

Product information HA-Marker 12/20

English

Marking tool with $\varnothing 12\text{mm}$ and $\varnothing 20\text{mm}$ arbor



HA-STOCKER
Product information 12/20 marker

This manual is designed to help familiarise you with your new product. Using this system for purposes other than those intended by the manufacturer can result in damage to the system or injuries to the operator. Materials other than those outlined in this manual are processed at the operator's own risk.

Operation

The HA-Marker is a mechanical marking system which is held in the machine spindle with a toolholder. It is designed for marking workpieces and may only be used in accordance with its technical data. The maximum loads specified by the manufacturer must not be exceeded.

The marking is carried out permanently using a combination of material compaction and material displacement via a special needle. No cooling lubricant or compressed air is required for operating the tool.

There should be minimal spindle rotation when using the tool where possible (max. 20 rpm).

If the tool is held in a Weldon toolholder, the following maximum tightening torques of the turnbuckle must be observed. Failure to do so could result in damage or destruction to the body.

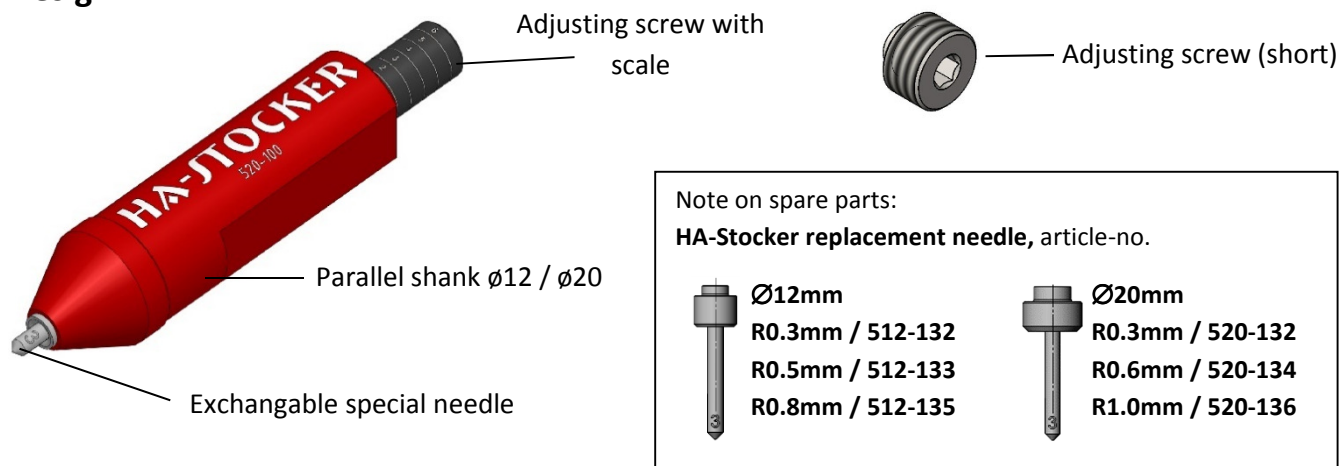
- Turnbuckle: M6 max. = 1.8 Nm / M8 max. = 2.3 Nm / M10 max. = 2.9 Nm / M12 max. = 3.5 Nm

Usage options

The HA-Marker is suitable for permanent marking of surfaces up to 55 HRC and can level out unevenness up to 4mm.

The marking can be carried out on the following material among others: Steel, cast iron, plastic, aluminium, copper, brass, titanium. (List is not definitive).

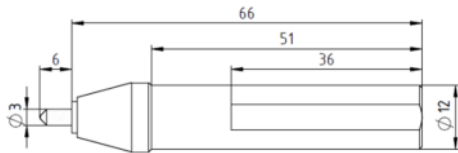
Design



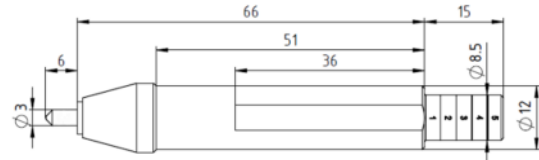
Note on validity: Figures in this document may differ from the delivered product. We reserve the right to make changes due to errors or based on technical advances.

