

WALTHER PILOT



Material Transfer Systems: Complete Systems and Components



Die Beschichtungs-Experten

The product range for all requirements

Perfect in every detail

1. WALTHER PILOT has the tailor-made solution for your materials. This also includes providing the best process technology (stirring, heating, metering) – to ensure that your production has consistently high quality.
2. The systems supplied by WALTHER PILOT require minimum maintenance and are designed for a long service life. All components meet the highest quality demands.

3. Ask your local WALTHER PILOT sales office for support when you are planning a new project or want to optimise existing plant and equipment.

You will not only be provided with specific know how, you will also have the benefit of specialist after-sales service.

You can also contact WALTHER PILOT directly at our headquarters in Wuppertal, Germany.

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- Catalogue 2004 / 2005



Material transfer systems are tested thoroughly before delivery – to ensure that they are perfect in every detail.



Drum transfer systems

Stirring station for consistently high material quality

The coating material is prepared while it is still in the delivery drum, to ensure that it is in an optimum condition for spraying. We supply equipment solutions that are ideally matched to your production requirements.

If required, we can also take care of integrating the application technology.

Basic system components:

- Drip tray in accordance with Water Protection Laws
- Pneumatic, twist-proof lift for drum cover acting in both directions (available for 30-, 60- and 200-litre drums and barrels)
- Agitator (electric or pneumatic)
- Pump with material filter
- Switch (on/off)
- Compressed air supply

System options:

- Level monitoring equipment
- Temperature sensors
- Spray guns / hoses
- Compressed air supply system for application equipment
- Heater



In addition to diaphragm pumps, piston pumps can also be used, e.g. for higher-viscosity materials.

Drum transfer systems

Material temperature control

Consistently good results can only be achieved if the entire quantity of coating material is kept at a constant temperature. In the system illustrated here, the temperature of the 200-litre transport drums is controlled by special heating jackets. The drums are heated from below.

The agitator has two effects: firstly, it homogenises the coating material (no temperature fluctuations) and secondly it ensures that the material heats up quickly. A temperature control system allows the optimum spraying temperature of the material to be set precisely.

This not only guarantees quality assurance due to exactly reproducible production conditions, it also protects the environment. Since the material properties are adjusted mainly by heating and less solvent has to be added, VOC emissions are reduced. Drying times can also be considerably shortened. Depending on the application profile, investment in additional heating systems soon pays off.



System for several colours



Detailed view:
open heating jacket

Further possibilities for material temperature control:

- Material heaters
- Heating hoses
- Heating bands
- Heating collars
- Pipe heaters



Material heater for all types of material. All wetted parts are made of stainless steel.

SprayPak – the versatile system

The PILOT SprayPak material supply unit with a double diaphragm pump is mounted in a space-saving manner on a drum cover or bracket. SprayPak offers a clear overview of all the necessary pneumatic control elements. The system has a special pneumatically powered fine regulator for the material pressure, ensuring excellent pulsation-free atomisation. A material filter is also integrated. Particularly economical spray coating with a finish that meets the highest quality requirements is best achieved using PILOT medium-pressure spray guns. Transfer rates similar to HVLP are possible.



SprayPak system for spraying separating agents

The system is ideally suited for spraying water-borne materials.

All wetted parts are made of stainless steel or solvent-resistant plastic. For the application of separating agents, the PILOT Mini-MD spray gun is the best choice.



Clear and easy adjustment

SprayPak allow you to adjust the settings of

- Pumps
- Material pressure
- Spraying pressure at the spray gun



SprayPak is also available on a trolley and with a suction set for 30-litre cans. Spray gun: PILOT Maxi-MD.

Complete circulation systems

Operation of a circulation system

The material is pumped from the tank via a ring circuit to the point(s) of application. After the final point of application, the material flows back to the tank via a backpressure regulator. As a result, the material is constantly kept in motion and is not able to settle in the pipes.

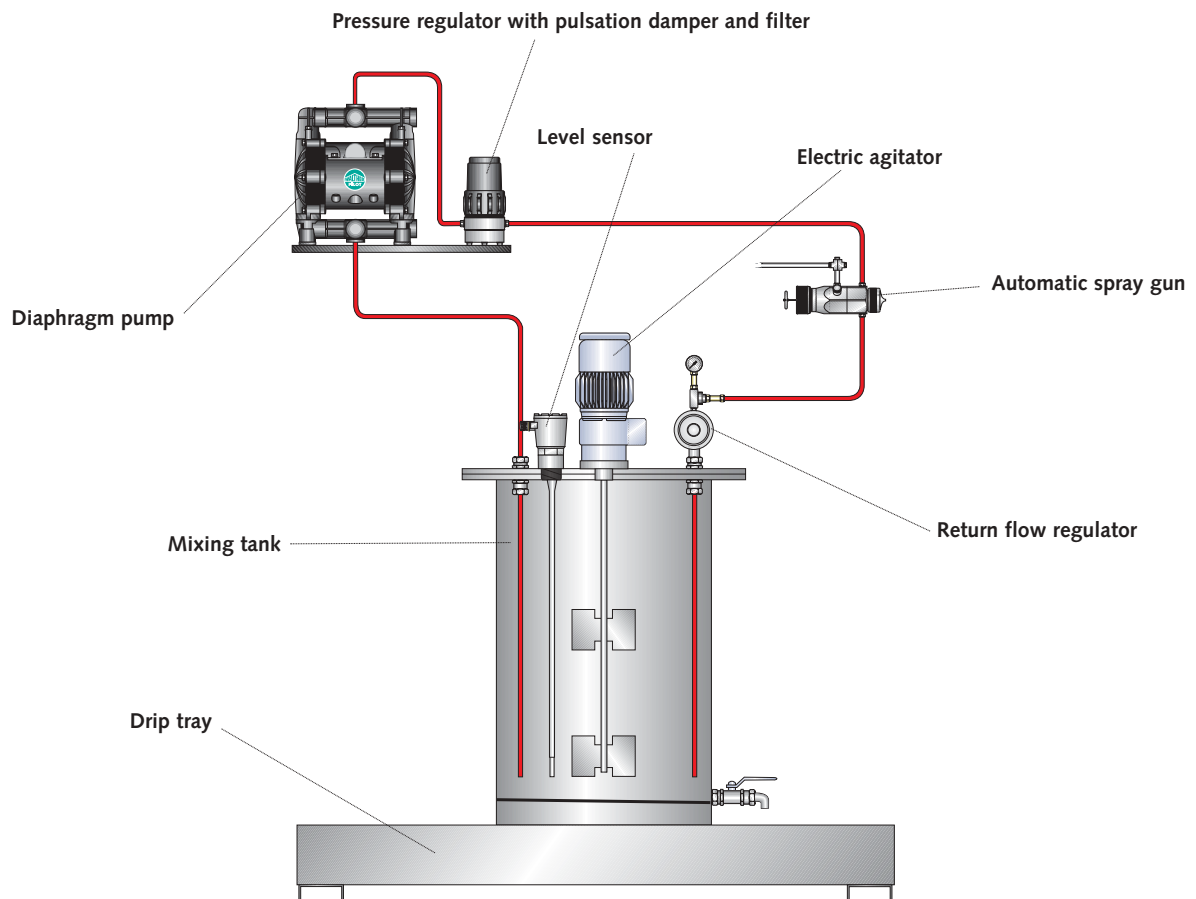
Low-pressure circulation systems

In these systems, diaphragm pumps are used to supply the coating material to the application equipment. Air-atomising spray guns are used.

