Dot Marking Systems

- Paint Spray Systems
- Marking Blocks
- Printing Systems
- Paints and Inks
The company is headquartered in the Vohwinkel borough within the City of Wuppertal. Spray guns and marking blocks are manufactured here. Pressure tanks and spray booths are manufactured at the Neunkirchen-Struthütten plant in the Siegerland region.

If you have questions, please contact:
Holger Nickel: Technology +49 / 202 / 787-2279
Robby Ritter: Sales +49 / 202 / 787-2208
René Brettmann: Sales management +49 / 202 / 787-2252

Colored markings to indicate quality standards or for process control purposes are essential components in modern production systems. WALTHER PILOT uses tailor-made systems and high-quality components to create exactly the conditions you expect, in the interest of future-proof marking technology.

With WALTHER PILOT you always see the big picture.

WALTHER PILOT is a member of the Wagner Group.
A wealth of application options

Marking
- Marking to document inspections of weldments in sheet metal and pipe
- Marking rejects
- Marking complying parts
- Marking following leak testing
- Marking as an orientation aid (indicating the installation position)
- Identifying similar-looking but differing models
- Marking cutting and bending lines
- Marking lines used for manufacturing purposes

Substrates: metal, plastic, glass, paper, cellulose, cork, stone, ceramics, wood, cardboard, rubber, textiles

Contents

Dot and bar codes with paint spray technology Page 4

The applications for dot or bar codes vary widely. The major advantage of the paint spraying process is the fact that the marks are applied without touching the object. That is one reason why the process is preferred for marking for objects in the metals and plastics processing industries. Markings can be applied in any attitude and orientation. Special spray gun configurations are also possible so that classifications can be distinguished with differing colors. This enables encoding as per any of a number of criteria.
Please take note of our Select systems and combination systems.

Identification using marking blocks Page 12

Pneumatically and electromagnetically driven marking block are available to apply alphanumeric characters. These large-character printers are, as a rule, fitted with from four to nine spray nozzles. Special configurations can be assembled.

Other applications Page 14

Marking guns are suitable not only for marking and signing but also for intricate, sharp-edged painting and a wealth of other purposes.

Printing systems Page 16

We are also your specialist of choice for all kinds of printing:
- High-resolution HRI and HRI-UV inkjet printers
- Continuous inkjet printers
- A variety of cartridge printers
Dot and bar codes with paint spray technology

Select 1 System / Model V 45

- Small spray system with miniature material pressure tanks, to apply about 3,500 dots (dots 5 mm in diameter)
- Simple operation, low maintenance
- For dots of from 3 to 30 mm in diameter
- A solenoid valve is used to trigger the spray gun. WALTHER PILOT can also deliver the controls, upon request
- We would be happy to provide planning and assembly services, right through to integrating the system into your assembly line.

Equipment

- Marking spray gun, Model 20-360, with pull rod for manual activation (e.g. for spray trials)
  Body: nickel-plated brass; nozzle and needle: stainless steel; nozzle sizes: 0.3, 0.5, 0.8, 1.0, 1.2, 1.5 mm in diameter
- Miniature material pressure tank, 45 ml, stainless steel, max. 3 bar
- Solenoid valve, 3-port, 2-position, 24 V DC; other voltages available
- Compressed air manifold with pressure gauges and safety valve
  Combination of all compressed air control functions for simpler marking systems (control and spraying air for the spray gun, tank pressurization air)
- Hose kit (2 meters), incl. fittings for both the air and material hoses

Options

- The miniature material pressure tank is attached directly to the spray gun, without a connector hose.
- Holders for marking guns
- Spray booths 'Air on demand'. Overspray exhaust systems are mandatory even if applying only tiny amounts of paint. We have an affordable solution.
- Color sensors and measurement transducers for function monitoring
- Integration of the system into your assembly line
Small spray system with pressure cup, to apply about 55,000 dots (dots 5 mm in diameter) or 3,300 meters of lines (5 mm wide)

Compact design for simple integration into the process

Simple operation, low maintenance

For dots of from 3 to 30 mm in diameter

A solenoid valve is used to trigger the spray gun. WALTHER PILOT can also deliver the controls, upon request

We would be happy to provide planning and assembly services, right through to integrating the system into your assembly line.

