

# REA JET

INDUSTRIAL CODING AND  
MARKING SOLUTIONS -  
MADE IN GERMANY

## Making an Impression Spray Mark Systems



# REA JET Spray Mark Technology: High-quality marking and precision line tracing

Color coded markings play a key role in many technical industries. In industrial applications, color coded markings provide information on the quality and condition of products, as well as information that regulates processes and specifies proper procedures.

Typical examples:

- Marking of defective products using dot marking in red
- Displaying inspected quality in automated manufacturer processes using a green stripe
- Colored line marking for pipes, profiles, and endless products
- Multi colored dot and line marking for product type differentiation
- Welded seam marking in the manufacture of metal profiles
- Mechanically detectable line markings for edge trimming
- Application of location and position markings, as well as “bend here” and “cut here” markings

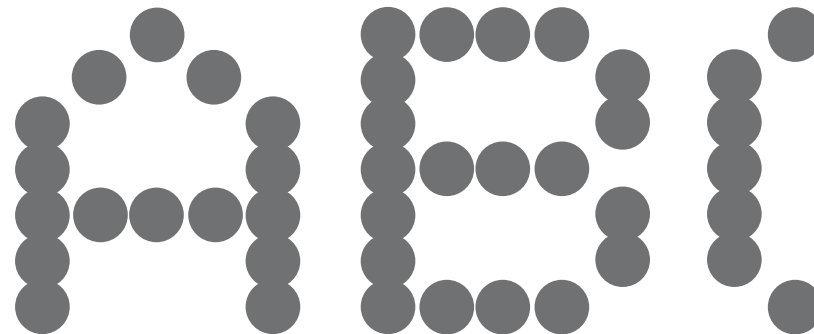
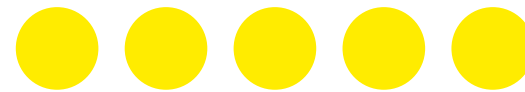
**REA JET Spray Mark Technology** has even more to offer. For example, two-dimensional application of primers, paints, adhesives, disinfectants, and other media, exactly there where they're really needed.

Invest and save in the right places!

Examples of the application of fluid media:

- Targeted application of cooling and cutting media, as well as lubricants
- Application of fluid media for automatic soldering processes (flux)
- Seals made of protective lacquer, for example in circuit board manufacturing
- Application of oils and separating agents
- Precision application of adhesives and screw sealing lacquer

For very large alphanumeric prints which are clearly legible from a distance (dot size up to 30 mm), we offer REA JET Spray Mark Blocks with 7 to 32 spray mark heads.