Advantages:

1. Constant colour shade, constant viscosity during application – high process reliability.
2. Clean material due to constant filtering.
3. Avoidance of downtime, especially with automatic tank filling.
4. Separation of central material supply and application space.
5. Excellent possibilities for adjusting viscosity – also by heating.
6. The coating material can be purchased in more economical large drums.
7. Material circulation systems are not available "off the peg". We develop tailor-made solutions that are optimally matched to your production requirements – for maximum benefit.
8. Circulation systems can be easily designed for water-borne materials.
9. Optimum system monitoring is ensured by min./max. sensors, temperature meters, manometers on pressurised components, metering equipment, etc.
10. No settling of the material in the pipes.

Material flow in a low-pressure circulation system:



The basic components of a low-pressure circulation system. The lid of the mixing tank can be opened over 1/3 of its area for manual filling or inspection.

The pump console is fixed to the tank. The air-powered agitator is approved for use in potentially explosive atmospheres in accordance with ATEX Directive 94/9/EC. The ports for the agitator are ATEX certified.



As a full system supplier, WALTHER PILOT also offers the best application equipment to suit your needs, e.g. spray guns for manual or automatic operation. The automatic circulation spray gun PILOT WA 510 shown here is also available as an HVLP version PILOT WA 530. If space is limited, PILOT WA 610 is the ideal choice.



PILOT WA 610

PILOT WA 510 and 530



PILOT XIII-U



The equipment solution to suit the customer's needs also includes mounting panels for fixing pumps or Spaypaks, air fittings, solenoid valves, etc. Complete solutions for application equipment are also available: automatic spray guns, brackets, reciprocating units or linear drives, hoses, compressed air supply.

Complete circulation systems

High-pressure circulation systems

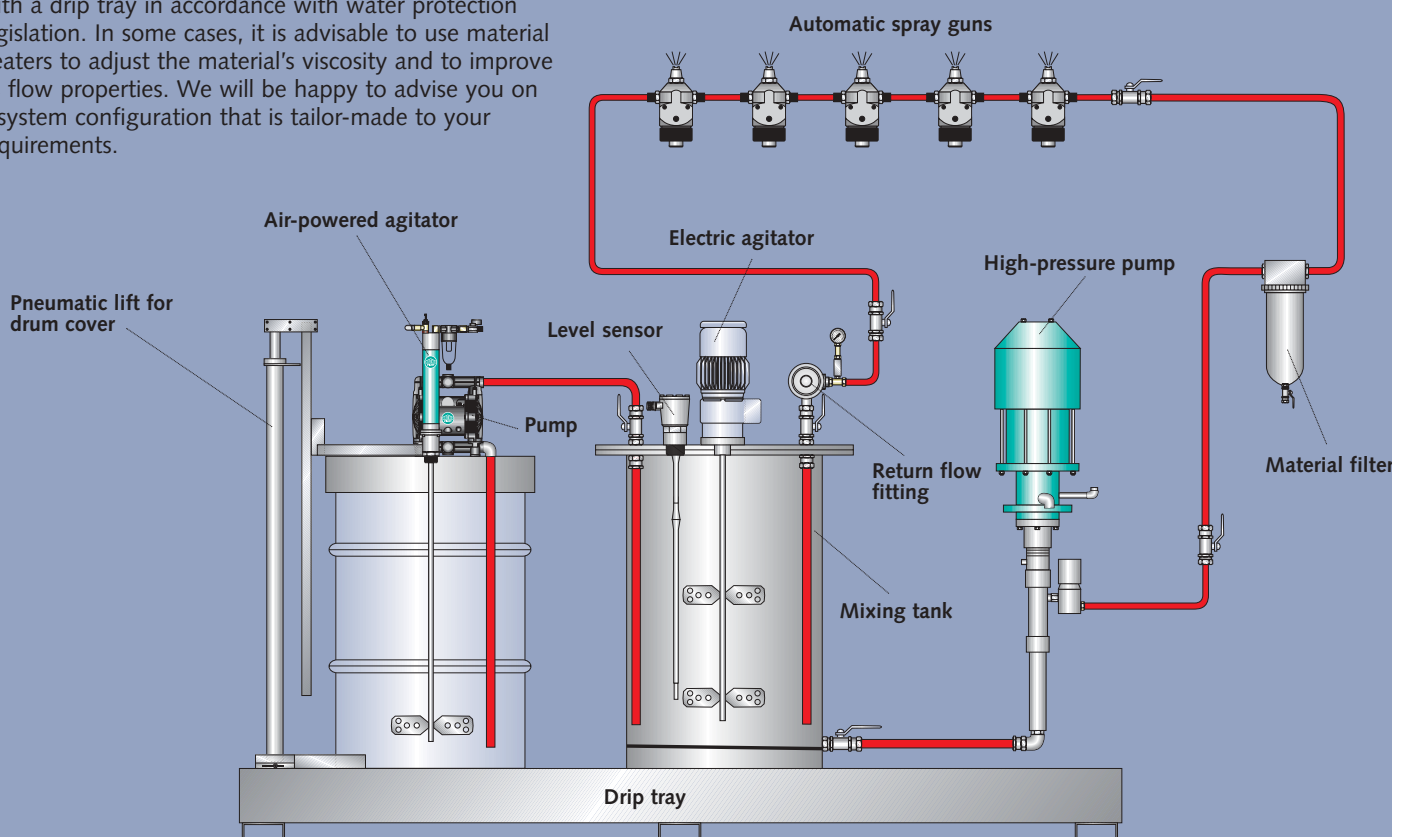
In the system illustrated here, high-pressure piston pumps are used to transfer the coating material to the application equipment or to several application points. In general, airless or air-assisted airless atomisers are used. Such systems are especially suited for spraying large quantities of material. Material pressure regulators are connected into the circuit to reduce the pressure at the atomiser.



Material flow diagram of a high-pressure circulation system:

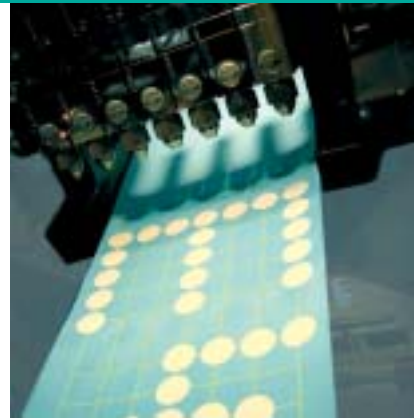
Tank station for high-pressure circulation operation with a lift for drum covers for 200-litre drums and a paint mixing tank Type FMB 250 (or larger) from WALTHER PILOT. Level monitoring with automatic refilling is provided by the pulse generator of the min./max. sensor. The diaphragm pump on the drum cover is activated when the level in the paint mixing tank reaches the minimum, thus eliminating interruptions in the coating process caused by manual filling. Furthermore, the properties of the coating material can be adjusted in a very short time by proportioning the required amount of solvent via a further diaphragm pump (not shown).

The min./max. sensor also serves as an overflow sensor. Important: drums and mixing tanks must be provided with a drip tray in accordance with water protection legislation. In some cases, it is advisable to use material heaters to adjust the material's viscosity and to improve its flow properties. We will be happy to advise you on a system configuration that is tailor-made to your requirements.

