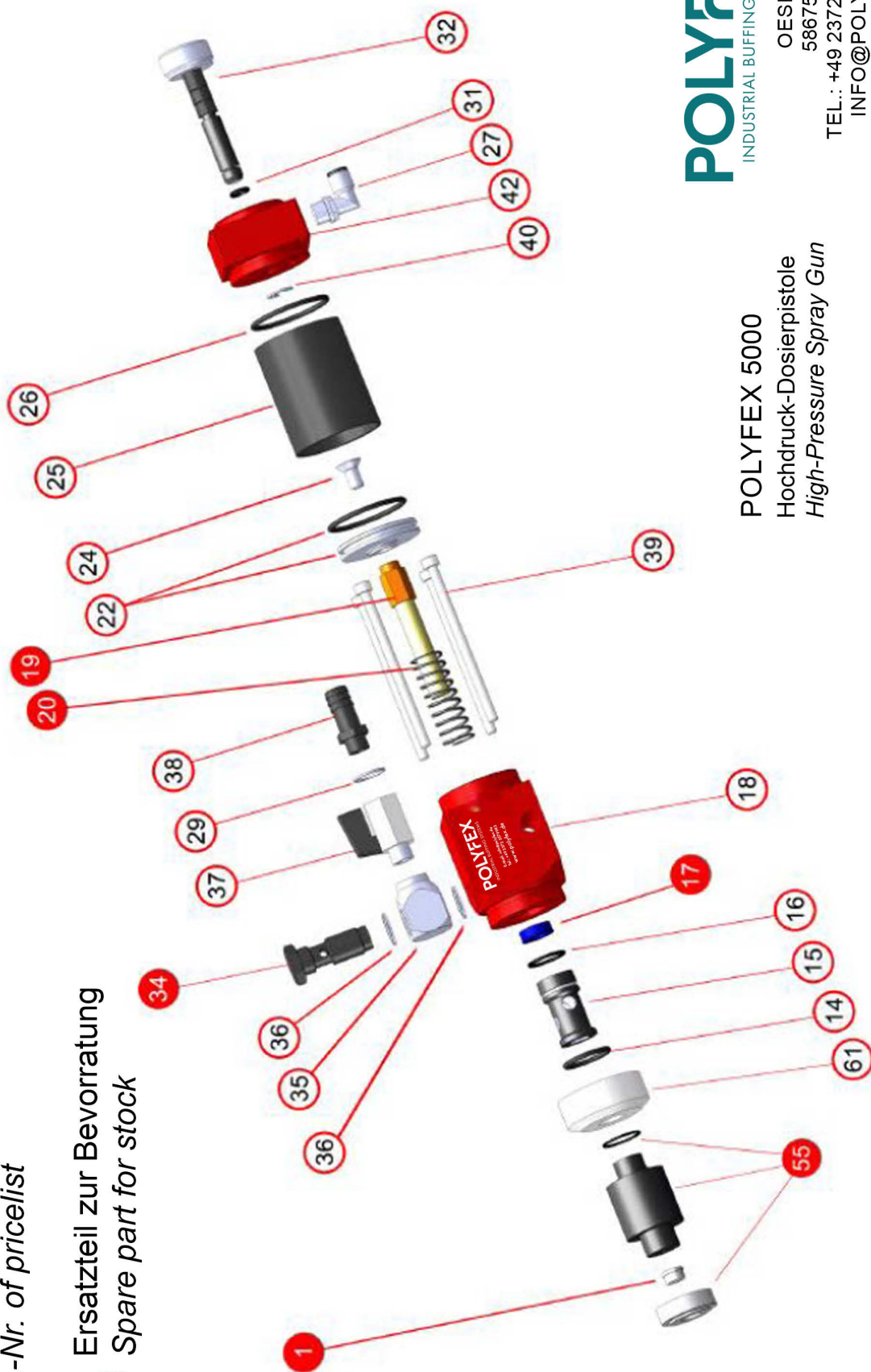
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Pos.-Nr. aus Preisliste

Pos.-Nr. of pricelist

Ersatzteil zur Bevorratung

Spare part for stock



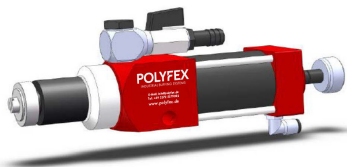
POLYFEX 5000
Hochdruck-Dosierpistole
High-Pressure Spray Gun

