

EXCLUSIVE LINE®

Made by Guhring

Solid carbide micro-precision drills Technical data and advantages

Optimal tool design down to the smallest detail

The production of the smallest holes requires highest accuracy. Solid carbide micro-precision drills of Guhring's ExclusiveLine are designed to optimally satisfy these requirements.

They enable high-performance machining in the majority of materials. The 4 facet point grind with honed cutting edges offer high cutting rates and optimal chip breaking. The special flute profile provides problem free swarf evacuation from the hole.

Additional specifications are the reinforced shank for improved tool clamping and the SuperA-coating, which is especially designed for demanding applications like the machining of hardened steels or HSC.

Micro-precision drills with internal cooling are available with spiral coolant ducts thanks to the company's own carbide technology.

Small but mighty - with and without internal cooling

Solid carbide micro-precision drills without internal cooling for drilling depths up to 4xD and 7xD are available in the diameter range from 0.8 to 3.0 mm.

Holes up to 8xD and 15xD are the domain of solid carbide micro-precision drills with internal cooling. Thanks to the optimised tool geometry, pecking is not required for holes up to 15xD with Guhring's solid carbide micro-precision drills.

The tool design makes the solid carbide micro-precision drill up to 4xD without internal cooling optimally suitable as a pilot drill for the 15xD micro-precision drill with internal cooling.



NEW
now with IC for 8xD
and 15xD

Machining examples of solid carbide micro-precision drills 8xD and 15xD with IC

Guhring no.	6408	6408	6412	6412
Diameter	1.4 mm	2.5 mm	2.5 mm	2.1 mm
Coating	SuperA	SuperA	SuperA	SuperA
Material group	cast iron	alloyed case hardened steel	alloyed heat-treatable steel	stainless steel
Material description	GG25	16MnCr5	42CrMo4	X6CrNiTi18 10
Drill. depth [mm]	8xD	8xD	15xD	15xD
Hole type	blind hole	blind hole	blind hole	blind hole
Cooling	IC 80 bar	IC 80 bar	IC 80 bar	IC 80 bar
Coolant	soluble oil	soluble oil	soluble oil	soluble oil
Machine type	machining centre	machining centre	machining centre	machining centre
v_c [mm/min]	80	120	100	60
f [mm/rev.]	0.1	0.14	0.1	0.03
Tool life [m]	150	110	60	60