---

Options

- Holders for marking guns
- Spray booths 'Air on demand'. Overspray exhaust systems are mandatory even if applying only tiny amounts of paint. We have an affordable solution.
- Color sensors and measurement transducers for function monitoring
- Control cabinets
- Integration of the system into your assembly line

---

Equipment

- Marking spray gun, Model 20-360, with pull rod for manual activation (e.g. for spray trials)
  Body: nickel-plated brass; nozzle and needle: stainless steel; nozzle sizes: 0.3, 0.5, 0.8, 1.0, 1.2, 1.5 mm in diameter
- Material pressure tank, 750 ml, lightweight alloy, max. 3 bar
- Solenoid valve, 3-port, 2-position, 24 V DC; other voltages available
- Compressed air manifold with pressure gauges and safety valve
  Combination of all compressed air control functions for simpler marking systems (control and spraying air for the spray gun, tank pressurization air)
- Hose kit (2 meters), incl. fittings for both the air and material hoses
Dot and bar codes with paint spray technology

Select 3 System / Model V 1000

- Small spray system with miniature material pressure tanks, to apply about 70,000 dots (dots 5 mm in diameter) or 4,500 meters of lines (5 mm wide)
- Compact design for simple integration into the process
- Simple operation, low maintenance
- For dots of from 3 to 30 mm in diameter
- A solenoid valve is used to trigger the spray gun. WALTHER PILOT can also deliver the controls, upon request.
- We would be happy to provide planning and assembly services, right through to integrating the system into your assembly line.

Equipment

- Marking spray gun, Model 20-360, with pull rod for manual activation (e.g. for spray trials)
  Body: nickel-plated brass; nozzle and needle: stainless steel; nozzle sizes: 0.3, 0.5, 0.8, 1.0, 1.2, 1.5 mm in diameter
- MDG 1 material pressure tank, 1,100 ml, stainless steel, max. 3 bar
- Solenoid valve, 3-port, 2-position, 24 V DC; other voltages available
- Compressed air manifold with pressure gauges and safety valve
  Combination of all compressed air control functions for simpler marking systems (control and spraying air for the spray gun, tank pressurization air)
- Hose kit (2 meters), incl. fittings for both the air and material hoses

Options

- Holders for marking guns
- Agitators and fill level measurement sensors
- Spray booths ‘Air on demand’
- Color sensors and measurement transducers to monitor functions
- Control cabinets / pneumatic control cabinets
- Integration of the system into your assembly line

System variants

Model V 2000; like V 1000 but with MDG 2 tank; net contents 1,800 ml
Model V 3000; like V 1000 but with MDG 3 tank; net contents 2,500 ml
Model V 4000; like V 1000 but with MDG 4 tank; net contents 3,100 ml
Option: Pneumatic, geared agitator, 0.16 kW
This system is preferred for use in particular with materials which will settle out or dry quickly. This is why these materials are kept in circulation. A dual diaphragm pump is used for this purpose.

This is a small spray system with a material pressure tank, to apply about 70,000 dots (dots 5 mm in diameter) or 4,500 meters of lines (5 mm wide).

Simple operation, low maintenance

For dots of from 3 to 30 mm in diameter

A solenoid valve is used to trigger the spray gun. WALTHER PILOT can also deliver the controls, upon request.

We would be happy to provide planning and assembly services, right through to integrating the system into your assembly line.

### Equipment

- **Marking spray gun, Model 20-365**, with pull rod for manual activation (e.g. for spray trials), recirculating version
  - Body: nickel-plated brass; nozzle and needle: stainless steel; nozzle sizes: 0.3, 0.5, 0.8, 1.0, 1.2, 1.5 mm in diameter
- **MDG 1 material pressure tank, 1,100 ml**, stainless steel, max. 3 bar, recirculating version
- **Solenoid valve, 3-port, 2-position**, 24 V DC; other voltages available
- **Solenoid valve, 2-port, 2-position**, 24 V DC; other voltages available
- **MBP 2812 diaphragm pump**
  - Acetyl (other versions possible)
- **Pneumatic control cabinet with pressure gauge**
  - To connect one pressure tank, one marking gun, one diaphragm pump
- **Hose kit (2 meters), incl. fittings**
  - for both the air and material hoses

### System variants

Depending on production requirements, material delivery to a marking system may comprise multiple material pressure tanks and diaphragm pumps. We will work out a concept customized to suit your operations.

