

# Drilling example SKH51 (62HRC)

Tool : C-UMD  $\phi 1.0 \times 10$   
Work material : SKD51 (62HRC)  
Hole depth : 5 mm  
Coolant : Water soluble

## Drilling condition

Spindle Speed (min <sup>-1</sup> )	Feed Rate (mm/min)	Peck Amount (mm/time)	Chip Load (mm/rev)	No. of Hole	Cycle Time (min)
1,600	5	0.05	0.00313	10	48.5

\*50% of spindle speed and 25% of feed rate from catalog condition of pre-hardened steels / hardened steels.

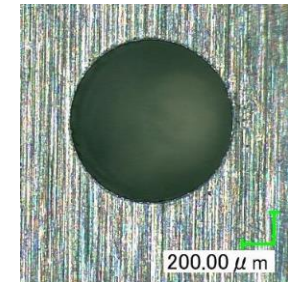
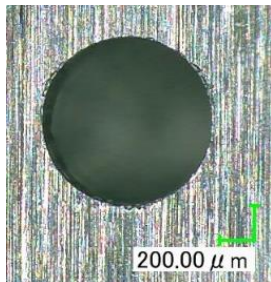
## Result

Tool after 10 holes



1<sup>st</sup> hole

10<sup>th</sup> hole



**Since the tool had large wear,  
it is impossible to continue.  
Tool life of 10 holes is reasonable.**