



PRECISION TOOLS

ONEOPERATION

SNAP

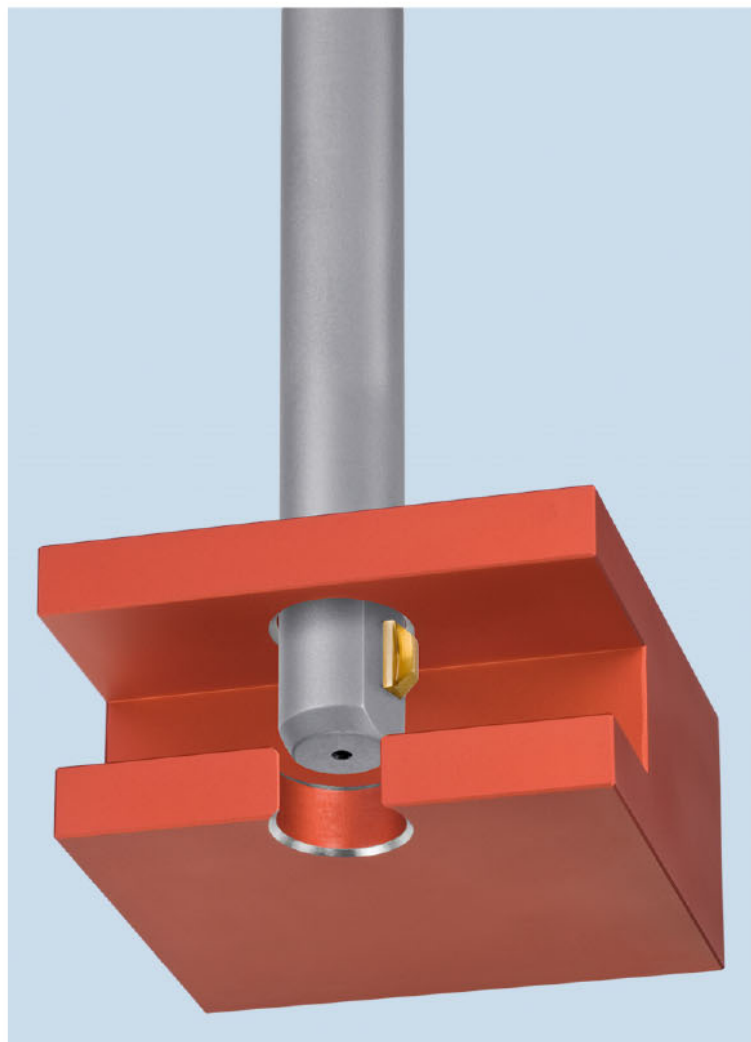
Instruction Book

For all purpose deburring and chamfering of through holes, front and back, in a single pass.

Table of Contents

Tool Description	pg.2
Changing Blades	pg. 3
Using the tool	pg. 4
Programming	pg. 5
Troubleshooting	pg. 6

All Heule tool systems are protected by international patents.