Alphanumeric information  
on refractory bricks



High-point marking  
on automobile tires



Mirror application for  
2D DataMatrix Code

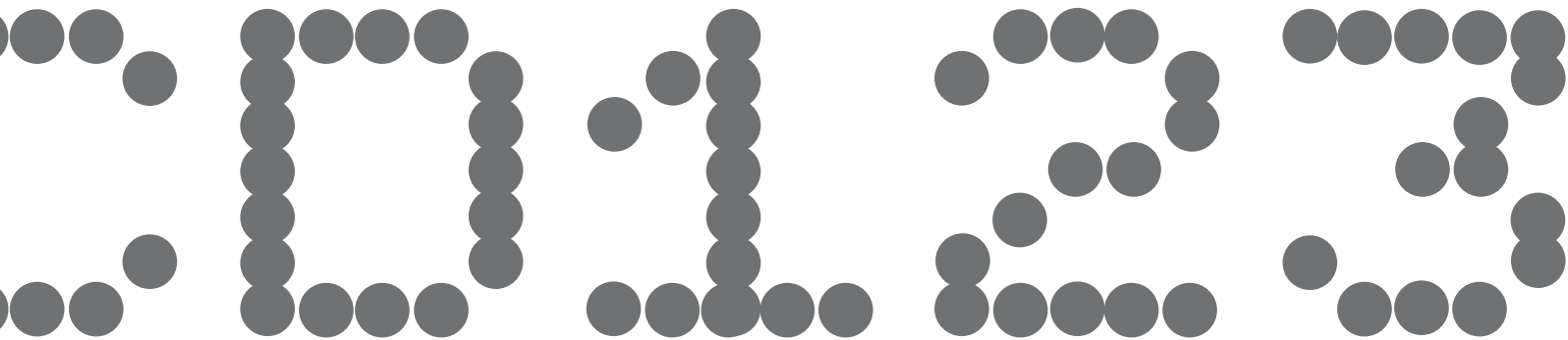
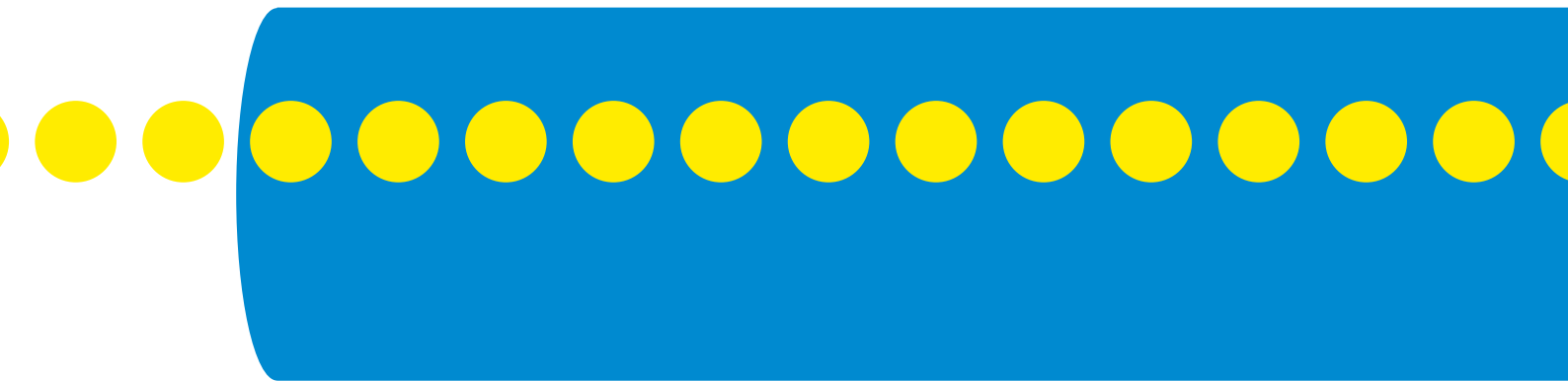