MDG 2 (1,800 ml), MDG 3 (2,500 ml), MDG 4 (3,100 ml) tanks or tanks from the LDG series may be used instead of the MDG 1 material pressure tank.

### Options

- Holders for marking guns
- Agitators and fill level measurement sensors
- Color sensors and measurement transducers to monitor functions
- Control cabinets / pneumatic control cabinets
- Integration of the system into your assembly line
- Compressed air manifold instead of pneumatic controls
Equipment

Marking spray gun, Model 20-360, with pull rod for manual activation (e.g. for spray trials), flushing version.
- Body: nickel-plated brass; nozzle and needle: stainless steel; nozzle sizes: 0.3, 0.5, 0.8, 1.0, 1.2, 1.5 mm in diameter
- Flushing valve, Model 20-369
  - Body: Nickel-plated brass
- MDG 3 material pressure tank, 2,500 ml, stainless steel, max. 3 bar, without agitator, for paint / ink
- MDG 3 material pressure tank, 2,500 ml, stainless steel, max. 3 bar, without agitator, for cleaning agent
- Solenoid valve, 3-port, 2-position, 24 V DC; other voltages available (one flushing valve, one marking gun)
- Solenoid valve, 2-port, 2-position, 24 V DC; other voltages available (one flushing valve)
- Pneumatic control cabinet with pressure gauge
  - To connect two pressure tanks, one marking gun, one flushing valve
- Hose kit incl. fittings
  - for both the air and material hoses

Options:
- Holders for marking guns
- Agitators and fill level measurement sensors
- Color sensors and measurement transducers to monitor functions
- Control cabinets / pneumatic control cabinets
- Integration of the system into your assembly line
- Overspray extraction: Air on demand

Select 5 – flushable / Model V 3003

- Systems of this type are always used whenever the nozzle and air cap are exposed to extreme material build-up. This is why the system is fitted with an additional flushing valve. After the spray cycle a mix of air and cleaning agent is pressed into the circular gap between the nozzle and the air cap.
- This is a small spray system with a material pressure tank, to apply about 210,000 dots (dots 5 mm in diameter) or 13,500 meters of lines (5 mm wide)
- Simple operation, low maintenance
- For dots of from 3 to 30 mm in diameter
- A solenoid valve is used to trigger the spray gun. WALTHER PILOT can also deliver the controls, upon request.
- We would be happy to provide planning and assembly services, right through to integrating the system into your assembly line.

System variants

- Model V 1001; like V 3003 but with MDG 1 tank; net contents 1,100 ml
- Model V 2002; like V 3003 but with MDG 2 tank; net contents 1,800 ml
- Model V 4004; like V 3003 but with MDG 4 tank; net contents 3,100 ml
- Option: Pneumatic agitator

Flushing sequence

1. When the marking process is finished, the solenoid valve is used to shut off the marking gun.
2. Use the solenoid valve to open the flushing valve for about 3 to 5 seconds. A mix of air and solvent cleans the area between the nozzle and the air cap.
3. Use the solenoid valve to close the flushing valve after flushing is finished.
4. Open the solenoid valve for about 5 seconds to dry the nozzle and air cap area.
5. Close solenoid valve; cleaning process is complete.
Select 6 – recirculating – flushable / Model V 8008