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SNAP-IB 2012

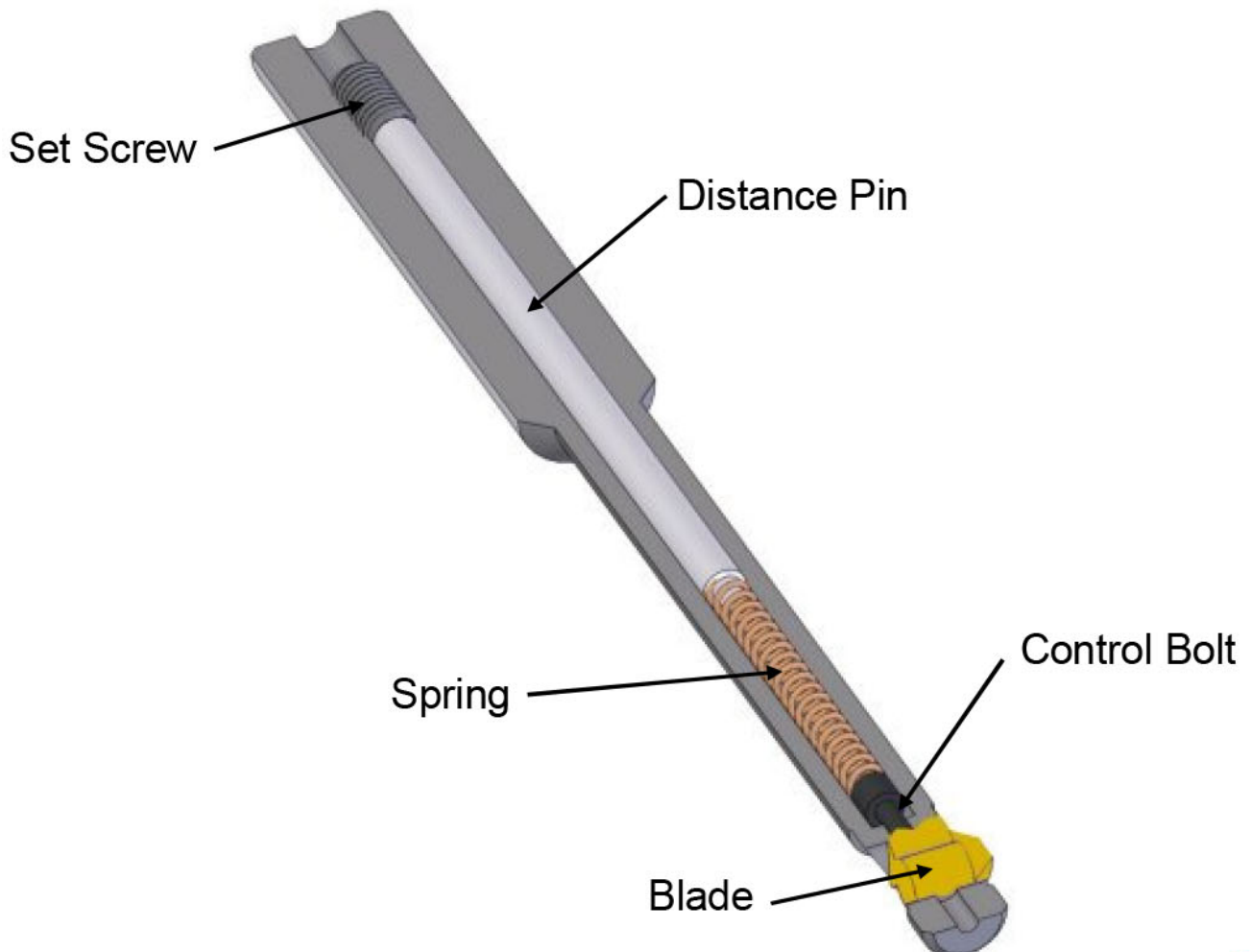
Tool Description

The HEULE SNAP deburring tool is the answer for today's manufacturers need for simpler and more flexible solutions without sacrificing quality or tool life.

SNAP is a very simple tool for deburring and/or chamfering through holes on the top and bottom without reversing the spindle, dwelling, or indexing the part.

The SNAP tool offers a simple to use high quality deburring tool with Carbide inserts coated in TiN, TiCN, or TiAlN to meet today's manufacturing needs.

Crosscut of SNAP Components

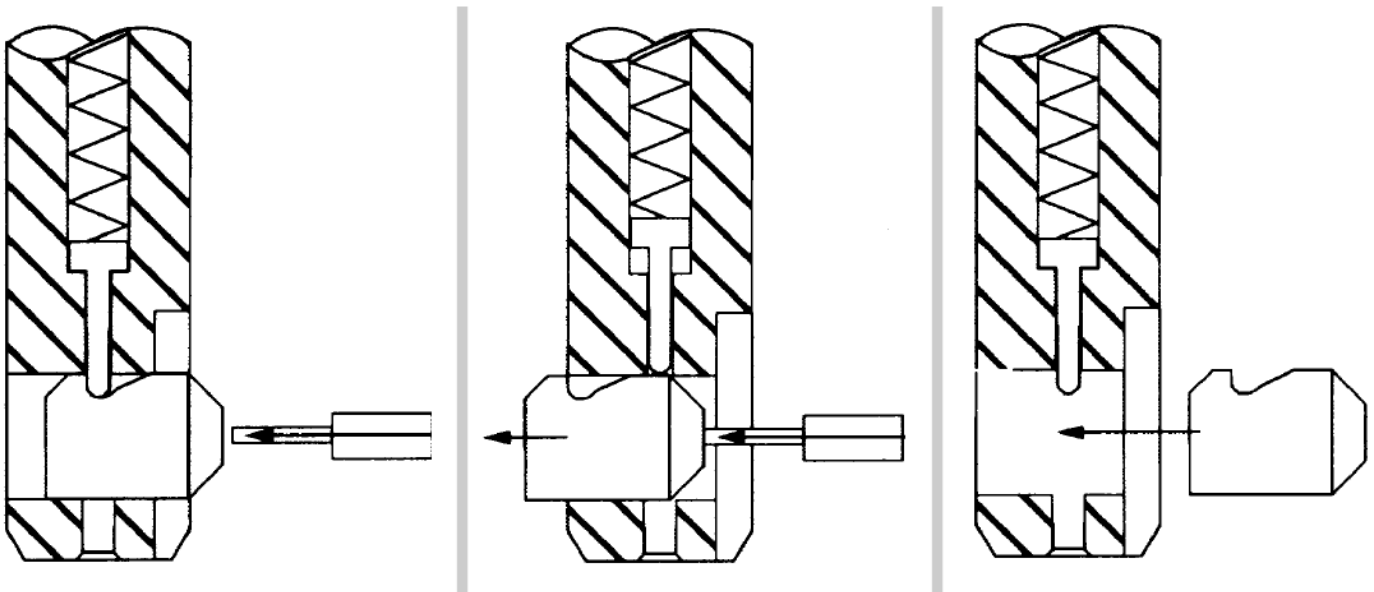


Changing Blades

The blade change is quick and easy.