Application of soldering  
agents on circuit boards



Colored ring marking on  
steel pipes





Marking of good parts after quality inspection



Alphanumeric marking of aluminum bars



Multi-colored marking of spring rings



Chimney stone line-marking for correct installation

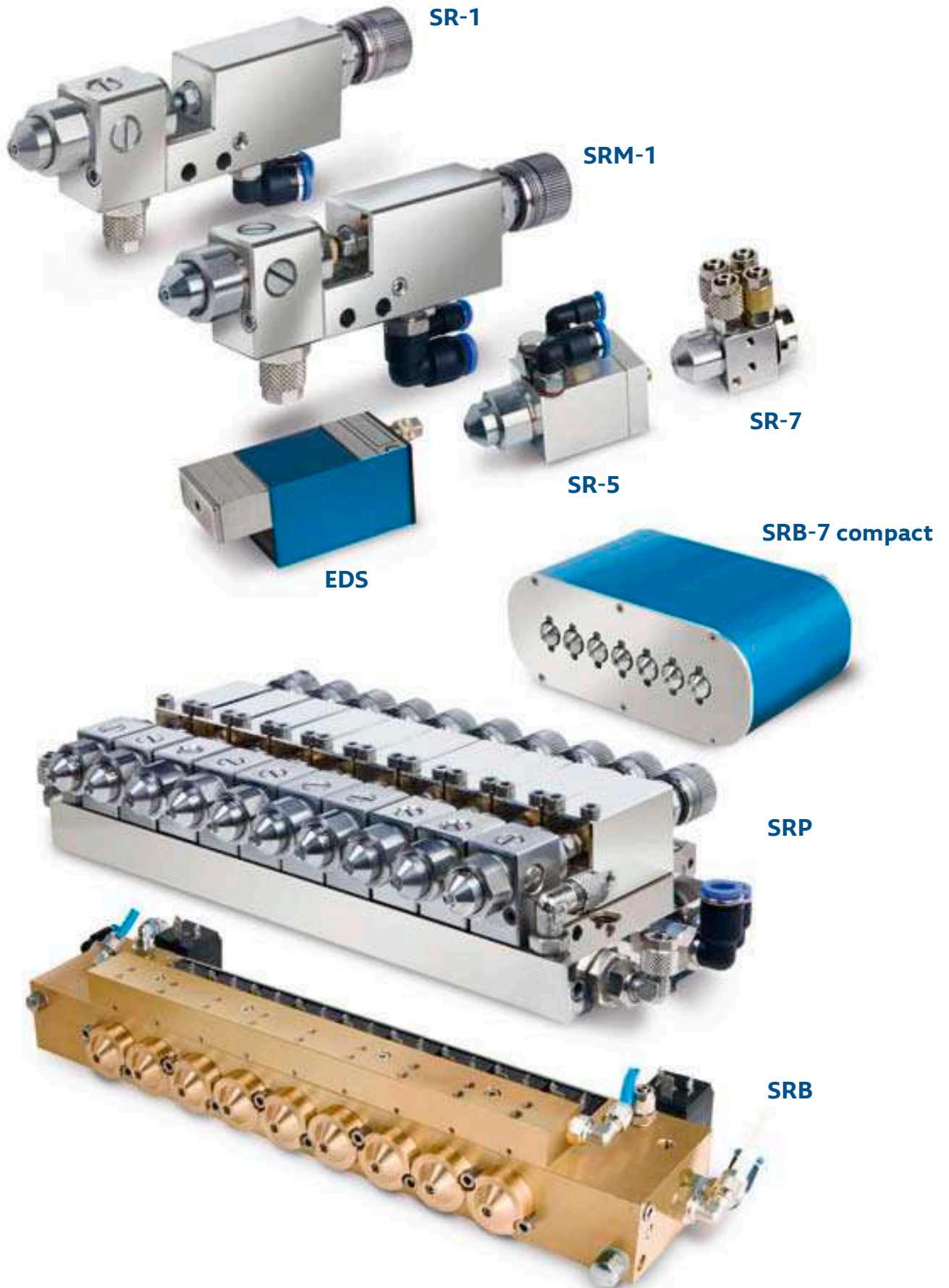


Cylindrical rope marking





# Quality in detail: The individual components



## Single-Dot Marking System and Spray Mark Heads

	EDS	SR-1	SRM-1	SR-5	SR-7
<b>Media</b>	Ink Flux	Paint Ink	Paint Ink Abrasive Media (e. g. adhesives)	Paint Ink	Paint Ink
<b>Dot</b>	0.8 – 2 mm	3 – 30 mm	3 – 30 mm	3 – 30 mm	3 – 20 mm
<b>Line</b>	0.8 – 2 mm	3 – 25 mm	3 – 25 mm	3 – 25 mm	3 – 20 mm
<b>Surface</b>	-	20 – 60 mm	20 – 60 mm	20 – 60 mm	-
<b>Nozzle size</b>	0.08 mm 0.12 mm 0.18 mm 0.27 mm 0.35 mm	0.3 mm 0.5 mm 0.8 mm 1.0 mm 1.2 mm 1.5 mm	0.3 mm 0.5 mm 0.8 mm 1.0 mm 1.2 mm 1.5 mm	0.3 mm 0.5 mm 0.8 mm 1.0 mm 1.2 mm 1.5 mm	0.3 mm 0.5 mm 0.8 mm 1.0 mm 1.2 mm 1.5 mm
<b>Dimensions Weight</b>	30 x 30 x 75 mm 220 g	130 x 50 x 21 mm 400 g	130 x 50 x 21 mm 400 g	65 x 40 x 25 mm 200 g	37 x 20 x 20 mm 90 g
<b>Spray distance</b>	up to 10 mm	3 – 100 mm	3 – 100 mm	3 – 100 mm	3 – 60 mm
<b>Particular characteristics</b>	Electric and pneumatic version For very fine dots and lines	Pneumatic Internal control Nozzle and air control head flushing Integrated Circulation function	Pneumatic Internal control Nozzle and air control head flushing Integrated Circulation function Membrane seal, thus suitable for abrasive media	Pneumatic Spray air control via additional valve Nozzle and air control head flushing Circulation function* Compact design	Pneumatic Spray air control via additional valve Very compact design for minimal space requirements Integrated Circulation function