POLYFEX
INDUSTRIAL BUFFING SYSTEMS

OESESTR. 68
58675 HEMER
TEL.: +49 2372 5579982
INFO@POLYFEX.DE
WWW.POLYFEX.DE

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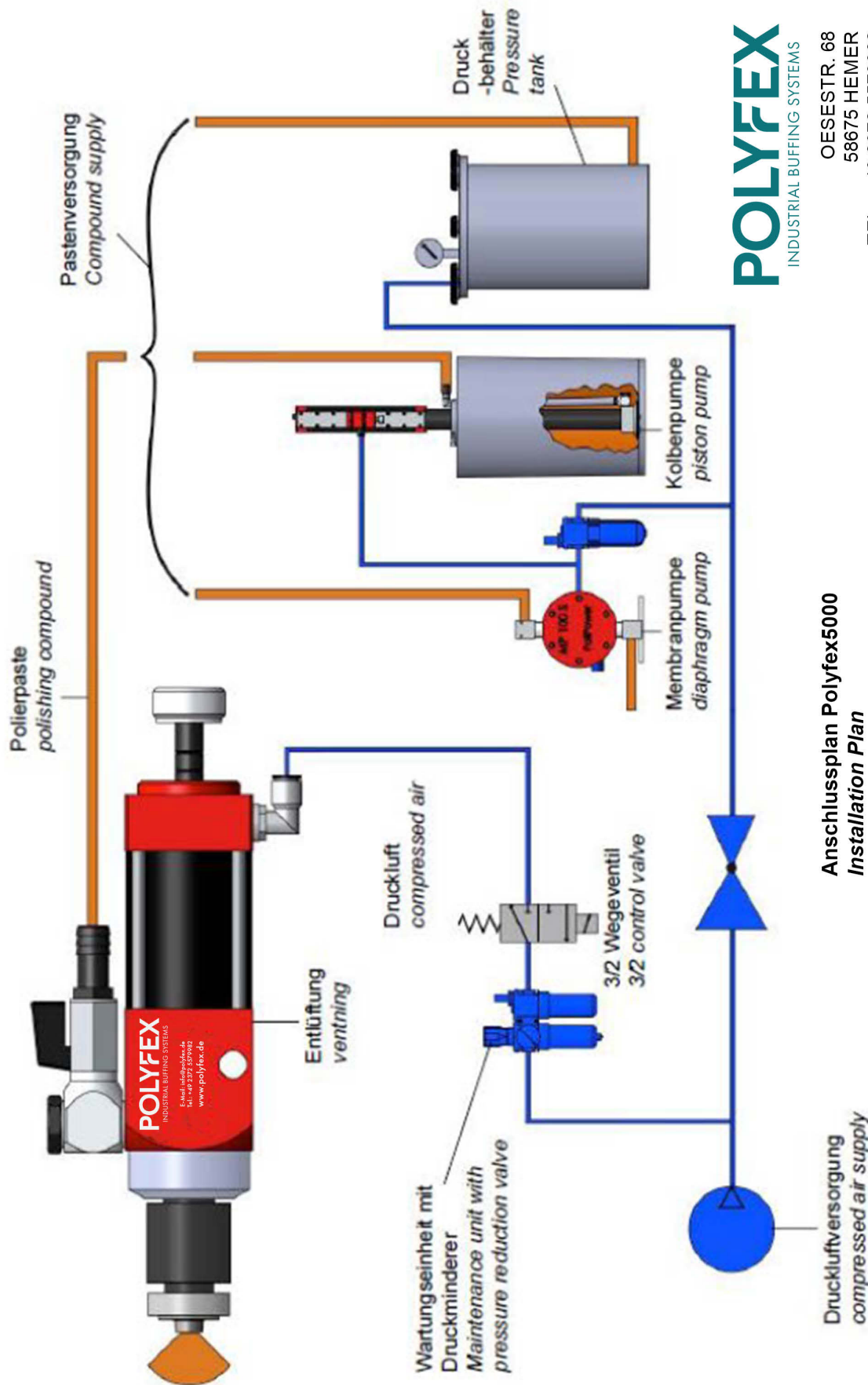
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Pos.-Nr. Pos.-No.	Artikel-Bezeichnung Article description	Teile-Nr. Part-No.
1	Düse / Nozzle	5000 - 01
14	Dichtscheibe/ Retaining Plate	5000 - 14
15	Einschubhülse/ Sleeve	5000 - 15
16	O-Ring	5000 - 16
17	Stangendichtung / Cup Seal	5000 - 17
18	Gehäuse o. Bohrung / Body without hole	5000 - 18
18	Gehäuse m. Bohrung / Body with 1/4"	5000 - 18
18	Gehäuse m. Bohrung/ Body with M22x1.5	5000 - 18
19	Stößel / Plunger	5000 - 19
20	Rückholfeder / Compression Spring	5000 - 20
22	Pneumatikkolben/ Pneumatic Piston	5000 - 22
24	Schraube / Screw	5000 - 24
25	Zylinderrohr / Cylinder Tube	5000 - 25
26	O-Ring	5000 - 26
27	Luftanschluß/ Air Connection	5000 - 27
29	Dichtring/ Gasket	5000 - 29
31	O-Ring	5000 - 31
32	Dosierschraube / Dosing Screw	5000 - 32
34	Rückschlagventil / Check Valve	5000 - 34
35	Winkelstück / Angle	5000 - 35
36	Dichtring/ Gasket	5000 - 36
37	Mini-Kugelhahn / Stop Valve	5000 - 37
38	Einschraub - Tülle / Hose Connection	5000 - 38
39	Zylinderschraube / Cylinder Screw	5000 - 39
40	Scheibe / Plate	5000 - 40
42	Zylinderboden / Cylinder Bottom	5000 - 42
55	OW-Ausspritzkopf / OW-Head	5000 - 55
	kompl. ohne Düse / compl. without nozzle	
61	Adapter f. Polyfex 5000	5000 - 61
	Polyfex 5000	
	kompl. ohne Düse / compl. without nozzle	5000 - 00

