

## Customized multifunctional tools

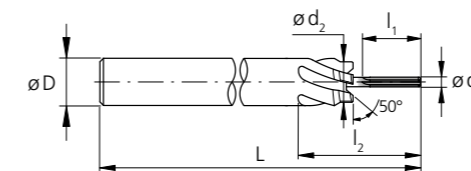


Mikron Tool produces solid carbide multifunctional tools according to your needs and requirements and within the following range:

- Various operations can be combined in one tool for example:
  1. Tool for centering + drilling
  2. Tool for centering + drilling + reaming
  3. Tool for drilling + reaming
  4. Drill + form drill
  5. Tool for milling + deburring

### CHARACTERISTICS

- Diameter min: 1.0 mm
- Diameter max: 32.0 mm, bigger following specific requests
- Maximum tool length: 330 mm
- Tolerance of tool diameters max.:  $\pm 0.5 \mu\text{m}$
- Concentricity between shaft and cutting diameters.:  $2 \mu\text{m}$
- Number of cutting edges: 2 - 8
- Cutting direction: right-hand cutting or left-hand cutting
- Tool material: tungsten carbide, grade selection depending on application



### COATINGS

Various, choice according to application

### COOLING

- Tools with internal helix shaped cooling channels up to the tip of the tool
- Tools with straight internal cooling channels in the shaft
- Tools to be used with external coolant supply

### TYPE OF SHAFT

- Cylindrical as per DIN 6535 HA
- Cylindrical as per DIN 6535 HE (Whistle Notch)
- Cylindrical as per DIN 6535 HB (Weldon)
- Others upon request

### MATERIAL TO BE MACHINED

Tool for steel, corrosion-resistant steels, i.e. stainless steels, pure titanium / titanium alloys, super alloys, i.e. heat-resistant alloys such as Inconel or Hastelloy, CrCo alloys, hardened steel up to 55HRC, aluminum / aluminum alloys, brass, copper, cast materials, etc.

### TREATMENTS

Cutting edge preparation, polishing of flutes