\*optional

## Spray Mark Blocks

	SRP-					SRB-		SRB-7 compact
	7	9	10	16	32	7	9	
<b>Nozzles</b>	7	9	10	16	32	7	9	
<b>Printing height (in mm)</b>	25 – 130	30 – 180	40 – 200	60 – 350	120 – 700	40 – 190	50 – 240	25 – 130
<b>Media</b>	Paint, ink, abrasive media Heat resistant (up to 600 °C)					Paint, ink, abrasive media Heat resistant (up to 600 °C) Hot mark paints (up to 1000 °C)		Paint, ink, abrasive media Heat resistant (up to 600 °C)
<b>Speed</b>	Up to 50 m/min					Up to 80 m/min		Up to 80 m/min
<b>Dimensions</b>	SRP-7: 200 x 130 x 82 mm SRP-9: 220 x 130 x 82 mm SRP-10: 260 x 130 x 82 mm SRP-16: 420 x 130 x 82 mm SRP-32: 750 x 130 x 82 mm					SRB-7: 375 x 160 x 78 mm SRB-9: 435 x 160 x 78 mm		180 x 73 x 104 mm
<b>Weight</b>	SRP-7: 8 kg					SRB-7: 9 kg		3 kg
<b>Particular characteristics</b>	Electro-pneumatic control via 3/2-way valve Nozzle and air control head					Electromagnetic direct control Nozzle and air control head External flushing of air control head Separation of materials area from the controls		Electromagnetic direct control Nozzle and air control head External flushing of air control head is possible

## Advanced marking: Possible configurations

Modularly structured **REA JET Spray Mark Heads** (System Example A) can apply precise dots and lines to porous and non-porous surfaces. With extremely short cycle times of 20 ms, speeds of up to 100 m/min are easily possible. The dot size can be freely adjusted by controlling the material pressure, the notch setting on the spray mark head and the nozzle size used.

Wide area marking can be applied using spray mark heads with wide spray heads. Markings can be applied from above, below, and sideways. This allows systems to be flexibly integrated with the existing production environment. In addition to an assortment of material designs (stainless steel, brass, aluminum), REA JET spray mark heads can be supplied with additional equipment for special media.

With pigmented media, the circulation function provides material flow for optimal coverage. Special membrane seals (SRM-1) make the heads durable and especially well suited for handling abrasive media such as adhesives, UV-curing lacquers, anti-corrosion protection or aggressive paints and inks.

**REA JET Spray Mark Blocks** (System Example C) are used wherever product marking must be clearly visible from a distance. Alphanumeric information such as material descriptions, batch numbers and logos with a print height of 700 mm can be printed. In the aluminum and steel industries, the use of heat resistant paints and hot mark paints is an important requirement for modern spray technology systems.