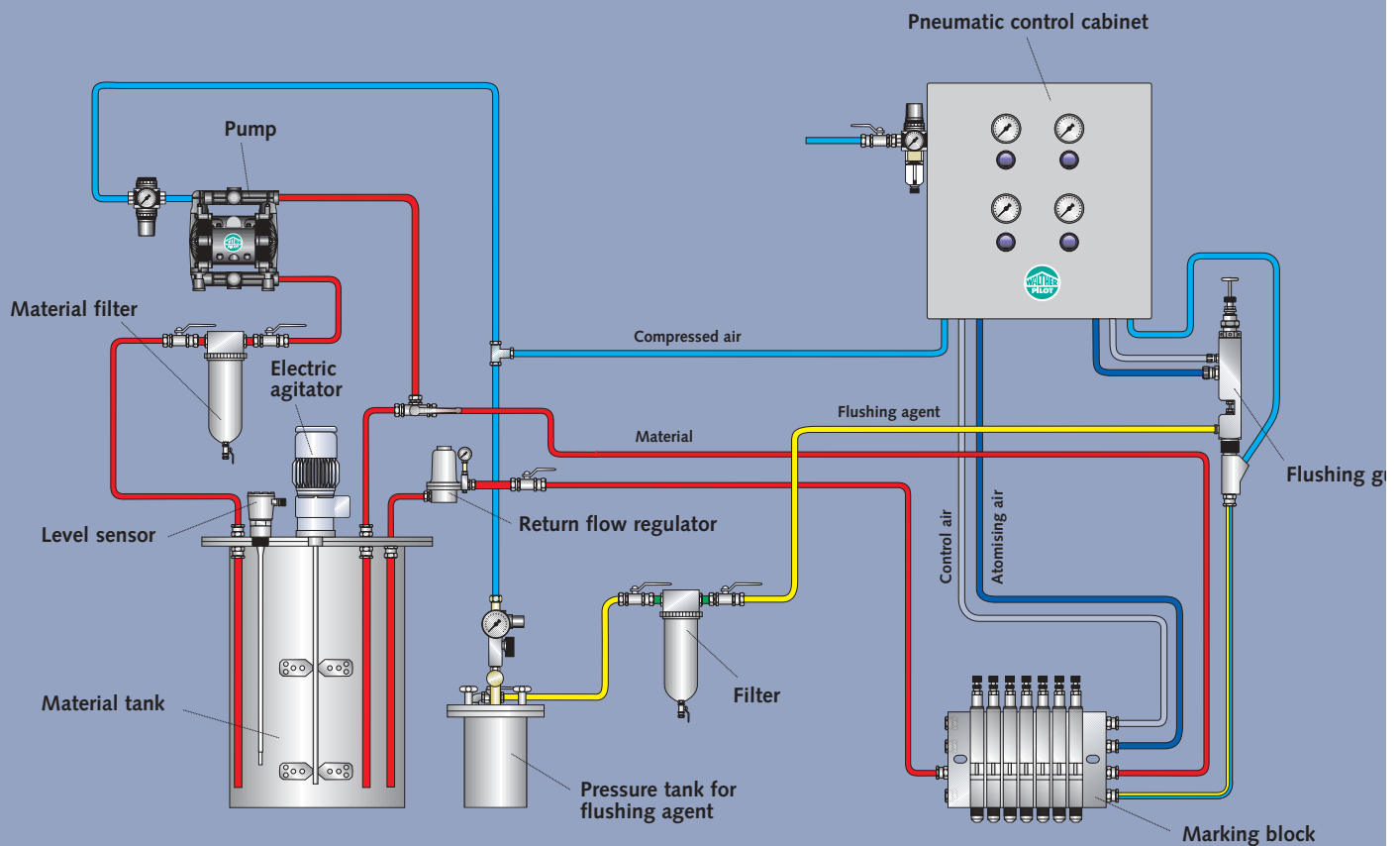


Circulation systems for spray marking and spray coding

WALTHER PILOT supplies marking blocks for spray marking and spray coding, for example for marking steel slabs, sheet, billets and much more besides. Special spray guns are also available for marking (e.g. defect marking) as part of quality assurance. Whenever you need to spray small quantities of material with high precision, WALTHER PILOT offers the optimum complete system to suit your needs.



Model of a spray coding matrix



Material flow diagram of a circulation system spray marking and spray coding

The system has two circulation circuits:

1. Material circuit via the marking block and back to the mixing tank.
2. When spraying is interrupted, material with a strong tendency to settle is continuously circulated between the tank and the pump. Instead of the mixing tank, pressure tanks can be integrated into the circulation system as required.

Integrated flushing gun

A small pressure tank is provided to supply the spray gun with cleaning agent. This is used to externally clean the nozzle/air cap at the marking block after every spraying process. The flushing gun has a separate air connection to dry the nozzle with compressed air after each flushing procedure.

This development guarantees maximum process reliability even for small application quantities.



Compact system for small application quantities with pressure tanks for the coating material and solvent as well as a double diaphragm pump and a flushing gun.

Transfer systems with pressure tanks

Decisive advantages

Pressure tanks offer the ideal opportunities for material supply, as the material is transferred to the application equipment without pulsation. At the same time, they guarantee that the material is safely stored. The wide range of products manufactured by WALTHER PILOT offers optimum solutions whatever your needs, no matter whether you want to spray paint, lacquer, primer or other materials.

Pressure tanks are especially suitable for use with abrasive materials, as they have virtually no wearing parts. They are also the ideal choice for shear-sensitive materials.



Control cabinet with meters for level monitoring



Pressure tank stirring station for transferring separating agent. The system includes a total of eight tanks and two control cabinets. The pressure tanks are each fitted with electric agitators and capacitive sensors for level monitoring.

In this case, the material is transferred according to the so-called "stand-by principle", i.e. as soon as the level in a tank falls below the minimum level, the system automatically switches over to the already filled replacement tank. This allows production to continue without interruption.



The system's operating panel



Material pressure tank with lift for cover



WALTHER PILOT now offers the perfect solution for many handling problems: a pneumatic lift for cover for material pressure tanks.

This is particularly useful when lids are fitted with agitators, level sensors, etc, which make manual lifting a difficult task. The new design of the lifting system makes filling the tank much easier and the lid is securely positioned. What is more, sensitive accessory components such as level sensors are effectively protected against mishandling.

The pneumatic lift is perfectly suitable for use with the following tank sizes:

- MDG 45
- MDG 60
- MDG 90
(further tank sizes available on request)

The pneumatic lift for cover can also be used for tank versions with a heating collar or heating jacket.

Accessories:

Base plate or drip tray.



Pneumatic lift for pressure tank mounted on base plate.



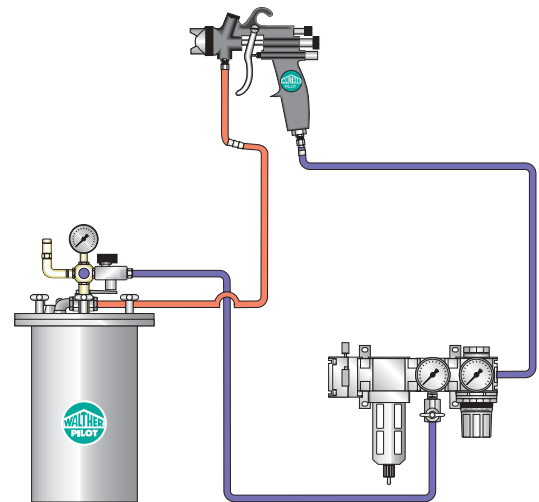
Material supply station for the operation of four automatic spray guns.

Features included: pneumatic lift for tank lid, small pressure tank for flushing agent, double-diaphragm-pump, switchboard cabinet.

