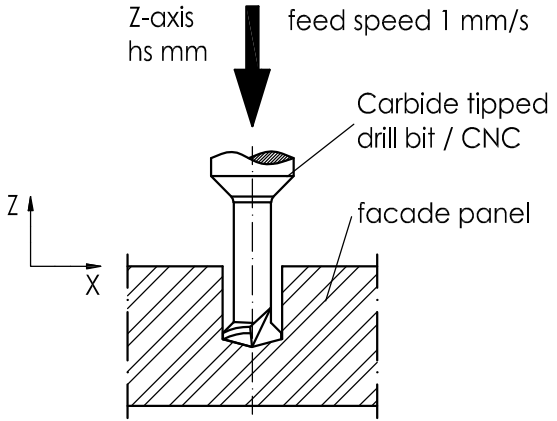
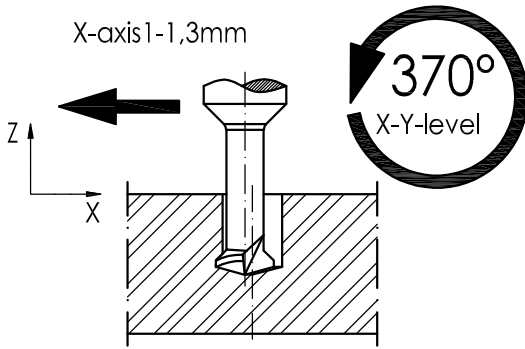

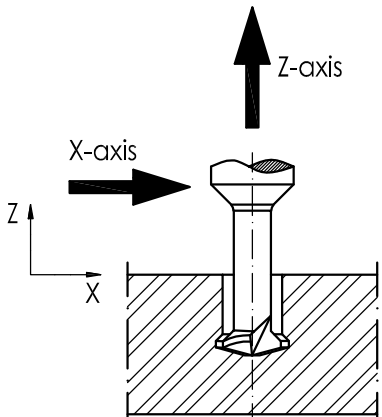
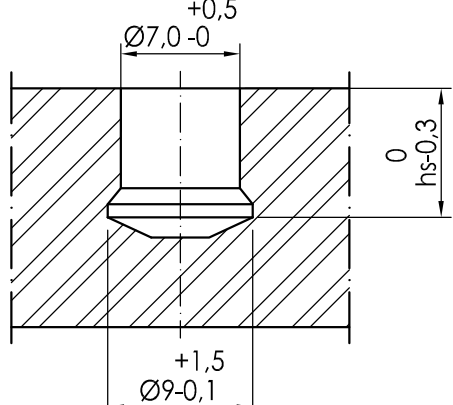


1	 <p>Z-axis hs mm</p> <p>feed speed 1 mm/s</p> <p>Carbide tipped drill bit / CNC</p> <p>facade panel</p>	<p>RPM: Depends on panel material. Startspeed 1.400 r/min; max. 4.200 r/min</p> <p>Drill vertical into panel. Feed speed standard 1 mm/s. Drilling depth corresponds to setting depth. Example: Setting depth <math>h_s = 10</math> corresponds to drilling depth 10mm, measured from panel surface.</p> <p>It is be advantageous for the borehole result, when the borehole cuts are regularly blow out with compressed air during the drilling process.</p>
2	 <p>X-axis 1-1,3mm</p> <p>370° X-Y-level</p>	<p>Move drill bit approx. 1,1mm (max. 1,3mm) sideways. Make a complete circle from this position around the axis of the drill hole without changing the drilling depth.</p> <p>Circle should done 370° versus 360°, to avoid an edge in the drilled hole.</p> <p><u>Note:</u> The final setting depth comes from sideways movement of the drill bit. The more the drill bit moves sideways, the lesser the setting depth will be. Due to this, test the setting depth only with KEIL measuring device and adjust the drilling process after testing.</p> <p><u>Alternative undercut process:</u> Run a spiral borehole center until the undercut diameter is reached.</p> 
3	 <p>Z-axis</p> <p>X-axis</p>	<p>After finishing the circle movement, bring the drill bit back to center of drill hole.</p> <p>Drill bit can now move out of undercut hole.</p> <p>If necessary clean up drill hole, e.g. with compressed air.</p>
4	 <p>+0,5</p> <p><math>\varnothing 7,0 -0</math></p> <p>0</p> <p><math>h_s - 0,3</math></p> <p>+1,5</p> <p><math>\varnothing 9 - 0,1</math></p>	<p>Geometry of the drill hole for KEIL undercut anchor KH 7/9 (hex-head)</p> <p><u>Attention:</u> The setting depth is defined by the slopes, not the bottom of the hole. Due to this, it is only possible to test the setting depth by using KEIL measuring device!</p> <p>Pay attention to the right setting depth <math>h_s</math> of the measuring device.</p> <p>The carbide tipped facade drill bit CNC wears out by the increased number of drill holes, resulting in the undercut hole having to be regularly checked and the drilling process having to be fine tuned accordingly.</p>

## Instructions HM CNC processing

### KEIL Undercut Anchor KH

<Anleitung HM CNC Bearbeitung E 20032018>  
Drawing scale not true to real scale

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