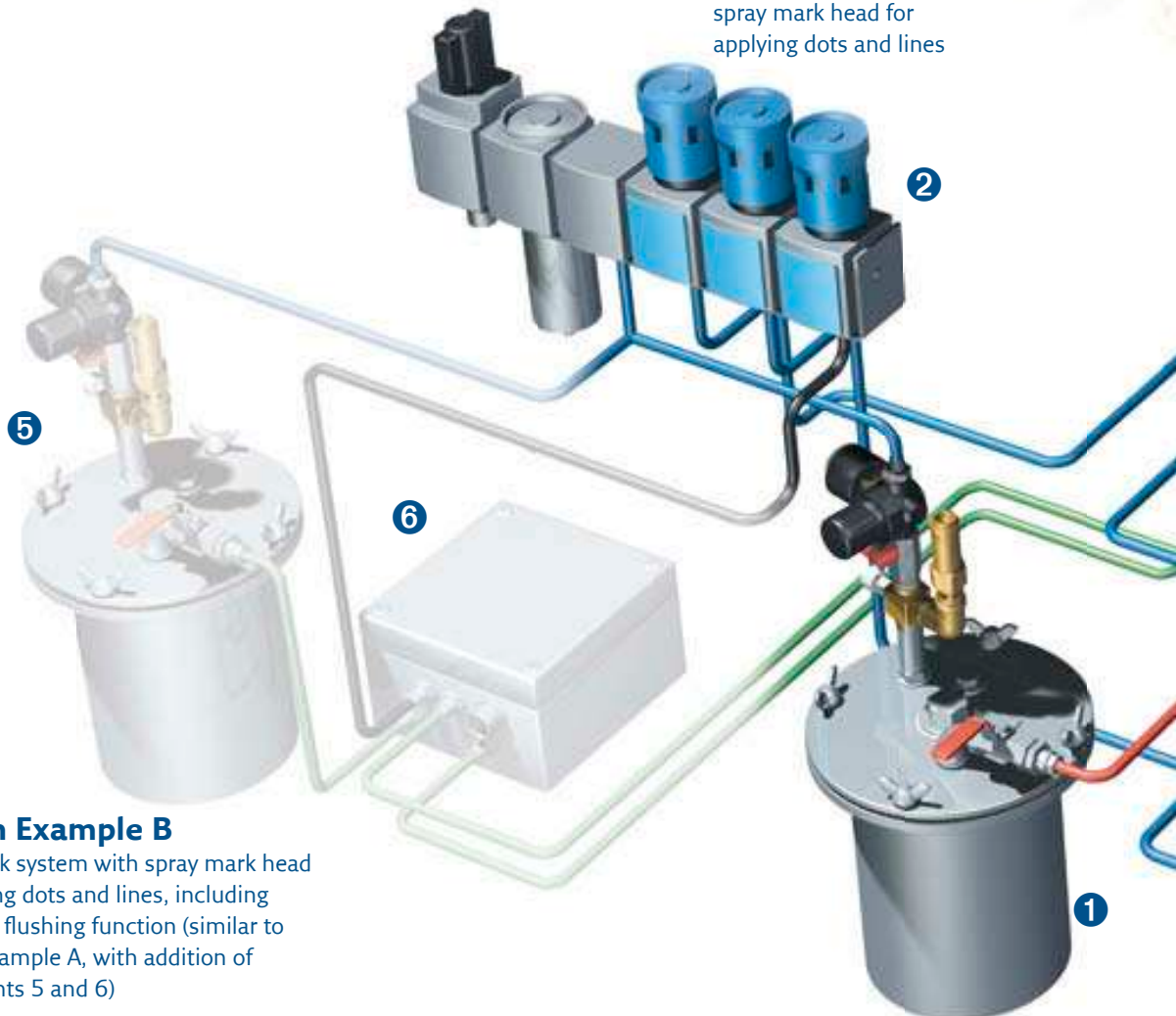
For easy cleaning of the system and for changing colors, the spray mark system can be extended by including a flush function (System Example B).

The **REA JET Single-Dot Marking Systems** (EDS) are particularly well suited to very fine dot and line markings.

The dot size is configured by selecting the nozzle size and by varying the material pressure, and the stepless setting on the controller.

