

## zeus® MARKING TECHNOLOGY

### 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 inexpensive text changes. The easy and fast exchange of the entire segment mount / marking roll constitutes the last but not the least element of the multi-faceted profile of this system.

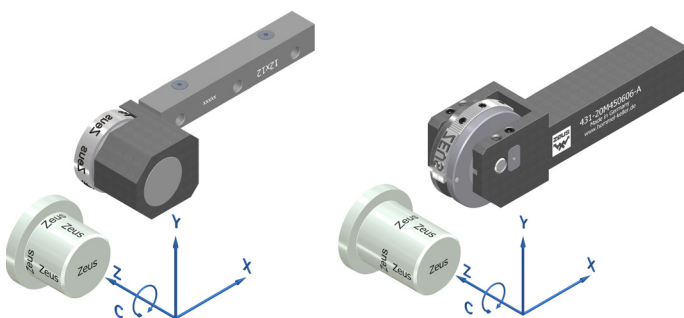
#### TECHNICAL FEATURES:

- It is not necessary to match the marking roll to the diameter of the workpiece.
- Three driving points guarantee a perfect impression.
- To generate the impression, the roll turns only once and only partly. It stops at the end of the text.
- Unlike the revolving system, this technology requires a higher contact pressure because the desired depth of the impression must be achieved in one go.

#### BENEFITS FOR THE USER:

- Tool may be used for multiple workpieces with varying diameters and shapes.
- It is suitable for small, medium-sized and large series.
- Diameter variances do not constitute a problem.
- The marking roll may be (optionally) equipped with exchangeable text segments. That means texts are flexible and may be adapted to multiple applications (e.g. consecutive serial numbers, production dates etc.)
- The T-shape of the segments allow texts to be reversed 180 degrees. That means texts may be applied in reverse direction of reading.
- When you need a completely different text, you simply exchange the entire mount unit – quick and easy.
- No problem to mark workpieces all the way up to the collar.

Please find more information concerning individual marking systems in the corresponding product descriptions and in the technical appendix.



**zeus® MARKING TECHNOLOGY**  
**SPRING-RETURN SYSTEM**

**TOOL SERIES MR1**

**Tools:**

- 431-08/10/12/16 R150506-A
- 431-08/10/12/16 L150506-A



- 431-16/20/25 M250606



**Marking rolls for MR1 series**

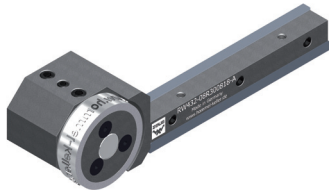
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**TOOL SERIES MR1**  
**MARKING UP TO THE COLLAR**

**Tools:**

- 432-08/10/12/16 R300818
- 432-16/20/25 R501018
- 432-08/10/12/16 L300818
- 432-16/20/25 L501018



**Marking rolls for MR1 series (up to the collar)**

- 44



**TOOL SERIES MRS1**  
**WITH EXCHANGEABLE SEGMENTS**

**Tools:**

- 431-16/20/25 M 450606



**Marking rolls for MRS1 series**

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**TOOL SERIES MRS1**  
**WITH EXCHANGEABLE SEGMENTS – MARKING IS POSSIBLE UP TO THE COLLAR**

**Tools:**

- 432-08/10/12/16 R300818
- 432-16/20/25 R501018
- 432-08/10/12/16 L300818
- 432-16/20/25 L501018



**Marking rolls for MRS1 series (up to the collar)**

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**zeus® MARKING TECHNOLOGY**

**MARKING ROLL NO. 41  
SPRING-RETURN SYSTEM**

Marking roll No. 41 is suitable for marking multiple workpieces with varying diameters.

**STANDARD DESIGN:**

- Material: 1.2436
- Hardness: 61 – 63 HRC
- Flank angle: 90°
- Typeface: DIN 1451
- Roll width: 5 mm, 6 mm
- Max. character height: roll width minus 1 mm

Deviations from standard design are optionally available (i.e. different materials, flank angles, typefaces and roll widths).

**TECHNICAL FEATURES:**

- The design of marking roll No. 41 is independent of the workpiece diameter.
- There are three driving points that guarantee the perfect impression depth. (See possible types of marking).
- Basically, it is absolutely possible to work without driving points. In that case, however, we cannot guarantee for a perfect depth and definition of the impression from the first to the last character.
- Driving points may be placed to the side of the characters.
- Full depth and definition are accomplished in one go.



**BENEFITS FOR THE USER:**

- This roll is especially versatile because it is independent of the workpiece diameter.
- Workpiece diameter tolerances do not constitute a problem.
- Marking is possible at high speed.
- Marking rolls can be easily exchanged.
- Special characters may be used instead of driving knurls, e.g. logos, backslashes, stars, diamonds etc.
- The reading direction may be flipped by flipping the roll 180 degrees.

**Possible types of marking:**



**FOR MARKING TOOLS:**

Series MR1:

- 431-08/10/12/16 R150506-A
- 431-08/10/12/16 L150506-A
- 431-16/20/25 M250606

**zeus® MARKING TECHNOLOGY**

**MARKING ROLL NO. 44  
SPRING-RETURN SYSTEM**

Marking roll No. 44 is suitable for marking multiple workpieces with varying diameters. Marking all the way up to the collar is possible.