Dimensions

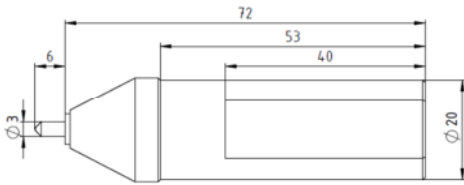
Marker $\varnothing 12\text{mm}$ / short adjusting screw without scale



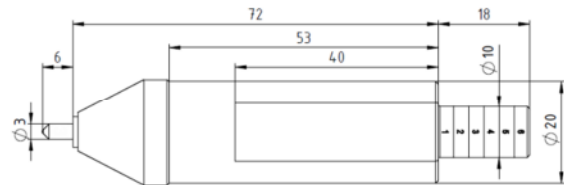
Marker $\varnothing 12\text{mm}$ / adjusting screw with scale



Marker $\varnothing 20\text{mm}$ / short adjusting screw without scale

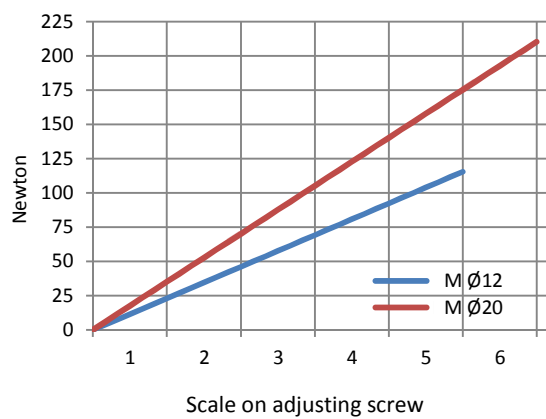


Marker $\varnothing 20\text{mm}$ / adjusting screw with scale



The overall length of the tool can be reduced with the short adjusting screw.

Setting the marking depth



The marking depth depends on the surface hardness and can be adjusted via the adjusting screw on the rear of the tool. The further the adjusting screw is turned in, the larger the pre-load acting on the needle and the wider the marking line becomes. After the initial tests, the screw-in depth can be increased or reduced according to your requirements. The **diagram** shows the relevant pre-loads.

Insert the tool into the workpiece by approx. 2.5mm. This enables unevenness of up to $\pm 2\text{mm}$ to be levelled out with no additional programming. The immersion depth does not correspond to the scratch depth.

Special needle

The needle is made from special steel and the surface is finished. To change the needle, turn the adjusting screw completely out of the marker. Turn the marker into the vertical position so that the compression spring and the needle slide out. If the needle gets stuck, shake the marker gently.

Then place the new needle on the compression spring and insert it into the marker with the needle first. Finally screw the adjusting screw into the desired position.

The following special needles are included in the scope of supply:

- Arbor $\varnothing 12$: Needle with spherical radius of 0.3 mm / 0.5 mm / 0.8 mm
- Arbor $\varnothing 20$: Needle with spherical radius of 0.3 mm / 0.6 mm / 1.0 mm

As a general rule, the harder the component surface to be marked is, the smaller the selected spherical radius should be. The smaller the spherical radius, the smaller the width of the line. Only the original needles guarantee the desired marking quality.

Programming instructions

Many tool machine manufacturers offer programs for marking with numbers, letters and logos. If programs for engraving have already been used, these programs can also be used for marking with the HA-Marker:

- Arbor stop / lock or with low speed of rotation max. 20 [rpm]
- Marking speed 1 - 200 [m/min] (rapid traverse)

Set the adjusting screw so that the special needle springs by 1 - 2mm. The adjusting screw must always be set so that the spring is not "on block".