### System Example A

Spray mark system with spray mark head for applying dots and lines



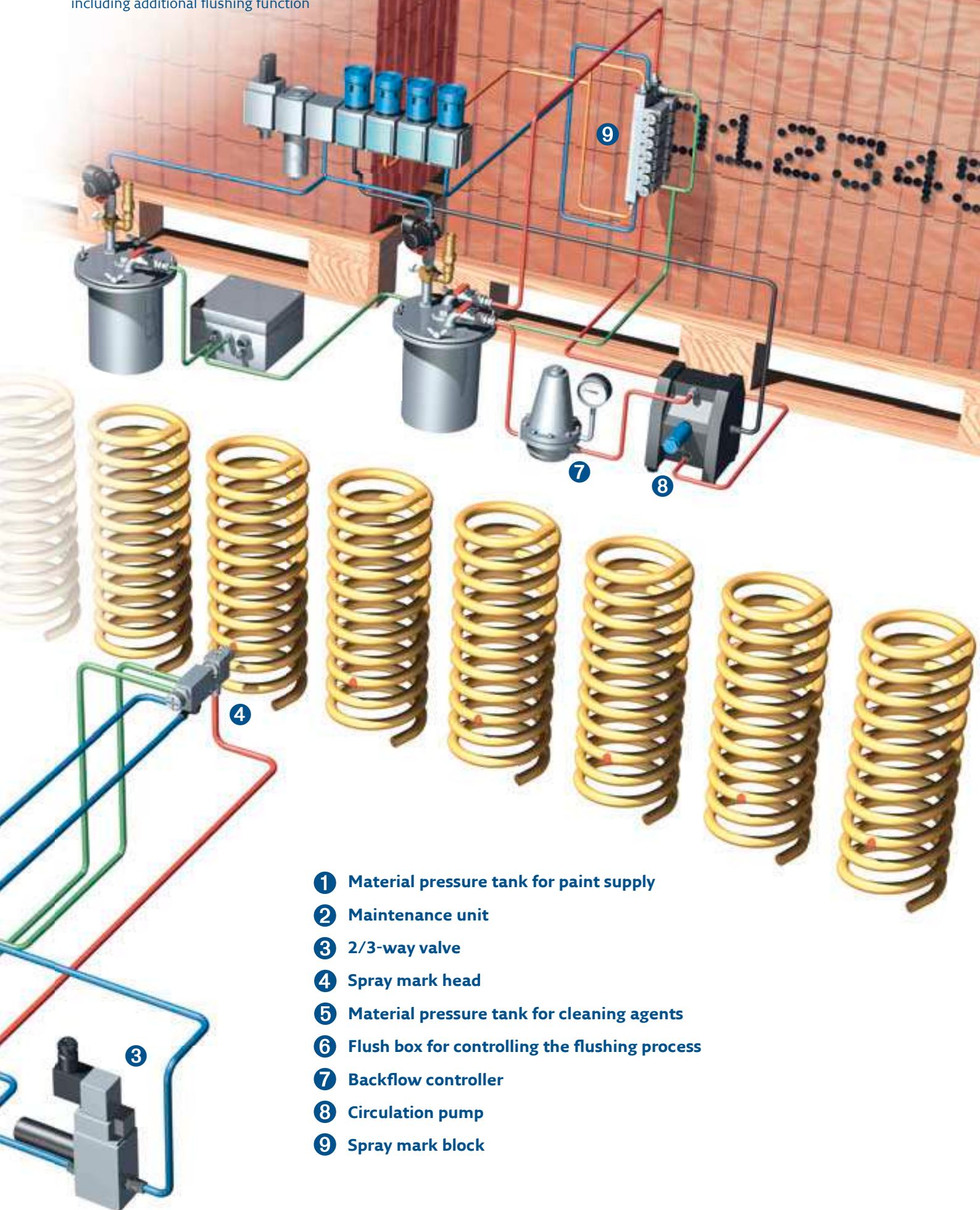
### System Example B

Spray mark system with spray mark head for applying dots and lines, including additional flushing function (similar to system example A, with addition of components 5 and 6)



## System Example C

Spray mark system with spray mark block for applying alphanumeric prints, including additional flushing function



- 1 Material pressure tank for paint supply
- 2 Maintenance unit
- 3 2/3-way valve
- 4 Spray mark head
- 5 Material pressure tank for cleaning agents
- 6 Flush box for controlling the flushing process
- 7 Backflow controller
- 8 Circulation pump
- 9 Spray mark block

## Ready for immediate use: Complete Spray Mark Systems

Complete systems are fully configured and can immediately be integrated into production processes. With its 125 ml paint supply, the compact **REA JET STC System** is particularly well suited to small and medium-sized spray mark jobs with limited material requirements. Applications are, for example, to be found in the quality marking of components. The trigger signal can be set manually or with an external pulse.

The **REA JET STF System** is distinguished by its particularly flexible operating options. It is well suited to use in medium to large spray marking tasks and can be integrated directly into the production environment.

Numerous setting options for spray and material pressure; the 1.5 litre or 4.5 litre material supplies, with an integrated agitator and a tube length of 3 metres to the spray mark head, make it a universally usable spray mark system for dot and line marking in industrial surroundings.

### STF

Flexible Spray Mark Head System  
with optional 1.5 litre or 4.5 litre  
material supply

### STC

Compact Spray Mark Head System  
with 125 ml material supply





## Always reliable: Material tanks for paint supply

The material feed of the REA JET spray mark systems operates using special material tanks (MDB) in sizes of 1.5 and 4.5 litre holding capacity, for accommodating original containers. The high-quality stainless steel design meets the exacting demands of industry. They provide an even and pulsation free material flow of paint and flushing agents, within a pressure range of one to 6 bar. When using pigmented media, and media with a tendency to settle out, agitators (manual, compressed air, electronically powered) provide steady material consistency. Fill level indicators

(optical, electronical) allow for precise monitoring of the remaining material quantity. An additional material outlet is provided to enable circulation. For special applications, a small tank directly mounted on the spray mark head with 75 ml of holding capacity, can be provided.