**STANDARD DESIGN:**

- Material: 1.2436
- Hardness: 61 – 63 HRC
- Flank angle: 90°
- Typeface: DIN 1451
- Roll width: 8 mm
- Max. character height: 7 mm (roll width minus 1 mm)

Deviations from standard design are optionally available (i.e. different materials, flank angles, typefaces and roll widths).



**TECHNICAL FEATURES:**

- The design of marking roll No. 44 is independent of the workpiece diameter.
- There are three driving points that guarantee the perfect impression depth. (See possible types of marking).
- Basically, it is absolutely possible to work without driving points. In that case, however, we cannot guarantee for a perfect depth and definition of the impression from the first to the last character.
- Driving points may be placed to the side of the characters.
- Full depth and definition are accomplished in one go.

**BENEFITS FOR THE USER:**

- This roll is especially versatile because it is independent of the workpiece diameter.
- Suitable for markings all the way up to the collar.
- Workpiece diameter tolerances do not constitute a problem.
- Marking is possible at high speed.
- Special characters may be used instead of driving knurls, e.g. logos, backslashes, stars, diamonds etc.
- The reading direction may be flipped by flipping the roll 180 degrees.

**Possible types of marking:**



**FOR MARKING TOOLS:**

Series MR1:

- 431-08/10/12/16 R300818
- 431-08/10/12/16 L300818
- 432-16/20/25 R500818
- 432-16/20/25 L500818

## zeus® MARKING TECHNOLOGY

### MARKING ROLL NO. 42 SPRING-RETURN SYSTEM

Marking roll No. 42 is suitable for marking multiple workpieces with varying diameters. Exchangeable segments make it possible to match this flexible roll to multiple applications.

#### STANDARD DESIGN:

- Material: 1.2436
- Hardness: 61 – 63 HRC
- Flank angle: 90°
- Typeface: DIN 1451
- Roll width: 5 mm, 6 mm
- Max. character height: roll width minus 1 mm

Deviations from standard design are optionally available (i.e. different materials, flank angles, typefaces and roll widths).

#### TECHNICAL FEATURES:

- The design of marking roll No. 42 is independent of the workpiece diameter.
- Segments may be exchanged individually.
- There are three driving points that guarantee the perfect impression depth. (See possible types of marking).
- Basically, it is absolutely possible to work without driving points. In that case, however, we cannot guarantee for a perfect depth and definition of the impression from the first to the last character.
- Driving points may be placed to the side of the characters.
- Full depth and definition are accomplished in one go.



#### BENEFITS FOR THE USER:

- This roll is especially versatile because it's INDEPENDENT of the workpiece diameter.
- Exchangeable segments make it possible to match this roll to multiple applications – a fast, flexible and economic solution.
- Workpiece diameter tolerances do not constitute a problem.
- Marking is possible at high speed.
- Special characters may be used instead of driving knurls, e.g. logos, backslashes, stars, diamonds etc.
- The reading direction may be flipped by flipping the roll 180 degrees.

#### Possible types of marking:



#### FOR MARKING TOOLS:

Series MRS1:

- 431-16/20/25 M450606

**zeus® MARKING TECHNOLOGY**

**MARKING ROLL NO. 43  
SPRING-RETURN SYSTEM**

Marking roll No. 43 is particularly versatile. The exchangeable segments make it possible to match this flexible roll to multiple applications. What is more, it can produce markings that go all the way to the collar.

**STANDARD DESIGN:**

- Material: 1.2436
- Hardness: 61 – 63 HRC
- Flank angle: 90°
- Typeface: DIN 1451
- Roll width: 8 mm
- Max. character height: 7 mm (roll width minus 1 mm)

Deviations from standard design are optionally available (i.e. different materials, flank angles, typefaces and roll widths).

**TECHNICAL FEATURES:**

- The design of marking roll No. 43 is independent of the workpiece diameter.
- Segments may be exchanged individually.
- There are three driving points that guarantee the perfect impression depth. (See possible types of marking).
- Basically, it is absolutely possible to work without driving points. In that case, however, we cannot guarantee for a perfect depth and definition of the impression from the first to the last character.
- Driving points may be placed to the side of the characters.
- Full depth and definition are accomplished in one go.



**BENEFITS FOR THE USER:**

- This roll is especially versatile because it is independent of the workpiece diameter.
- Exchangeable segments make it possible to match this roll to multiple applications – a fast, flexible and economic solution.
- Suitable for markings all the way up to the collar.
- Workpiece diameter tolerances do not constitute a problem.
- Marking is possible at high speed.
- Special characters may be used instead of driving knurls, e.g. logos, backslashes, stars, diamonds etc.
- The reading direction may be flipped by flipping the roll 180 degrees.

**Possible types of marking:**



**FOR MARKING TOOLS:**

Series MRS1:

- 432-08/10/12/16 R300818
- 432-08/10/12/16 L300818
- 432-16/20/25 R501018
- 432-16/20/25 L501018