Equipment

1. Marking spray gun,
   Model 20-365, with pull rod for manual activation
   (e.g. for spray trials), flushable version.
   Body: nickel-plated brass; nozzle and needle: stainless steel; nozzle sizes: 0.3, 0.5, 0.8, 1.0, 1.2, 1.5 mm in diameter
2. Flushing valve, Model 20-369
   Body: Nickel-plated brass
3. MDG 8 material pressure tank, 6,400 ml, stainless steel, max. 4 bar, without agitator, for paint, recirculating version
4. MDG 8 material pressure tank, 6,400 ml, stainless steel, max. 4 bar, without agitator, for cleaning agent
5. MBP 2812 diaphragm pump
   Acetyl (other versions possible)
6. Solenoid valve, 3-port, 2-position
   24 V DC; other voltages available
   (one flushing valve, one marking gun)
7. Solenoid valve, 2-port, 2-position
   24 V DC; other voltages available
   (one flushing valve, one diaphragm pump)
8. Pneumatic control cabinet with pressure gauge
   To connect two pressure tanks, one marking gun, one flushing valve
9. Hose kit incl. fittings
   for both the air and material hoses

Options: as for the Select 5, see page 8

- This system is designed to process materials which will settle out or dry quickly. A dual diaphragm pump is used to keep these materials in circulation. A supplementary flushing feature prevents performance losses due to material build-up collecting at the nozzle and air head.
- This is a spray system for larger quantities of materials, with a material pressure tank sufficient to apply about 37,000 meters of lines (5 mm wide) and an additional material pressure tank for the cleaning agent.
- With flushing valve to clean the nozzle on the marking gun
- A solenoid valve is used to trigger the spray gun. WALTER PILOT can also deliver the controls, upon request.
- Simple operation, low maintenance
- We would be happy to provide planning and assembly services, right through to integrating the system into your assembly line.

System variants

Model V 12.012; like V 8008 but with MDG 12 tank; net contents 11,800 ml
Model V 22.022; like V 8008 but with MDG 22 tank; net contents 19,500 ml
We will design a configuration matched to your specific production requirements.

- Pneumatic control cabinet
- Electro-pneumatic control cabinet
- Electrical control cabinet

All the components required to integrate these control elements into the system – such as mounting stands or frames – can also be obtained from us.
Application technology, material delivery, spray booths, function monitoring

Our equipment and services:

- Material delivery technology to suit specific requirements: Pressure tank with agitator and fill level measurement sensors, diaphragm pumps for materials recirculation, and all the required hoses.
- Cabinets for the materials delivery technology including, if indicated, controls for regulated exhaust of noxious gases or fumes that could be released when pressure tanks are opened; sumps for use when handling hazardous liquids.
- Marking guns with flushing system to clean the outside of the nozzles after each spray cycle.
- Spray booths for solvent fumes and overspray. Multi-layer paper filters with high absorption capacity.
- Color sensors and measurement transducers to monitor functions. They provide assurance that the dot or bar code was actually applied and avoids faulty coatings and rejects.
- Control technology: Control cabinets (pneumatic, electro-pneumatic, electrical) exactly suited to your needs.
- Space-saving integration of the marking system into existing or projected production lines. Expert engineering, all from a single source.

Using color sensors makes for unvarying process reliability.

Small spraying system with linear drive

Spray booth

Cabinet with material delivery system (pressure tank with shelf consoles for the cover, dual-diaphragm pump, sump and fill level measurement probe)
Matrix for marking blocks

The characters may be between 40 and 200 mm in height. Among the primary users are steel mills that identify their products with the appropriate batch numbers.

The characters can be read from a great distance.

Applications
- Marking ingots, strips, plates, pipes, profiles, coils, containers
- Color coding

Advantages

In contrast to other identification concepts, marking systems make it possible to apply heat-proof paints.

The individual spray guns can be removed from the block, both quickly and easily, for cleaning and maintenance work.

In the event that fast-drying paints are used or where there will be longer interruptions between marking cycles, we recommend using marking blocks with flushing equipment. This special WALTHER PILOT development ensures that paint residues are removed from the nozzle and air cap after the marking cycle. Thus the guns in the block remain functional at all times.