Transfer systems with pressure tanks

Spray gun systems

When spray guns with a material connection are used, the material pressure and the atomising pressure can be optimally matched. This allows special design features to be integrated for nozzle/air cap systems to ensure a top-quality finish even when using critical materials. Since the material is transferred under pressure, the material flow rate and the work rate are generally higher than with gravity feed cup guns.



The pressures for the spray gun and the tank are adjusted at the compressed air fitting. This allows optimum adjustment to the properties of the spraying material.

Standard transfer system with pressure tank and spray gun

1. Material pressure tank. The tanks can generally be fitted with manual, air-powered or electric agitators. Type MDG 22 and 45 pressure tanks are suitable for holding standard Euro cans.
2. Spray gun with connection to pressure tanks.
3. Filter/compressed air regulator H2 with two outlets for a material pressure tank and a spray gun.
4. Compressed air hose (2 m) from the filter/compressed air regulator to the pressure tank.
5. Compressed air hose (7 m) from the filter/compressed air regulator to the spray gun.
6. Material hose (5 m) from the material pressure tank to the spray gun.
7. Material filter with sieve (not included with adhesive spraying systems).

Special transfer systems with pressure tanks

These solutions are optimally designed to suit special requirements and offer considerable productivity benefits. We also offer special solutions when it comes to choosing application equipment (e.g. with nozzle extensions).

Special application system
for spraying separating agents



Two absolute lightweight systems



Not only the LDG-type pressure tank but also the PILOT Vario spray gun are incredibly lightweight.

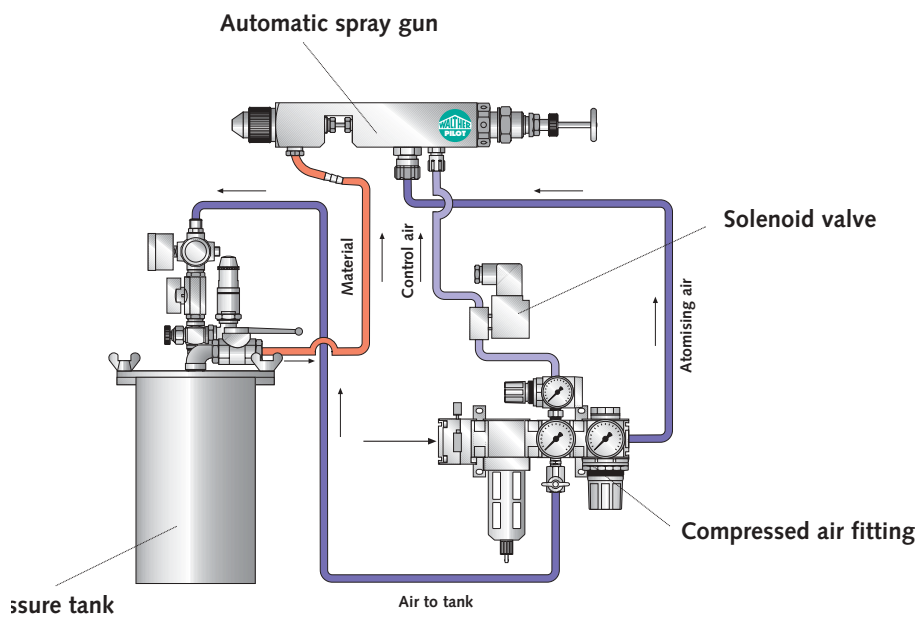
This top-of-the-range model from the PILOT series is available in several versions:

- HVLP – low pressure
- MD – medium pressure
- HD – conventional atomisation

Please order our brochure
"Manual Spray Guns".

Automatic spray gun systems

The compressed air fitting PILOT A1 is designed especially for automatic systems. The control air that triggers the spraying process requires a further connection.



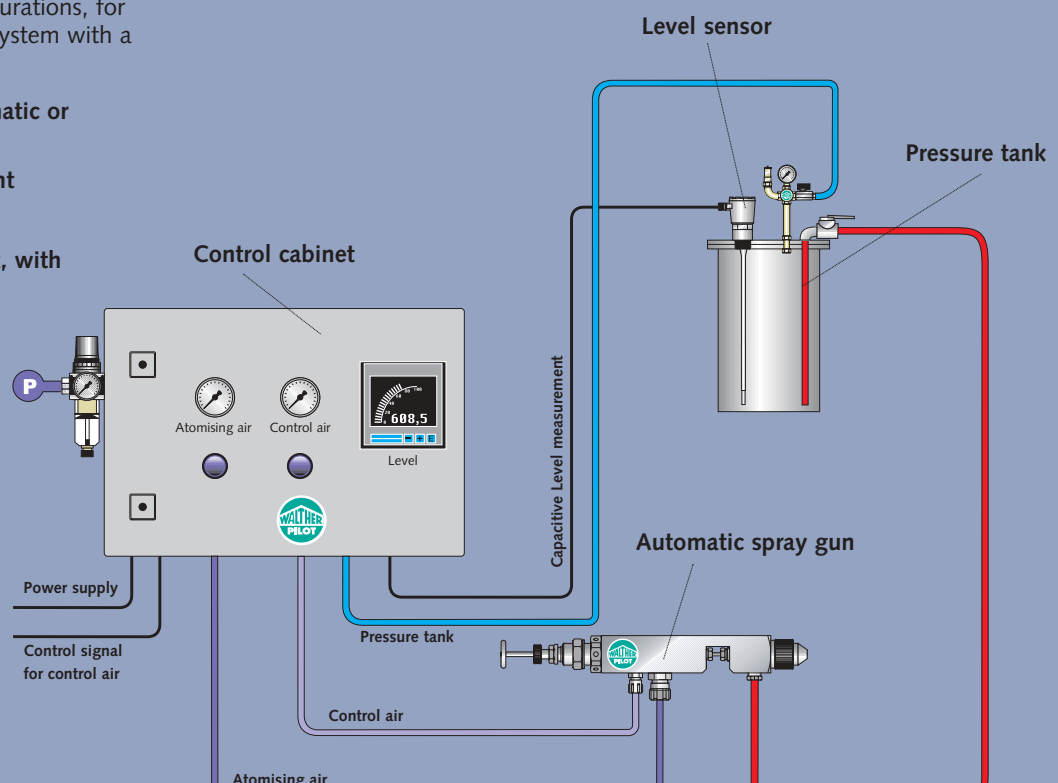
Marking system with control cabinet mounted on stand with holder and automatic spray coding system with fixture.

WALTHER PILOT provides solutions for many precision spraying applications:

- Spraying with precise edge definition
- Application of sealing lacquer
- Spray coating small parts
- Application of adhesive to edges

We can supply the ideal solution even for complex system configurations, for example for the marking system with a pressure tank shown here.

- Control cabinet (pneumatic or electro-pneumatic)
- Level sensing equipment
- Top-quality spray gun
- Matching pressure tank, with agitator if required



Transfer systems for adhesives

One-component transfer system Klebond 1



Spraying system with stainless steel small pressure tank MDG 4

For solvent-based adhesives, comprising:

- Material pressure tank Type MDG 22 or MDG 45, galvanized or stainless steel according to spraying material, not including agitator
- Spray gun PILOT III K or PILOT XIII
- Filter/compressed air regulator Type H2
- Hose set, comprising:
2 m compressed air hose,
7 m compressed air hose,
5 m material hose

For dispersion adhesives, comprising:

- Material pressure tank Type MDG 22 or MDG 45, stainless steel, not including agitator
- Adhesive spray gun PILOT XIII-ND or PILOT Maxi-ND-K
- Filter/compressed air regulator Type H2
- Additional compressed air micro-meter for fine adjustment
- Hose set, comprising:
2 m compressed air hose,
7 m compressed air hose,
5 m material hose

The above-mentioned pressure tanks are suitable for use with standard Euro cans. Special system configurations available on request.

