

**Product group:** twist drill  
**Workpiece:** others  
**Material group:** H 1.1 - High strength steels, hardened steels, hard castings 44-50 HRC  
**Material:** 1.6528

**Application conditions**

**before**

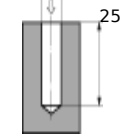
**Machine type** CNC machine  
 - Machining plane vertical  
 - Internal cooling [bar] emulsion  
**Tool adaptation** shrink-fit chuck  
 - internal coolant supply E - emulsion  
**Coolant-lubricant** E - emulsion  
**Tool** SU-Serie  
 - Article number 1534SU03C-0390  
 - Manufacturer ZCC  
 - cutting material HM  
 - coating 3042  
**Cutting speed [m/min]** 56  
 - feed f [mm/rev] 0,05  
**tool life (no. of drilled holes)** 815  
**tool path [m]** 20,38  
**Problem / Advantage** • low tool life

Czech Republic / Lukas Novak

**drilled hole diameter:**

Ø3,9

**drilled hole depth [mm]:**



**after**

CNC machine  
 vertical  
 emulsion  
 shrink-fit chuck  
 E - emulsion  
 E - emulsion  
**BASIC-DRILL-5xD-IK**  
**TA211344.0390**  
**EMUGE**  
 HM  
**TIALN-T63**  
**50**  
**0,1**  
 1.156  
**28,90**  
 • increased tool life

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