Great range of models to meet nearly every requirement

All the technology from a single source – spray guns, pressure tanks, hoses, solenoid valves, compressed air maintenance units

High part conveyance speeds thanks to short spray gun actuation times

Flushing device for the nozzle and air cap on request

Rugged design – low wear

Easy cleaning and maintenance

The synchronization of part throughput speed and the alphanumeric characters to be applied is handled by the control computer, to be provided by the owner.
Pneumatically controlled marking blocks

Compact, space-saving design

Low-wear, diaphragm-type guns are used here. Their service lives are many times those of spray units with needle closures. It makes good sense to select diaphragm guns when marking hot objects or working paints containing sharp-edged pigments.

- Characters can be between 40 and 200 mm in height. The size of the dots can be regulated by a fine-detent adjustment system.
- Maximum lettering speed is 54 meters per minute.
- The block can be delivered with a flushing feature if desired.
- Pneumatic marking blocks may be fitted with any desired number of spray guns.

Electromagnetically controlled marking blocks (Series ES)

High speed with paint jet

The new “paint jet” is small, lightweight and achieves unexcelled speed. Direct control of the nozzles using special solenoids makes possible cycling periods of 3 milliseconds from one dot to the next.

- Characters may be between 40 and 200 mm in height. The size of the dots can be regulated by a fine-detent adjustment system.
- Maximum lettering speed is 360 meters per minute.
- The flushing feature is standard for this block.
- Systems with 7 or 9 nozzles are available as standard designs. Special solutions with a differing number of nozzles can be made up without difficulty.
A wealth of applications

Marking guns and marking blocks can be used in a number of applications. Paint will often be involved, but other materials may be processed, too, including adhesives, release agents, lubricants, casting compounds and even cosmetics.

The WALTHER PILOT material pressure tanks and pumps are your best choices for material delivery.

Particularly whenever demanding tasks are to be mastered, that's where WALTHER PILOT is the specialist you need to contact. Get in touch with us. Spray systems for fine work are usually not available from stock.

Application examples

- Applying screw lock lacquer
- Applying lubricant during drilling and milling, for instance
- Applying release elements for rubber profiles
- Gluing the ends of rolls of paper
- Painting collars for gas cartridges
- Defined application of adhesives (edge veneers)
- Metering hardeners and adhesives
- Sealing circuit boards with protective lacquer
- Enclosing circuit board components in cast material
- Lacquering small components with complex geometries
- On-the-dot paint application with a clean edge

These paint application systems can carry out a wealth of painting and gluing work – right on through to applying dyes to artificial flowers.

Processing foodstuffs using individual spray guns guided by a robot

Coating small components
Implementing innovative painting concepts

Since paint is applied with a sharp edge, the marking gun is an excellent tool for coating small components, largely free of overspray. In the example used here it is a matter of painting the threads on a bolt. Due to the sharp-edged painting and virtually no overspray, it is possible to use the robot to hold the object being painted – instead of the usual configuration where the spray gun is held.

Do you also need innovative solutions in regard to coatings?

We would be glad to provide consulting support.

If necessary, we will conduct tests in our applications laboratory using your workpieces and the coating materials in question. This gives you full assurance that the ideal application technology will be employed.

Painting at inaccessible locations

Particularly compact spray guns for external control are built in such a way that they can also reach into cavities and recesses and apply dot-shaped coatings there.

Example: Touch-up painting in inside a packaging tin. Two miniaturized, automatic spray guns apply enamel dots near the lugs for the handle.

Even though the amount of paint is very small – exhaust capability to remove overspray is provided for.

Applying a printing background

Paint, usually white, is applied with a spray gun as a printing substrate. The objective is to improve the legibility of information applied with an inkjet printer.

Purpose: The contrast between the lettering or encoding and this background is significantly higher than would otherwise be the case. The lettering can be better sensed by the reading unit.

Shown here: Sprayed backing on a catalytic converter.
Spray guns for paint markings

**PILOT Signier Standard**

**Standard model**

Fully automatic spray gun for many kinds of fine spraying work.