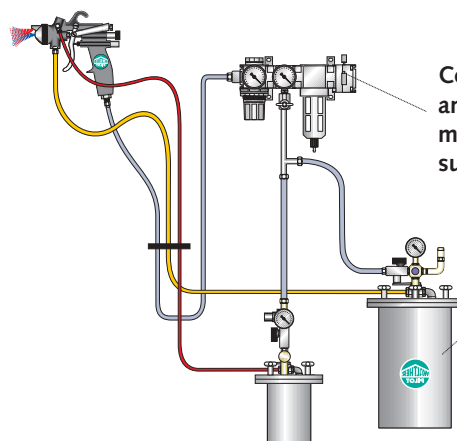
Two-component transfer system Klebond 2



PILOT Klebond 2 is optionally available with a tank cassette for MDG 4 and a stand, as shown.

Advantages of 2K adhesive technology:

- No oven drying required – short curing periods at room temperature
- High resistance to chemical, mechanical and climatic loads
- Top-quality adhesion results
- More environmental protection: VOC regulations can be complied with more easily as dispersion materials are used.
- Pressure tank MDG 45 or 22 for the A-component
- Pressure tank MDG 4 for the B-component
- Spray gun PILOT III-2K
- Air pressure regulator H2 with filter and T-piece for the compressed air supply to the two tanks and the spray gun
- Various hoses
- Hose protection



Compressed air filter and regulator in modular design – to suit the application.

Galvanized or stainless steel pressure tanks in many sizes.
Please order our special brochure.

PILOT RatioMaster

For two-component spraying, it is important to get the right mixing ratio of adhesive to activator.

The PILOT RatioMaster transfer system guarantees maximum application reliability.

PILOT RatioMaster works so precisely because its basic principle is very simple: the mixing ratio is determined by selecting the appropriate hose diameter. Once the hose diameter has been correctly chosen, the mixing ratio will not vary. The pump transfers both components in phase.

The material flow rate can now be chosen as required. Since the pump is controlled by the atomising air for the spray gun, it switches off automatically as soon as the spraying process is finished.

Solvent-based adhesives must not be used, as the system is not explosion-protected.

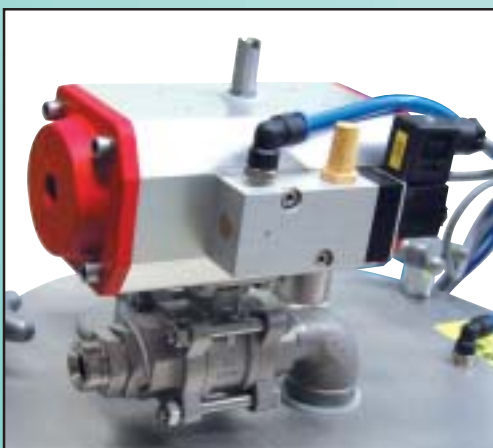


PILOT RatioMaster is designed for use with one spray gun. As a complete system including a spray gun PILOT III 2-K and hoses it is ready for operation immediately after installation. A further version for connecting two spray guns is also available.

PILOT Vakubond

Transferring shear-sensitive materials

At the push of a button, the pressure tank is filled with adhesive via a pneumatically controlled ball valve. This process, which works by producing a vacuum, eliminates the troublesome refilling of tanks. Once the valve has been closed, work can start immediately. The system switches over automatically to compressed air operation and the material is transferred directly to the application equipment. This innovative system has been patented.



Detailed view:
fitting for automatic tank filling



Transfer systems for high-viscosity materials

Spraying viscous materials, mastics, grease and adhesives with high process reliability.



Ram pressure drum unloader 0.75 t with extrusion pump and base plate for 200 litre drums.

Further equipment components, e.g. base plates, drum retaining ring, lifting trolleys, are available on request.

Drums with 60 litre and 200 litre capacity can be used.

Applications:

- Transferring raw materials for the production of adhesives and sealants
- Transferring adhesives, sealants and other viscous materials in the production area

The PILOT Wodan and PILOT Praetor series piston pumps are fitted with large-volume pump lowers.

This produces a high and constant material pressure to ensure that high-viscosity materials can even be pumped through long supply lines.

The pumps are suitable for a large number of materials, including:

- Silicone
- Mastics
- Urethane
- Butyls

Heated systems are also available.

The wide variety of models covers every requirement with regard to transfer performance and pressure range.

This guarantees that you will find the best and most cost-effective solution to suit your needs.





We also offer you the perfect solutions for your viscous material supply system, complete with all the necessary components – right down to individual extrusion guns for crawler application, e.g. for weld seam sealing in the automotive industry.



Ram pressure drum unloader 0,3 t for barrel sizes from 20 to 80 kg.

Barrel covers or follow plates for containers are available with internal diameters ranging from 270 - 385 mm.

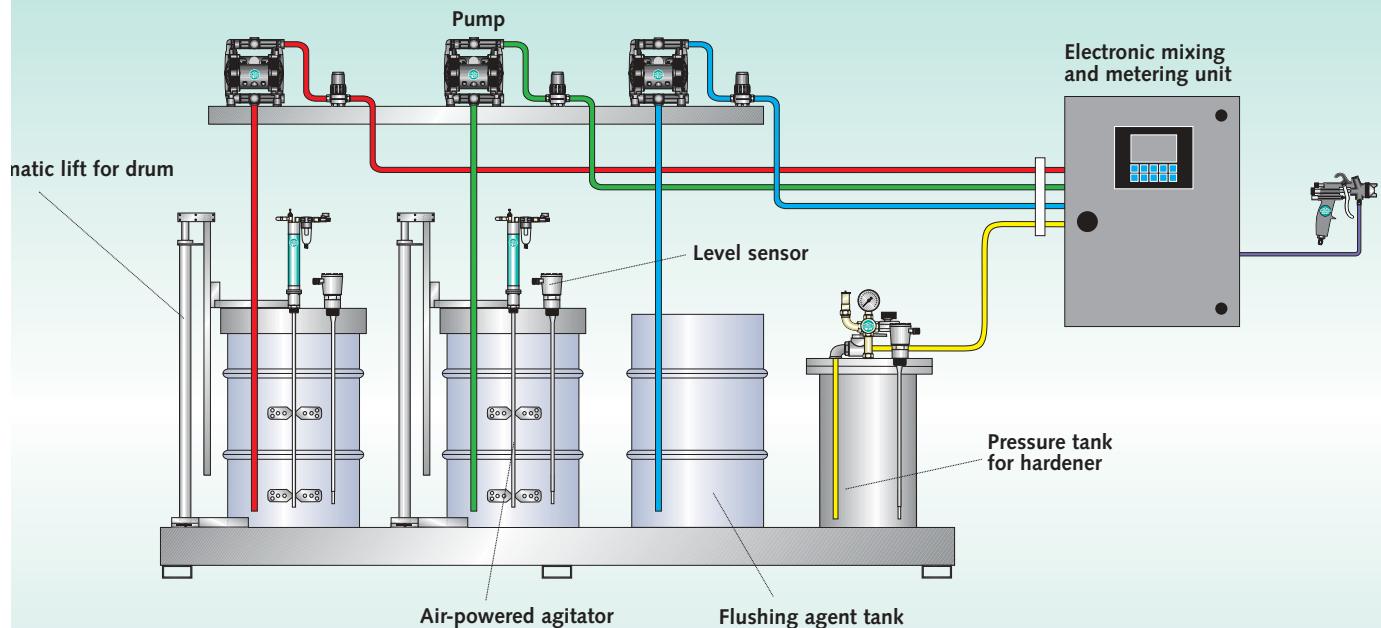
A wide range of suitable pumps is available as well.

