

Benefits and added value

Why mark?

In this day and age, marking of workpieces is absolutely indispensable for state-of-the-art production technologies with assemblies and system components. Immediate traceability, batch separation and tracking, as well as complete production documentation are essential requirements in many sectors.

But many types of marking for various applications are time-consuming, inflexible and therefore also cost-intensive.

With zeus marking technology, workpieces and turned parts of all types can be marked quickly, affordable and flexibly. The marking process is integrated directly in the machining process without changing to a separate machine.

As a result, there are no additional equipping costs – transport and storage times are eliminated.

Why zeus?

zeus marking technology is:

Fast: Processing times are significantly shorter in comparison with other marking technologies such as laser marking, needle embossing, etc.

Affordable: With the complete machining on a single machine, equipping times are significantly reduced and/or minimised.

Flexible: Compatible with all conventional machines and CNC lathes and milling centres.

Features and benefits

- Improved quality of documentation
- Durability due to embossing
- Quality characteristic
- Component can be painted
- Elimination of separate work processes
- Immediate traceability
- Batch separation and tracking
- Complete production documentation
- Clear differentiation from the competition or no-name products
- Modern, just-in-time production requires absolute reliability
- Lateral drives can be removed after completion of the marking process
- Special characters can be used as a drive, e.g. logos, backslash, asterisks, number signs, etc.

And where is it used?



Automotive



Valves



Fittings



Machine construction



Aerospace



Hydraulics / pneumatics



Consumer goods



Decorative



Jewellery

Revolving system

The revolving system is particularly useful for large and mid-sized series and for **recurring components**.

The marking roll is custom-built and adapted to the diameter of each individual workpiece. Thanks to the user-friendly mount system, operators can exchange the rolls quickly and easily so that the tool can be used for a broad range of different workpieces and markings.

Features and benefits

- Fast and economical
- Marking rolls can be easily exchanged
- Easy handling
- The marking is dependent on the workpiece diameter
- A drive provides for perfect revolving application of the marking
- Multiple revolutions ensure perfect precision and definition of the impression
- Perfect concentricity of max. 0.03 mm is essential
- The workpiece diameter must be guaranteed within very close tolerances (± 0.025 mm)
- Lateral drives can be removed after completion of the marking process
- Marking on conical surfaces is possible

Marking rolls and tools



! for conical applications and flat faces



! for conical applications



Spring-return system

The spring-return system offers a maximum of flexibility in all areas. You may use it for multiple workpieces with different diameters. Exchangeable marking segments facilitate economic text changes. The versatile spring-return system is designed for fast and easy exchange of the entire segment mount/markings roll unit.

Features and benefits

- Suitable for marking of different workpiece diameters
- Flexible marking for different applications due to exchangeable text segments, such as consecutive batch numbers, serial numbers, manufacturing data, etc.
- When you need a different text, you can simply exchange the entire mount unit – quick and easy
- Possible to mark workpieces up to a shoulder
- Three driving points guarantee a perfect impression during the rotating process
- Marking without driving points is possible, as long as the C-axis can be controlled
- Marking is achieved by one-time partial revolution of the mount unit, which stops at the end of the text
- Desired depth can be achieved at fast speed

