

Advantages of automated part marking with gravostar

Main advantage: Saving of the workpiece marking as a separate working process.

This means that each part comes **automatically from the CNC machine with the correct marking** and can be processed directly.

Use in CNC machine



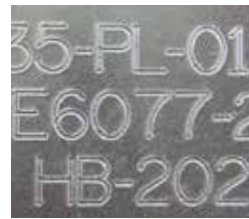
always consistent-
marking depth



automatically
exchangeable



on uneven or
rough surfaces



font as regular text,
number, logo etc.



or QR code resp.
data matrix code

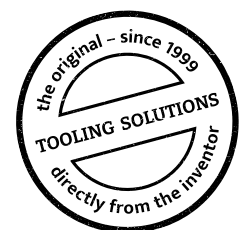
Features of the procedure

Part marking is integrated in the machining process in the CNC machine

- **Fast:** due to the non-cutting marking process, very high feed rates can be achieved, i.e. only a few seconds are needed for the marking process
- **Wear-resistant:** the marking needle made of solid carbide (hardness 92 HRC) is extremely wear-resistant, which guarantees a very long service life
- **Process reliability:** the marking process is a part of the production process and is therefore fully automatic. In this way wrong or forgotten markings can be excluded.

Range of application

- Marker types
 - alphanumeric marking as solid line or dot matrix
 - marking of any characters or logos
 - marking of QR Code or Data Matrix Code
- Marking areas
 - machined or raw
 - flat or uneven (always uniform marking depth)
 - suitable for practically any material (hardness up to approx. 62 HRC)



Advantage: Quality and process reliability

- Saving of the separate operation of subsequent part marking: each part comes automatically from the CNC machine with the correct marking
- Non-cutting marking process always guarantees consistent marking quality, largely independent of the wear condition of the marking needle
 - no burr, caused by increased tool wear
 - no missing marking due to broken milling cutter tip
- Reduced programming effort: marking program is part of the production program, making separate programming unnecessary
- Individual marking possibility of series or single parts with real-time data like serial numbering, current production data like production date, machine number etc. which are directly read out
 - from the machine controller
 - from the internal network

Further advantages

- Security
 - no wrong or incorrectly marked parts
 - no forgotten markings
- Employee Relief
 - no additional handling for part marking
 - no monitoring of the additional marking process
 - no risk of injury during parts handling or the marking process
 - no dirt or noise pollution due to subsequent part marking
- Less space required
 - no intermediate storage of the manufactured parts

Sales procedure

Depending on the task at hand, various processes such as needle embossing, scratch marking or roller embossing are available. When selecting the process, the existing machine equipment (e.g. central coolant supply or compressed air through the machine spindle) must also be taken into account.

Due to the variety of tasks, our portfolio now includes more than 20 different types of tools. However, we do not see our task as merely selling the marking tools we produce. It is very important to us that each individual customer receives the most suitable solution for his application. Together with the customer, we therefore clarify the respective task in advance.

Why do we do this: because we see it as our responsibility to ensure that you receive a tool that meets your expectations 100% – and that you as a customer get the greatest possible benefit from your investment. So get in touch with us today.