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Anschlussplan Polyfex5000 Installation Plan

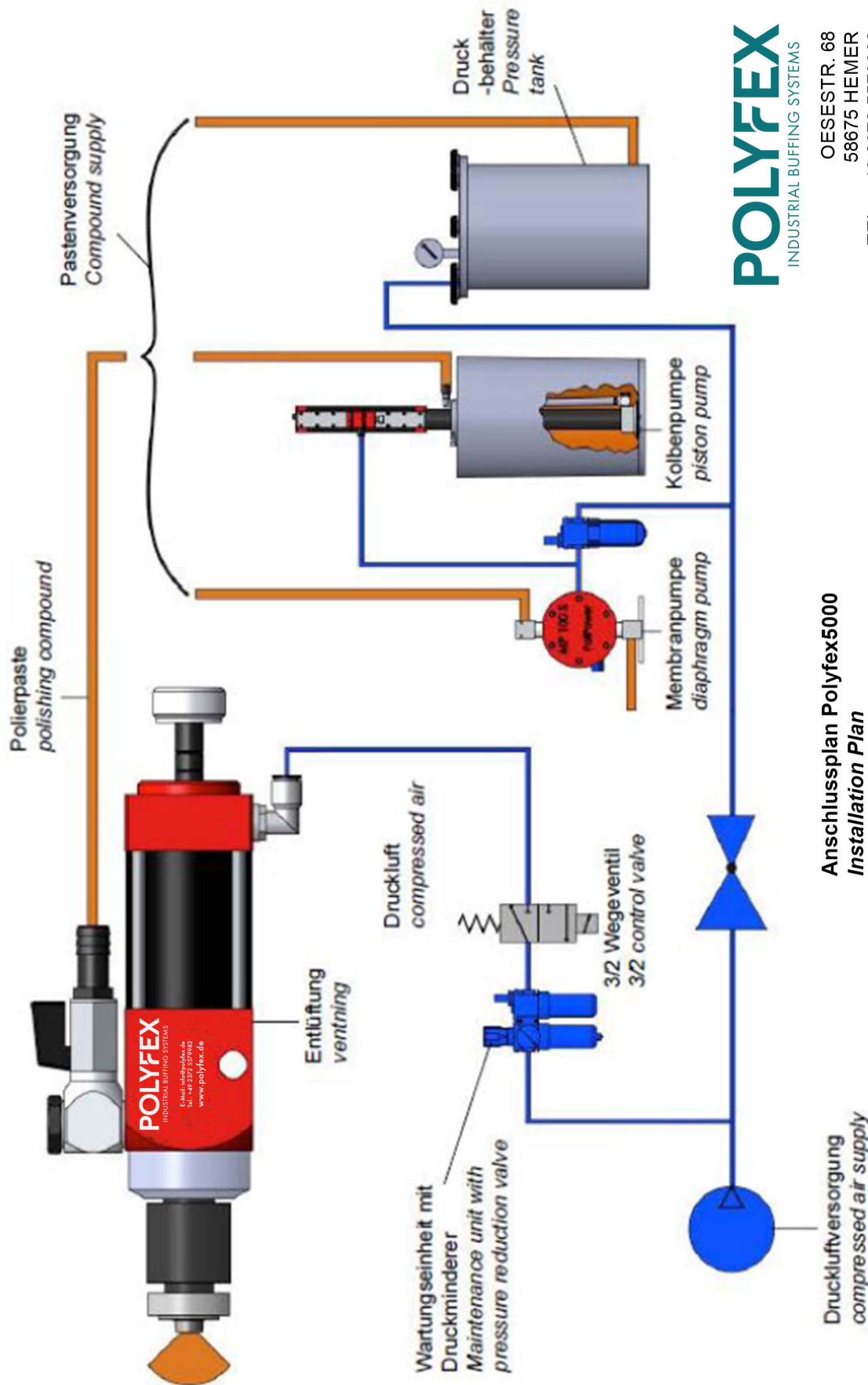
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