Hotmelt application systems

Heated systems are ideally suited for transferring high-viscosity or abrasive media. They offer high melting power and transfer performance for wax, silicone, sealants and adhesives.

Industrial applications:
automotive interiors, insulation glass,
furniture, window and door manufacture.

Multi-component mixing and metering stations



Material flow diagram: Two-component mixing and metering station

The transfer of coating material and flushing agent is generally done using pumps. The hardener is transferred to the mixing station via a pressure tank. The mixing ratio can be set by using either mechanical or electrical systems.

Two-component applications The advantages

- The surface is highly resistant to chemical, mechanical and climatic influences. In particular: hardness and scratch resistance, resistance to UV radiation.
- Short curing times: no oven drying required
- Ideal for fully assembled objects such as machines, tanks, etc.



We will be happy to advise you on the individual configuration of your system. WALTHER PILOT can supply all of the components you need, no matter whether you require a compact system or need to equip an entire finishing line.





Mechanical mixing and metering systems

Mechanical mixing and metering systems are available with a fixed (left picture) or variable (right picture) mixing ratio.

Entire systems, including mounting panels, drip trays, tanks and pumps, are assembled in our factory – tailor-made to suit your requirements



Electronic mixing and metering systems

Electronic systems provide the ideal conditions for achieving maximum precision with regard to the mixing ratio and online monitoring of the process parameters. They ensure that the set values are reliably maintained and that production takes place at a constantly high quality. These systems are least affected by material loss and retooling periods – an investment that quickly pays off.



- Top-quality finish
- No reworking costs
- No disposal costs caused by mixing too much material
- Simple integration into existing equipment configurations
- Logged process data, e.g. electronic systems allow these to be printed out for the ISO report if required.

Wagner Intellimix 1

- Electronic high-pressure metering system
- Working pressure up to 250 bar
- Suitable for low-pressure and high-pressure ranges
- Up to 8 programmes in various combinations
- With pot life monitoring for 2 – 360 min.
- Mixing ratio 1:1 to 20:1



Wagner Intellimix 3

- Electronic high-pressure metering system
- Working pressure up to 250 bar
- Suitable for low-pressure and high-pressure ranges
- Up to 8 programmes in various combinations
- With pot life monitoring for 2 – 360 min
- Mixing ratio 1:1 to 20:1
- Suitable for water-borne coatings



High-precision metering for single-component systems.

In this system, the flow rate is measured by non-contacting Coriolis force flow meters.

Pneumatic lift for drum covers



Lift with mounting plate

We supply lifts for drum covers for trouble-free drum changes, no matter whether you want to spray paint, lacquer, oil, adhesive, separating agents or other materials.

The drum covers can be specially equipped with accessories to suit your requirements: pumps, agitators, return flow fittings, material filters, level sensors, etc.

Safety features:

- The lifts are designed to withstand the highest loads.
- The lid can be raised only when the agitator has been switched off.
- The equipment is fully compliant with the far-reaching requirements of the ATEX Directive 94/9/EC on explosion protection, which has been in force throughout Europe since July 2003. All air-powered and electric agitators from WALTHER PILOT have passed the corresponding tests and are marked accordingly.



Detailed view

Included in delivery, versions

Pneumatic lifting cylinder operating in both directions, with a chromium-plated piston rod and fitted flow control valve outlet regulators, piston rod traverse with twist-resistant rod, drum support arm with three-point lid holder. 5/3-way valve with silencers.

Typ PHV 550: for 30-litre drums, stroke 550 mm, lifting load max. 50 kg

Typ PHV 700: for 60-litre drums, stroke 700 mm, lifting load max. 75 kg

Typ PHV 1000: for 200-litre drums, stroke 1,000 mm, lifting load max. 75 kg



Installed lifts with covers and air-powered agitators for 30-litre drums.

Drum centring fittings drip trays and mounting plates are available on request. Cover are also included in the range of accessories.



Mixing tanks Type FMB

WALTHER PILOT standard mixing tanks for mixing coating materials are available as standard as a galvanized version or in stainless steel 1.4301 pickled. Other stainless steel grades available on request. The lid has 1/3 opening. If required, the lid can be equipped with agitators, level sensors, temperature sensors or pumps.

Standard tank sizes, according to capacity:

| | | |
|---------|---------|---------|
| FMB 35 | FMB 60 | FMB 125 |
| FMB 250 | FMB 350 | FMB 500 |



Simple mixing tank Type FMB with air-powered agitator. A large number of sizes and versions are available.



Mixing tank in electropolished design with electric agitator.



Mixing tanks with geared electric agitator and special hinged handle

Lightweight pressure tanks Type LDG

These thin-walled lightweight pressure tanks are made entirely of stainless steel and are designed for a maximum operating pressure of 6 bar. The hinged cross grip locks allow the container to be opened easily and quickly. The lid has sufficient space for the additional fitting of agitators.

- Available either with upper or lower material outlet
- Tank capacities: 5 litres, 10 litres, 20 litres



Pressure tanks Type MDG – quality all round



Small material pressure tanks with great handling convenience

Small tanks are made exclusively of stainless steel in the grades 1.4301, 1.4541 and 1.4571. This ensures that the spraying material is not contaminated by corrosion.

If required, the tanks can be surface-finished.

Manual or air-powered agitators, inspection glass fittings, electric indicators for level and temperature as well as overfill control equipment can be installed depending on your needs. Version MDG 3 is suitable for holding hazardous material containers.

Technical data – small pressure tanks

| Type | MDG 1* | MDG 2* | MDG 3* | MDG 4 |
|---|--------|--------|--------|-------|
| Max. permissible operating pressure (bar) | 3/6 | 3/6 | 3/6 | 4/6 |
| Total capacity (litres) | 1 | 2 | 3 | 4 |

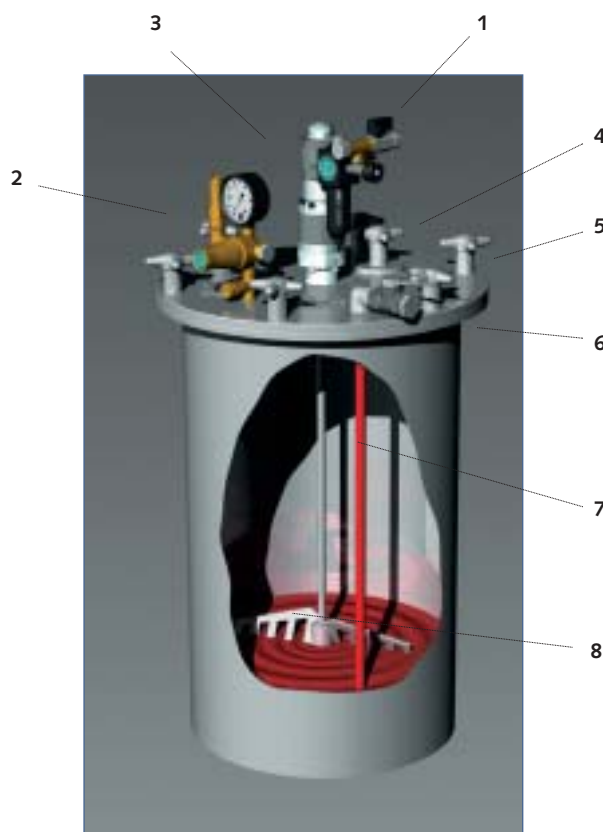
*Available only in stainless steel. Subject to change.