Spray gun body: Chrome-plated brass; nozzle: stainless steel; needle: stainless steel or sintered carbide, air caps: round or wide jet cap

Nozzle sizes as required: 0.3, 0.5, 0.8, 1.0, 1.2, 1.5 mm in diameter

**PILOT Signier variations:**

PILOT Signier – version for recirculating mode
Like the PILOT Signier Standard, but with additional hose connectors for material recirculation

PILOT Signier – flushable version
Like the PILOT Signier Standard, but with additional connector for cleaning agent feed

PILOT Signier – version for recirculating mode – flushable:
Like the PILOT Signier Standard, but with additional connector for cleaning agent feed and hose connectors for material recirculation

**PILOT WA 51**

Special-design spray guns for limited spaces

Spray nozzles of the smallest possible dimensions, with external control of the atomization parameters. All the wetted components are made of stainless steel. Material volume regulation. Round or wide jet nozzles available.

Nozzle sizes as required: 0.3, 0.5, 0.8, 1.0, 1.2, 1.5 mm in diameter

**Nozzle extensions**

Nozzle extensions for hard-to-reach locations on request
Special-design spray guns for special materials

Rugged, fully-automatic marking guns using a diaphragm instead of a needle seal. Particularly suitable when processing abrasive or moisture-curing materials. High cycle rate. Air caps: round or wide pattern.

Nozzle sizes as required:
0.3, 0.5, 0.8, 1.0, 1.2, 1.5 mm in diameter

A marking gun has to withstand the most extreme loading: continuous opening and closing at the shortest possible intervals. This will cause accelerated wear at the needle seal, particularly when handling abrasive media. Substituting a special diaphragm for the needle will lengthen service life significantly. We would be glad to provide information on the technical details.

Additional alternates when using moisture-curing materials: spray guns using Mesamoll lubricant

PILOT WA 210-H

Special-design spray guns for special materials

Fully automatic spray gun. Forward body and all wetted components made of Hastelloy alloy. Especially suitable for use with acidic or basic materials. Mesamoll lubrication effectively reduces needle packing wear. Material volume regulation by way of detent adjustment.

Nozzle sizes as required:
0.3, 0.5, 0.8, 1.0, 1.2, 1.5 mm in diameter

Mounts and marking brackets

We can also supply the mounts needed to align the marking guns where simultaneous, multiple encoding is required. Over and above that, we offer tailor-made, comprehensive solutions such as marking brackets.
Material and cleaning agent delivery

Small tanks, Model MDG or LDG, made of stainless steel are often used for marking tasks. They ensure pulse-free delivery of the material.

The tanks are suitable for accepting the original drums. We can also provide consumables (paints, inks, cleaning agents).

Over and above that, WALTHER PILOT can supply tanks in many standard and special sizes. In regard to safety, too, our tanks are designed to satisfy every requirement (Pressurized Vessel Regulation / ATEX Explosion Protection Directive). Agitators and fill level measurement sensors can also be installed in the smaller tanks without difficulty.

### Small MDG / LDG tanks

Small tanks, Model MDG or LDG, made of stainless steel are often used for marking tasks. They ensure pulse-free delivery of the material.

The tanks are suitable for accepting the original drums. We can also provide consumables (paints, inks, cleaning agents).

Over and above that, WALTHER PILOT can supply tanks in many standard and special sizes. In regard to safety, too, our tanks are designed to satisfy every requirement (Pressurized Vessel Regulation / ATEX Explosion Protection Directive). Agitators and fill level measurement sensors can also be installed in the smaller tanks without difficulty.