Marking rolls/segments and tools

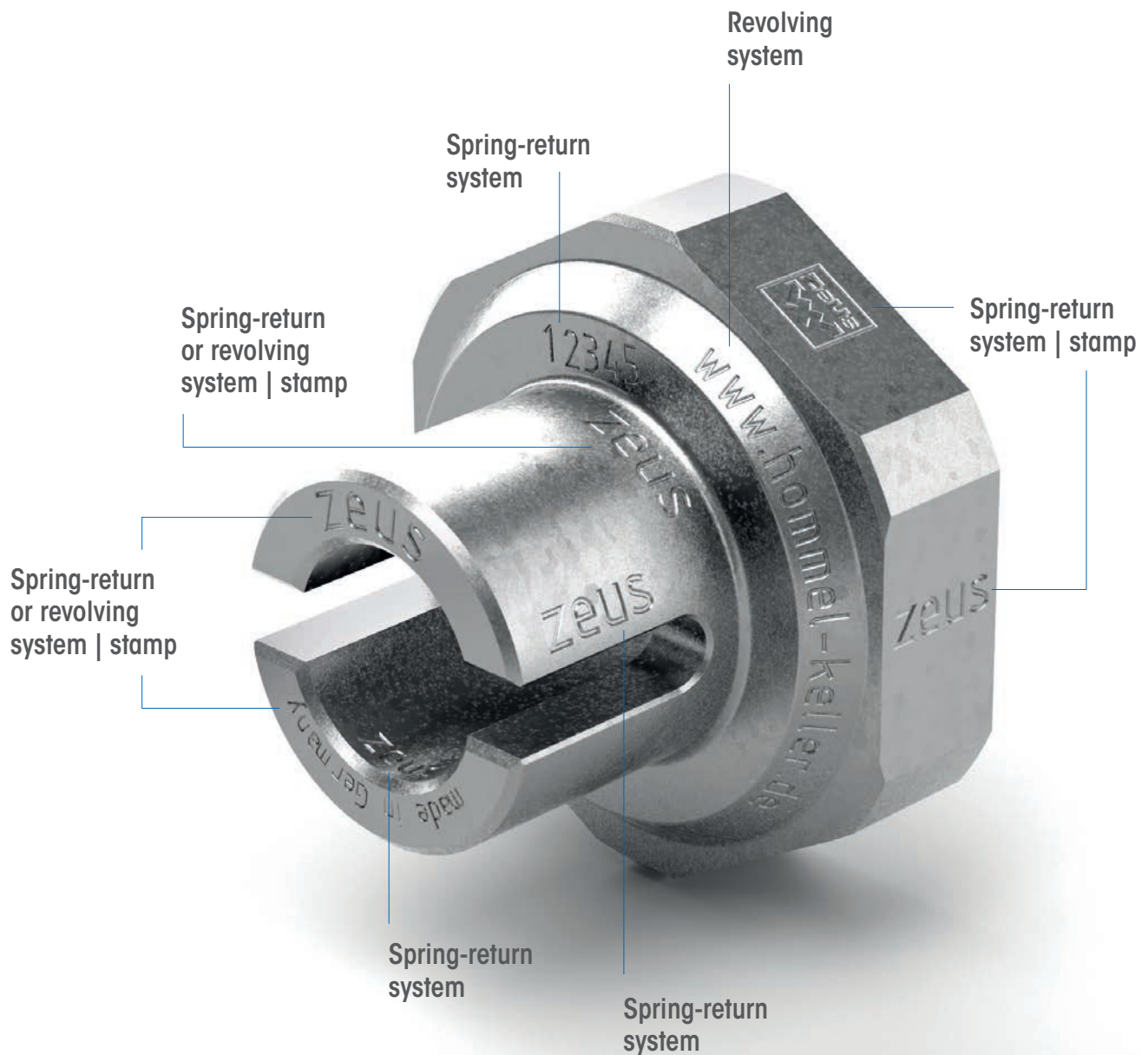


Applications



Where and how can workpieces be marked?

The example shows that you can mark at practically any position. Whether you require marking on spherical or conical surface, up to a shoulder, on end face or inner surface – zeus marking technology will satisfy your requirements.



Overview



Revolving marking system – with marking roll

Tool n°	Marking roll n°	Marking on workpiece	Marking roll Ø [mm]	Marking roll width [mm]	Shank size [mm]	Adaptable to shank size	Integrated centre height	Marking up to a shoulder
130	40	Circumference	Application-specific	Application-specific	Machine-specific	–	–	–
131	40	Circumference	Application-specific	Application-specific	Machine-specific	–	■	–
311	40-K	End face/ Conical surface	Application-specific	Application-specific	Machine-specific	–	■	–
312	40-K	End face/ Conical surface	Application-specific	Application-specific	Machine-specific	–	■	–

Spring-return marking system – with marking roll

Tool n°	Marking roll n°	Marking on workpiece	Marking roll Ø [mm]	Marking roll width [mm]	Shank size [mm]	Adaptable to shank size	Integrated centre height	Marking up to a shoulder
421	41	Circumference/ End face/ Flat face	25	6	16	20/25	■	–
422	41	Circumference/ End face/ Flat face	15	5	8	10/12/16	■	–
422	41	Circumference/ End face/ Flat face	15	7	8	10/12/16	■	■

Spring-return marking system – with marking segments

Tool n°	Marking segment No.	Marking on workpiece	Marking segment Ø [mm]	Segment width [mm]	Shank size [mm]	Adaptable to shank size	Integrated centre height	Marking up to the collar
431	42	Circumference/ End face/ Flat face	45	6	16	20/25	■	–
432	43	Circumference/ End face/ Flat face	30	8	8	10/12/16	■	■
432	43	Circumference/ End face/ Flat face	50	8	16	20/25	■	■