WALTHER PILOT standard pressure tanks

The standard product range comprises capacities from 8 to 500 litres. Manual, air-powered or electric agitators can be used. The tanks are available as galvanized versions or in stainless steel (1.4301, 1.4541, 1.4571).

Components of a standard pressure tank

1. Air inlet valve
2. Compressed air fitting with component-tested safety valve, manometer and bleed valve
3. Agitator (optional)
4. Material filling lock (MDG 12 and onwards)
5. Cross grip handles for opening and closing the tank (for small tanks: wing nuts)
6. Material outlet valve (the tanks are optionally available with a material outlet at the bottom)
7. Pipe to material outlet
8. Agitator impeller (many different geometries available)



Technical data – standard pressure tanks

| Type | MDG 8 | MDG 12 | MDG 22 | MDG 24 | MDG 45 | MDG 60 | MDG 90 | MDG 120 | MDG 250 | MDG 500 |
|-------------------------------------|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| Max. operating pressure (bar) | 4 | 6 | 6 | 6 | 6/4 | 6/3 | 6/2 | 6/1,5 | 6 | 6 |
| Total capacity (litres) | 8 | 12 | 22 | 24 | 45 | 60 | 90 | 120 | 250 | 500 |
| Contents of insert bucket* (litres) | – | 8 | 15 | 18 | 32 | 45 | 51,5 | 70 | – | – |

*Not included, available as accessory. Subject to change.



WALTHER PILOT pressure tanks – special solutions

WALTHER PILOT has a state-of-the-art tank manufacturing plant at the Neunkirchen factory. Flexible production equipment ensures that tailor-made special solutions can be manufactured for every individual application.



Comfortable working with Euro cans

For standard 10-litre or 30-litre cans, it is advisable to use tank types **MDG 22** or **MDG 45**. The cans are placed directly into the tank – thus eliminating time-consuming refilling.



Trolleys, available for MDG 12, 22, 24, 45, 60, 90, 120.

In the tanks shown here, the level is indicated by a Tecalan tube.



Standard material pressure tank MDG 250 with level sensor.

Safety first

The Pressure Equipment Directive 97/23/EC regulates the design, approval and use of pressure vessels and other pressure equipment in all member states of the EU. As a leading manufacturer of pressure vessels, WALTHER PILOT has implemented the Pressure Equipment Directive over its entire product range. This applies not only to standard vessels but also to special or custom-made vessels.

The Conformity Assessment procedures chosen by us in compliance with Directive 97/23/EC ensure that we can react to special customer requests with a high level of flexibility.

Furthermore, we are certified to manufacture and approve pressure vessels in accordance with the US-American ASME Code and with the Chinese regulations.

Agitators

Air-powered agitators

The agitators are fully assembled and consist of a motor, gears, fitting for the tank lid, shaft and impeller. The speed and power can be easily regulated according to the viscosity. The oil-free air vane motor requires no lubrication. Their compact and space-saving design allows them to be used anywhere.

Agitator bores for use with potentially explosive materials are explosion-protected in accordance with 94/9/EC (ATEX) and approved for use in Zones 0 and 1.



Electric agitators

The agitators are fully assembled and consist of a gear motor, clutch, fitting for the tank lid, shaft and impeller.

Agitator bores for use with potentially explosive materials are explosion-protected in accordance with 94/9/EC (ATEX) and approved for use in Zones 0 and 1.

Various power categories are available:

0,12 kW
0,18 kW
0,25 kW
0,37 kW
0,55 kW
0,75 kW



WALTHER PILOT also supplies a wide range of non-explosion-protected agitators. Special agitators in various power categories are also available.

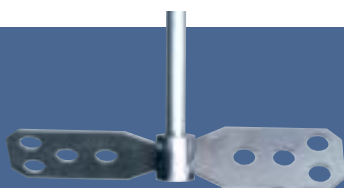
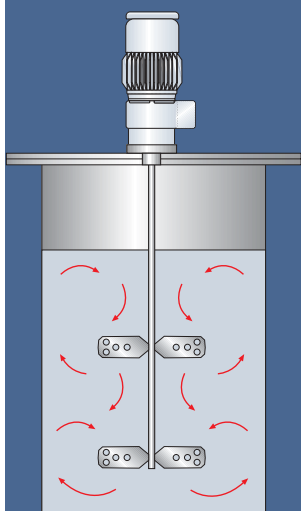
Magnetic agitators

WALTHER PILOT also supplies agitators with a magnetic clutch for hermetic sealing. The agitators are certified in accordance with 94/9/EC (ATEX) and certified for use in Zone 0 and 1.



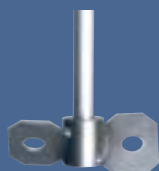
Special tank with two electric agitators

Agitator impellers



Pitched-blade impellers are particularly well suited for use in mixing tanks.

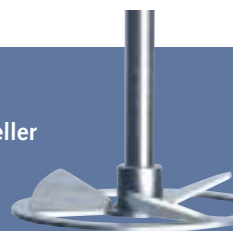
ATEX-certified impellers are made of stainless steel.



Blade impeller (ATEX-certified). This impeller is suitable for most applications in material pressure tanks.



Propeller-type impeller (ATEX-certified) especially for paint mixing agitators.



Paint mixing impeller with stand



Double diaphragm pumps

Double diaphragm pumps MBP 5212

Sturdy, powerful, reliable – and particularly affordable. Highly profitable in many sectors.

Housing made of polypropylene (MBP 5212 PTSS) or conductive polypropylene (MBP 5212 CTSS)

- Especially suitable as a transfer pump for material and flushing agent
- Can be used for a wide range of materials

Housing made of aluminium

- Robust industrial quality
- Suitable for a multitude of materials

Housing made of stainless steel

- Highly resistant to corrosion and wear
- Especially suitable for water-borne materials



MBP 5212 ATSS



MBP 5212 PTSS/CTSS



MBP 5212 STSS

Technical Data

- Pumping rate: max. 52 l/min.
- Material connection: 1/2" BSP
- Pump ratio: 1:1
- Air input pressure: max. 8 bar

In all pumps, the diaphragms are TEFLON®-coated. The ball and ball seat are made of stainless steel.

Double diaphragm pumps MBP 8034

The next higher weight class. Here too, all versions are available with a metal or plastic housing.

This pump series also features:

- Low purchase price
- Robust industrial quality
- Suitable for many types of material

Housing materials: polypropylene, Ryton, aluminium, stainless steel.

Versions:

- On stand
- On trolley
- For ceiling mounting
- For wall mounting



MBP 8034 ATSS in aluminium

MBP 8034 PTSS/ CTSS



Technical Data

- Pumping rate: max. 80 l/min.
- Material connection: 3/4" BSP
- Pump ratio: 1:1
- Air input pressure: max. 8 bar

In all pumps, the diaphragms are TEFLON®-coated. The ball and ball seat are made of stainless steel.

Piston pumps

PILOT Vesir

Low-pressure piston pumps

For use with low-viscosity materials. The models are available with wall mounting or mounted on a cover.

Versions:

- Short version
- Long version

Both versions are available in standard steel or stainless steel.