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. operating pressure</th>
<th>Net volume approx.</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDG 1</td>
<td>3 bar</td>
<td>1.1 liter</td>
<td>Without agitator</td>
</tr>
<tr>
<td>MDG 1</td>
<td>6 bar</td>
<td>1.1 liter</td>
<td>Without agitator</td>
</tr>
<tr>
<td>MDG 1</td>
<td>6 bar</td>
<td>1.1 liter</td>
<td>With pneumatic agitator*1</td>
</tr>
<tr>
<td>MDG 2</td>
<td>3 bar</td>
<td>1.8 liter</td>
<td>Without agitator</td>
</tr>
<tr>
<td>MDG 2</td>
<td>3 bar</td>
<td>1.8 liter</td>
<td>With pneumatic agitator*1</td>
</tr>
<tr>
<td>MDG 2</td>
<td>6 bar</td>
<td>1.8 liter</td>
<td>Without agitator</td>
</tr>
<tr>
<td>MDG 2</td>
<td>6 bar</td>
<td>1.8 liter</td>
<td>With pneumatic agitator*1</td>
</tr>
<tr>
<td>MDG 3</td>
<td>3 bar</td>
<td>2.5 liter</td>
<td>Without agitator</td>
</tr>
<tr>
<td>MDG 3</td>
<td>3 bar</td>
<td>2.5 liter</td>
<td>With pneumatic agitator*1</td>
</tr>
<tr>
<td>MDG 3</td>
<td>6 bar</td>
<td>2.5 liter</td>
<td>Without agitator</td>
</tr>
<tr>
<td>MDG 3</td>
<td>6 bar</td>
<td>2.5 liter</td>
<td>With pneumatic agitator*1</td>
</tr>
<tr>
<td>MDG 4</td>
<td>4 bar</td>
<td>3.1 liter</td>
<td>Without agitator</td>
</tr>
<tr>
<td>MDG 4</td>
<td>4 bar</td>
<td>3.1 liter</td>
<td>With manual agitator</td>
</tr>
<tr>
<td>MDG 4</td>
<td>4 bar</td>
<td>3.1 liter</td>
<td>With pneumatic agitator*1</td>
</tr>
<tr>
<td>LDG 5</td>
<td>6 bar</td>
<td>3.5 liter</td>
<td>Without agitator</td>
</tr>
<tr>
<td>LDG 5</td>
<td>6 bar</td>
<td>3.5 liter</td>
<td>With manual agitator</td>
</tr>
<tr>
<td>LDG 5</td>
<td>6 bar</td>
<td>3.5 liter</td>
<td>With pneumatic agitator*1</td>
</tr>
<tr>
<td>LDG 10</td>
<td>6 bar</td>
<td>9 liter</td>
<td>Without agitator</td>
</tr>
<tr>
<td>LDG 10</td>
<td>6 bar</td>
<td>9 liter</td>
<td>With manual agitator</td>
</tr>
<tr>
<td>LDG 10</td>
<td>6 bar</td>
<td>9 liter</td>
<td>With pneumatic agitator*2</td>
</tr>
<tr>
<td>LDG 10</td>
<td>6 bar</td>
<td>9 liter</td>
<td>With electric agitator*3</td>
</tr>
</tbody>
</table>

*1 (0.16 kW, 400 r.p.m.)
*2 (0.36 kW, 200 r.p.m.)
*3 (0.12 kW, 60 r.p.m.)

Other sizes on request

---

Stainless steel pressure tank models
MDG 4, 2 and 1

Pneumatic geared agitator, 0.16 kW, for small tanks

Stainless steel pressure tank models
LDG 20, 5 and 10 (lightweight design)
Max. operating pressure: 6 bar

LDG 20 with electrical geared agitator, 0.12 kW

LDG 10 with pneumatic geared agitator, 0.36 kW

Stainless steel pressure tank models
LDG 20, 5 and 10 (lightweight design)
Max. operating pressure: 6 bar

---

Diaphragm pumps for use in recirculating systems

Miniature material pressure tank, 45 ml, 3 bar, made of stainless steel. The tank is mounted directly on the spray gun. See page 4 for the Select 1 System.

Lightweight alloy pressure tank, 750 ml, 3 bar. See page 5 for the Select 2 System.

For LDG 5 and 10: Inliners made of thin, rugged polypropylene protect against material build-up. Only the outlet tube, agitator shaft and agitator blades need be cleaned.
WALTHER standard paints, inks, thinners

- The pigments in marking paints are especially finely ground so that, when compared with other surface coatings, they are more resistant to settling out and to clogging in and at the nozzle. These are all eco-friendly products, e.g. alcohol-based. Advantages: fast drying, clear marking dots, good UV resistance.

- The paints can be used on surfaces that are wet or dry, hot or cold, light or dark, porous or smooth, and even on greasy surfaces.

- They can be used, for instance, on sheet metal, pipes, plastics, textiles, glass, stone, wood, paper, ceramics and rubber.

- All the standard shades and fluorescent paints are available. Special shades and applications on request.

