

## gravostar HRY-20 PP

For the gravostar HRY-20 PP tool type, the needle oscillation is activated by compressed air, which is fed through the machine spindle. All functional elements are integrated in the tool. As soon as the compressed air supply is switched on, the needle oscillation starts with a frequency of about 300 Hz. Due to the high oscillation frequency, the individual marking dots are placed close to each other, so that they cannot be individually recognized. This creates the marking contour as a continuous deep line.

### Field of application:

Deep markings with high quality requirements on any workpieces  
with pre-defined specified (tolerated) marking depth  
(e.g. safety-related parts in turbine construction, etc.).

### General information:

- Use in machining centers, automatic lathes, etc.  
(no additional installations required)
- Reinforced marking needle activation (required air pressure approx. 2 - 8 bar)
- Standard version with 20 mm Weldon shank
  - various HSK, SK or special tool holders (optionally available)
- Needle holders with different extensions (optionally available)

### Tool specifications:

- Integrated, automatic distance compensation up to approx. 3 mm  
(constant marking depth also on uneven marking surfaces)
- Integrated, precisely adjustable compressed air controller  
(for precise adjustment of the pre-defined marking depth)
  - manometer connection (for measuring the pneumatic pressure setting)
- Reinforced carbide marking needle with very high wear resistance  
(material hardness 92 HRC)
  - easy exchangeability of the marking needle with a few simple steps
  - can be used for practically all free-cutting materials  
(up to approx. 62 HRC hardness of the marking surface)
- Very short marking time
  - oscillation frequency of the marking needle: approx. 300 Hz
  - feed speed more than 5'000 mm/min possible
- Extremely high process security due to simple, in-tool integrated activation of the marking needle oscillation
- For universal use (Weldon shank shaft with a diameter of 20 mm)
  - VDI tool holders for lathes (optionally available)
  - various HSK, SK or special tool holders for machining center (optionally available)