We can also, upon request, deliver turn-key paint supply units.

**MDB 4.5 litre**



**MDB 1.5 litre**



## A wide spectrum: Paints, inks, consumables

For industrial spray mark technology applications, REA JET offers a wide selection of reliable marking paints and solvents.

For marking, a range of media such as inks based on alcohol, acetone, or MEK, as well as solvent-based paints and lacquers, may be employed. Special paints such as water-based lacquers, UV and fluorescent paints, adhesives based on water or solvents, resins, heat resistant paints and paints for hot surfaces, up to 1000 degrees Celsius, are also available.

The spray mark inks and paints approved by REA JET ensure a high level of functional system security.

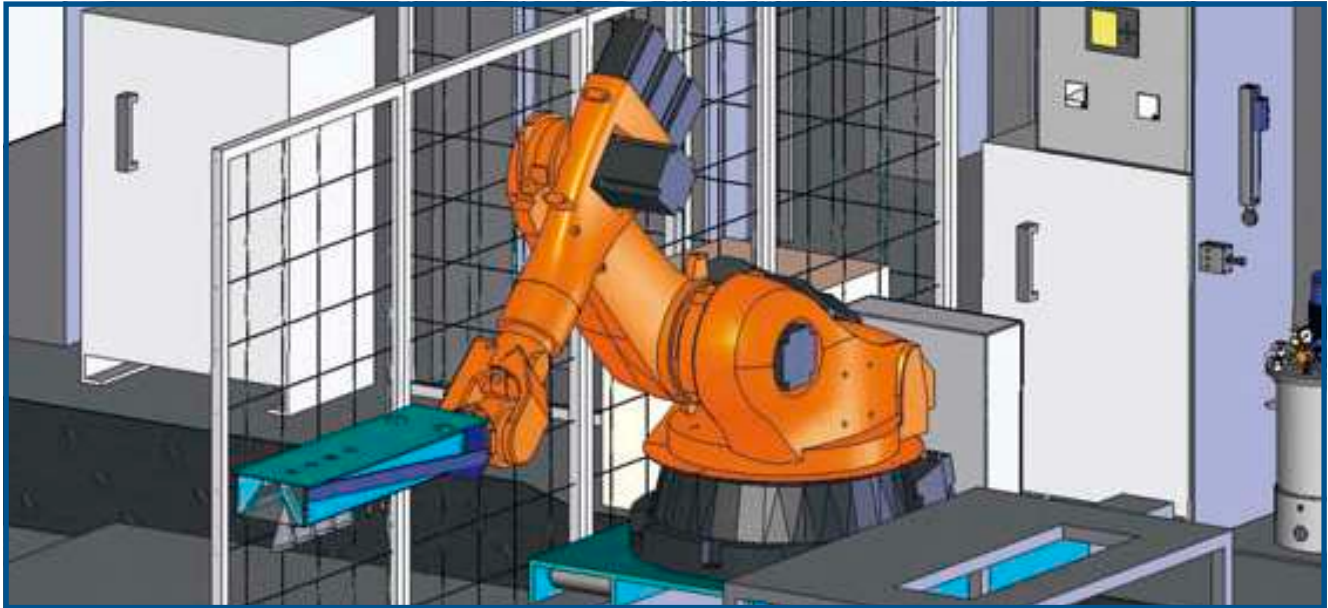
Approved cleaners are available for each spray mark medium. Customer specific development of a paint with special properties is always possible. Container sizes range from 125 ml bottles to 200 litre barrels.



## Effective planning for the future: Design and integration

3D design provides comprehensive information and helps to reduce costs, even during the planning phase of a REA JET Spray Mark System. Specific conditions on site are taken into account and incorporated in the project planning. Workflows can be visualized. The animation of the spray mark process in

the overall workflow can be very informative and is often a valuable basis for making decisions in a complex project. Many years of experience in building systems ensures for a successful implementation of your projects, from the planning stage up to production commissioning.





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