**Type WPF 1922**

Alcohol-based marking paint with reduced settling, fast-drying, various shades as required. Suitable thinner: WPV 0218.

**Type WPF 0232**

Solvent-based marking paint with reduced settling, extremely fast drying. Suitable thinner: VPV 0222.

**Typ WPT 1800**

Marking ink, alcohol-based, non-settling, fast-drying.

Container sizes and matching material pressure tanks

1 liter bottle, matching the MDG 3 material pressure tank
1 liter tin, matching the MDG 1 material pressure tank
2 liter tin, matching the MDG 4 material pressure tank
10 liter canister, matching the MDG 22 material pressure tank (not shown). Larger containers on request.
## Product range

### Equipment and plant to apply sprayable media

<table>
<thead>
<tr>
<th>Application technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual spray guns</td>
</tr>
<tr>
<td>Automatic spray guns</td>
</tr>
<tr>
<td>Airless units / Aircoat units</td>
</tr>
<tr>
<td>Electrostatic spray guns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tanks and material delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material pressure tanks</td>
</tr>
<tr>
<td>Paint mixing tanks</td>
</tr>
<tr>
<td>Mixing stations, agitators</td>
</tr>
<tr>
<td>Fill level measurement technology</td>
</tr>
<tr>
<td>Diaphragm and piston pumps</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multi-component technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical mixing and metering plants</td>
</tr>
<tr>
<td>Electronically controlled mixing and metering plants</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spray booths and ventilation systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booths with drying function</td>
</tr>
<tr>
<td>Industrial booths with dry or wet particle separation</td>
</tr>
<tr>
<td>Paint sludge removers</td>
</tr>
<tr>
<td>Air make-up systems</td>
</tr>
<tr>
<td>Drying systems</td>
</tr>
</tbody>
</table>

### Equipment and plant to apply adhesives and sealants

<table>
<thead>
<tr>
<th>Application technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spray guns for adhesives</td>
</tr>
<tr>
<td>Automatic spray guns</td>
</tr>
<tr>
<td>Extrusion guns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tanks and material delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material pressure tanks</td>
</tr>
<tr>
<td>Agitators</td>
</tr>
<tr>
<td>Fill level measurement technology</td>
</tr>
<tr>
<td>Diaphragm and piston pumps</td>
</tr>
<tr>
<td>Pumps for high-viscosity media (RAM)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Two-component technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-component pressure tank systems</td>
</tr>
<tr>
<td>Two-component RatioMaster hose pump system</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spray booths and ventilation systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial spray booths</td>
</tr>
<tr>
<td>Air make-up systems</td>
</tr>
</tbody>
</table>

### Marking systems

<table>
<thead>
<tr>
<th>Marking systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marking faults, good parts, bending lines; alphanumeric printing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Application technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic color marking systems</td>
</tr>
<tr>
<td>Marking blocks for lettering</td>
</tr>
<tr>
<td>Continuous-Inkjet-lettering systems</td>
</tr>
<tr>
<td>DOD lettering systems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tanks and material delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material pressure tanks</td>
</tr>
<tr>
<td>Agitators</td>
</tr>
<tr>
<td>Fill level measurement technology</td>
</tr>
<tr>
<td>Diaphragm and piston pumps</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spray booths and ventilation systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial spray booths</td>
</tr>
<tr>
<td>Air make-up systems</td>
</tr>
</tbody>
</table>

### Other fields

<table>
<thead>
<tr>
<th>Other fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent distillation units</td>
</tr>
<tr>
<td>Compressed air manifolds</td>
</tr>
<tr>
<td>Occupational safety</td>
</tr>
<tr>
<td>Filter technology</td>
</tr>
<tr>
<td>Cleaning technology</td>
</tr>
<tr>
<td>Extensive accessories</td>
</tr>
</tbody>
</table>

---

WALThER Spritz- und Lackiersysteme GmbH  
Kärntner Str. 18-30, 42327 Wuppertal, Germany  
Phone: +49/202/787-0, Fax: +49/202/787-217  
info@walther-pilot.de, www.walther-pilot.de