

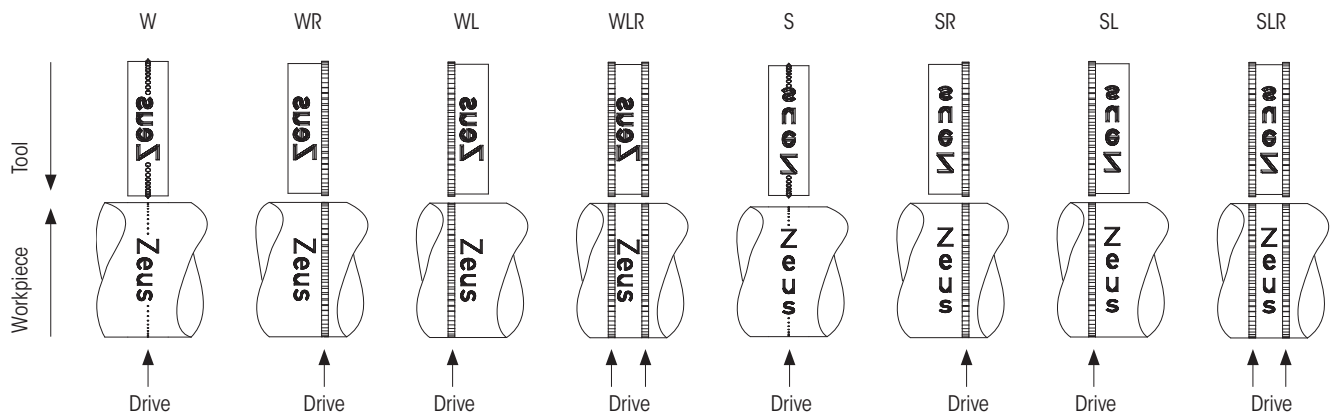
Marking roll specifications

1. Typefaces

- The standard typeface is based on DIN 1451
(Other typefaces available on request)
- A .dxf file is needed for logos and special characters

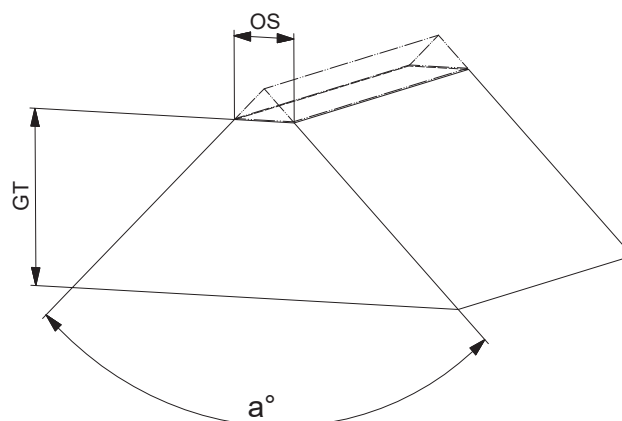
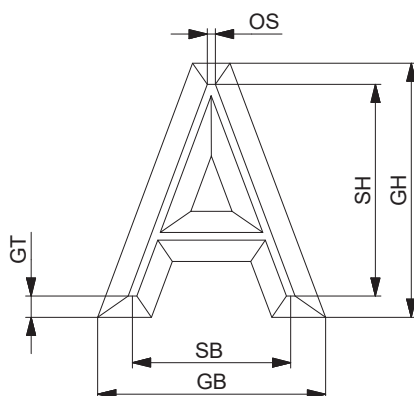
2. Possible marking types | drives

- To ensure continuous rotation of the tool, a drive is needed, which can be custom designed (logo, backlash, asterisks, number signs, etc.) and removed by means of reworking (cutting off, finish machining, bevelling, etc.)



3. Character height/embossing depth

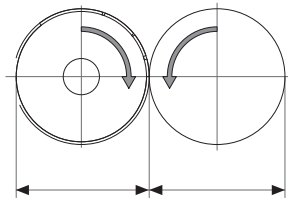
- The standard flank angle is 90°
(Other flank angles available on request)
- Minimum character height: 0.8 mm
- Maximum character height: Depending on the roll width
all standard sizes are possible
- The character height is measured on the offset
(see figure below)
- Standard embossing depth: 0.35 mm



α° = flank angle
 GT = embossing depth
 GB = embossing width
 GH = embossing height
 SB = character width
 SH = character height
 OS = offset

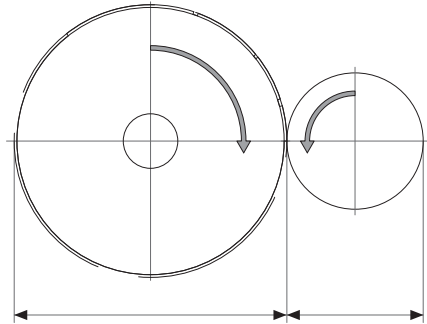
4. Diameter ratio: Marking roll – workpiece

- The diameter of the marking roll is dependent on the workpiece diameter



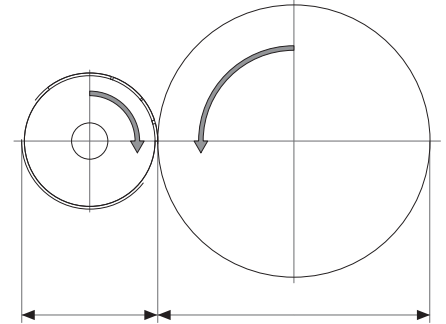
Marking roll \varnothing : Workpiece \varnothing
 $i = 1 : 1$

$i = 1$



Marking roll \varnothing : Workpiece \varnothing
 $i = n : 1$

$i > 1$



Marking roll \varnothing : Workpiece \varnothing
 $i = 1 : n$

$i < 1$

Practical guidance

1. Preparation of workpiece

- The surface must be clean
- Perfect concentricity is essential (0.03 mm)
- The diameter of the workpiece must be very precise (max. tolerance: ± 0.025 mm)

2. Impression depth

- The standard impression depth is 0.075 mm relative to the radius / 0.15 mm relative to the diameter
- Impression depths exceeding the recommended maximum values may cause character distortions

3. Marking as part of the machining process

- The position of the drive on the workpiece should be taken into account during the machining process
- There is a danger that weak parts of the workpiece are deformed during marking.
We recommend marking to be carried out on the strong parts of the workpiece and/or before the critical machining steps