

Product note

WriteStar RM12/RM20

Note on applicability

Illustrations in this publication may deviate from the product supplied. Errors and omissions due to technical progress expected.

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Working principle

- WriteStar is a marking tool that can be used on all CNC machines with an engraving software package.
- Marking labels are permanently created by a combination of material compaction and displacement using a special stylus.
- The tool requires no spindle rotation, cooling lubricant or pressurized air.
- The surface may be wetted with oil or cooling lubricant, but it is not necessary.
- Spindle speeds up to 300rpm are allowed, but they are also not necessary.



Applications

- WriteStar is suitable for marking surfaces
 - with up to 60HRC hardness.
 - with up to 3mm (RM12) or 5mm (RM20) unevenness.
 - that are non-machined or machined.
- Very high marking speed possible (max. 200 m/min).
- No tool drive required.
- Max. 15-degree slants can be labeled evenly.
- The materials that can be marked include:
steel, cast, plastic, aluminum, titan
- Suitable mountings are turning tool holders with 12/16/20mm or parallel shank mountings with 12 or 20mm diameter.
- The tool mounting clamp screws may contact the WriteStar only through a flat clamping plate, as its housing may be destroyed. The maximum allowed surface load is 500 N/cm².
- For optimal use of WriteStar if space is limited, INDEX offers a range of slim drill holders ixshop.ixworld.com

Setting the marking depth

- The marking depth depends on the surface hardness; it can be determined by the tool infeed and by the adjusting screw on the back of the tool.
- The more the adjusting screw is turned in, the larger is the force acting on the stylus, resulting in a wider marking line.
- The standard screw-in depth is 6mm (factory setting), while the maximum depth is 15mm.
- Changing the screw-in depth has no effect on the tool length.
- Burrs can be avoided by reducing the infeed/screw-in depth.

Programming notes

- Many machine tool manufacturers offer subprograms for labeling with numbers, letters, and logos.
- If engraving software has already been used, it can also be applied for marking with WriteStar.
- This requires the following changes
 - Reduce the spindle speed to 0rpm or to the lowest speed.
 - Increase the feed rate to the maximum.
 - Program the tool length such that the special stylus retreats 1 - 2mm (the insertion depth is not equal to the scoring depth).
 - If a burr forms along the marking line or if the marking is too weak, this can be corrected using tool offset.

Stylus wear

- Experience shows that the stylus, when used under typical conditions and for common material hardnesses, has a life cycle of several years or more than 40km of marking length.
- The stylus is replaced by us.
- Only original styluses ensure the desired marking quality.
- Disassembly of the tool will void the warranty.

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