PILOT Gordon

Affordable and sturdy basic model for a wide range of applications.

Small in size – big in performance

These portable pumps and spraying systems are available both in standard steel and in stainless steel. Air and material filters ensure trouble-free working. Extremely low maintenance.



PILOT Bestwin

The allrounder: universal equipment for practically every requirement

Versions:

- Pump only
- Pump on trolley
- Airless unit on trolley
- Air-assisted airless unit on trolley
- Pump on wall fitting
- Airless unit on wall fitting
- Air-assisted airless unit on wall fitting
- Can be equipped with material heater on request.

The standard for industry and trades

These powerful units allow you to transfer almost all types of materials to where they are required. They are suitable as transfer pumps or for both airless and air-assisted airless processes, as well as for hot spraying. Tough industrial quality – wear-optimised.

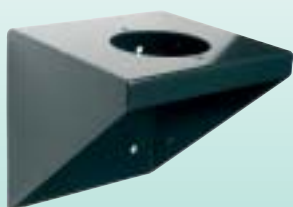


Bestwin Pump only



In the air-assisted airless version, the air inlet fitting is equipped with an additional air regulator. The air hose is combined with the material hose, thus allowing easy connection to the spray gun.

Bestwin Airless pump on trolley



Wall fittings matched to the pump type are available.

PILOT Wodan

All the power you need

These pumps are ideal for tough industrial jobs. High-viscosity materials such as anti-corrosion agents can be sprayed without problems. PILOT Wodan is also the perfect choice for use with long hose lengths.

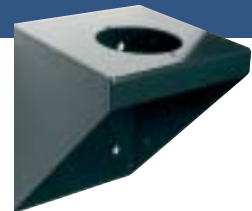
The pumps are suitable for hot spraying. The air and high-pressure material filters are included. Available in standard steel and stainless steel.



Versions:

- Pump only
- Pump on trolley
- Airless unit on trolley
- Air-assisted airless unit on trolley
- Pump on lifting trolley
- Airless unit on lifting trolley
- Air-assisted airless unit on lifting trolley
- Pump on wall fitting
- Airless unit on wall fitting
- Air-assisted airless unit on wall fitting

Can be equipped with material heater on request



Wall fittings matched to the pump type are available.



Suction gun

PILOT Praetor

Tough jobs made easy

Suitable for high-viscosity coating materials and ideally suited for high pumping quantities. Allows the use of several spray guns even with long hose lengths.

Various versions for different power ranges are available in standard steel or stainless steel. The pumps are equipped with an air input fitting, outlet filter and silencer.



Praetor airless unit on lifting trolley.

Versions:

- Pump only
- Pump on lifting trolley
- Airless unit on lifting trolley
- Air-assisted airless unit on lifting trolley
- Pump on wall fitting
- Airless unit on wall fitting
- Air-assisted airless unit on wall fitting

Can be equipped with material heater on request

Miscellaneous



Level sensor



Suction pipe with foot valve



Return flow regulator for circulation Systems



Material filter



Control cabinets (pneumatic or electro-pneumatic)



Control panel for arranging the compressed air supply units (instead of control cabinet)



Installations for inserting and removing the pig for emptying and cleaning material pipes



Modular colour change unit. Can be easily extended to accommodate additional colours.
All application systems from low-pressure to airless.



Material heater (explosion-protected)

for hot spraying.
Heating the spraying media allows you to save on solvents, which ensures better compliance with VOC directive. It also enables you to obtain an improved spray pattern and shorter drying times. All wetted parts in stainless steel.



Double-acting ram 2.5 t with base plate for 200-litre barrel.
Other versions available on request.

Other components:

- Drip trays
- Material pre-flow regulator
- Material pressure regulator
- Hoses

Spray guns

Spray guns with air atomisation

Spray gun PILOT Vario

- Material pressure up to 8 bar
- Wide model variety
 1. for conventional atomisation
 2. for medium-pressure atomisation
 3. as a low-pressure model (HVLP)
- Stainless steel material passage for all materials
- Weight only 390 g



Spray gun PILOT Maxi

- Spray gun with TEFLON®-coated body
- Material pressure up to 8 bar
- Wide model variety
 1. for conventional atomisation
 2. for medium-pressure atomisation
 3. as a low-pressure model (HVLP)
- Stainless steel material passage for all materials

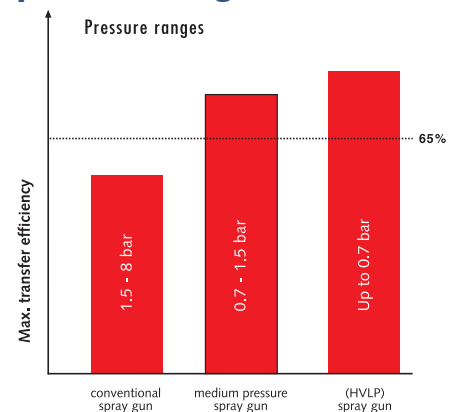


Spray gun PILOT Mini

- Light and handy plastic spray gun
- Material pressure up to 8 bar
- Wide model variety
 1. for conventional atomisation
 2. for medium-pressure atomisation
- Stainless steel material passage for all materials



Estimated transfer efficiency depending on the air pressure range



WALTHER PILOT-automatic spray guns

- Material pressure up to 8 bar
- Wide model variety for almost all applications
 1. for conventional atomisation
 2. for medium-pressure atomisation
 3. as a low-pressure model (HVLP)
 4. for circulation systems
 5. miniature size



Spray guns for high-pressure applications

Airless spray gun

- Standard airless spray gun
- Material pressure up to 250 bar
- Option of material filter in the handle
- Swivel fitting for material connection 1/4"



Airless spray gun

- Standard airless spray gun
- Material pressure up to 500 bar
- Option of material filter in the handle
- Swivel fitting for material connection 1/4"



Airless hot spray gun

- Hot spray airless gun
- Material pressure up to 500 bar
- Material connection thread: 1/4"



Airless automatic circulation spray gun PILOT WA 30-U

- Max. material pressure: 350 bar
- Also available with gun body in stainless steel



Mini airless automatic spray gun PILOT WA 20

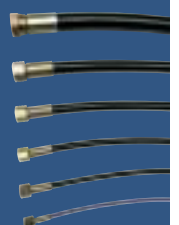
- Max. material pressure: 120 bar



Hoses

Hose set (compressed air and material) for spray guns

High-pressure hoses



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WALTHER PILOT spray booths



Small spray stands and
spray walls



Water-wash spray walls with
sludge removal



Combined spraying and drying booths

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Automatic spray guns
Airless equipment
Electrostatic spray guns

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Material pressure tanks
Non-pressurised containers
Material supply systems
Agitator systems
Level measuring equipment
Fluid pumps

Multi-component technology

Mechanical mixing and metering systems
Electronically controlled mixing and metering systems

Spray booths

Combined spraying and drying booths
Spray booths with filter mats
Spray booths with water-wash function
Ovens
Ventilation systems

Filter technology

Multi-layer paper filters
Labyrinth filters
Glass fibre filter mats
Andreae filters
Bag filters

Dryers

Drying chambers
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Complete range of accessories



Die Beschichtungs-Experten

WALTHER Spritz- und Lackiersysteme GmbH · Kärntner Str. 18-30 · D-42327 Wuppertal · P.O.Box 11 06 41 · D-42306 Wuppertal
Tel. D-(0) 202 / 787-0 · Fax D-(0) 202 / 787-217 · e-mail: info@walther-pilot.de

www.walther-pilot.de