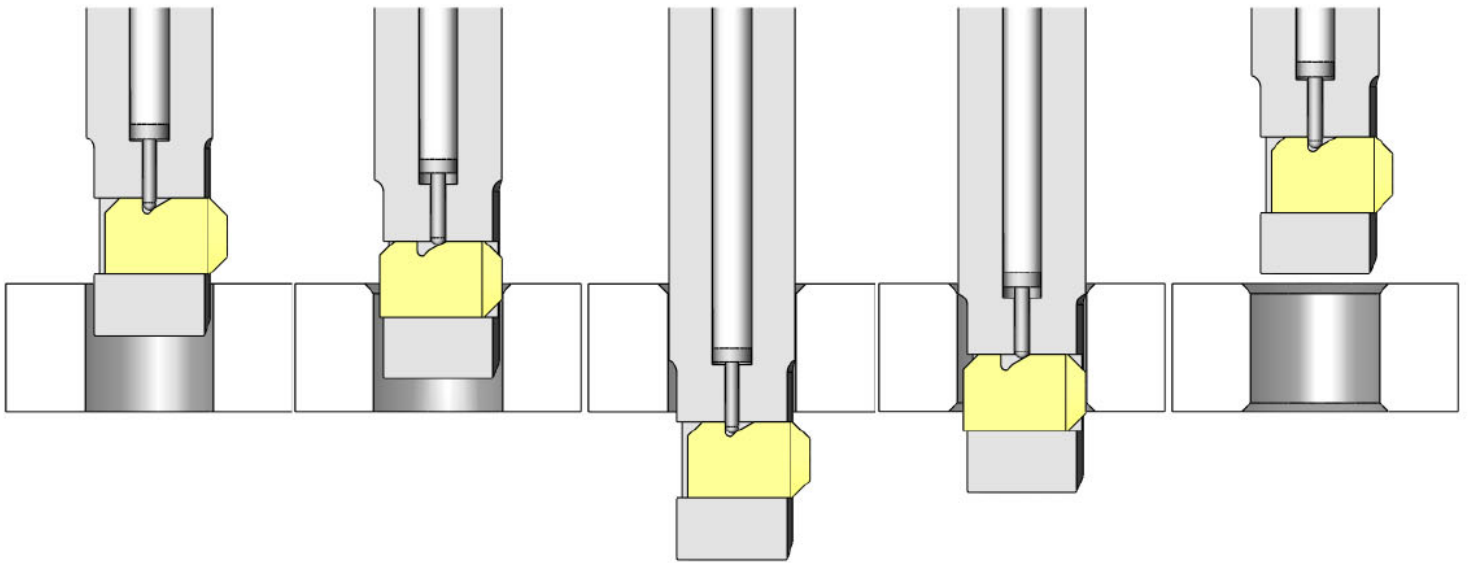
There are no tools required and it can be done with the tool in the spindle.

- Remove the blade by simply pushing it past center and out the back of the tool.
- Install the new blade by pushing it into the window until it 'snaps.'
- The tool is ready to run.



Please note: Blade can be installed from either side of the tool.

How do I use this tool?



As the rotating tool is fed into the hole, the front cutting edge deburrs the top of the hole by cutting a 45° chamfer. As the tool feeds into the part the blade is forced into the body and slides in the blade window.

When the blade is in the hole, only the ground gliding surface touches the surface protecting it from damage while the tool is fed through the part. There is no need to stop or reverse the spindle.

When the blade reaches the back of the part the coiled spring acts with the control bolt to push it back out into cutting position. The back edge is deburred and chamfered as the tool is withdrawn. When the blade is again in the hole, the tool can be rapid fed out and on to the next hole.

Programming Information

Material	IPPR	SFM
Aluminum	0.006-0.016	400-600
Brass	0.006-0.014	210-400
Low Carbon Steels	0.004-0.012	200-280
Med Carbon Steels	0.004-0.012	175-225
Free Machining Alloys	0.004-0.014	200-280
Stainless Steel	0.002-0.007	150-225
Gray Cast Iron	0.004-0.012	150-250
Nodular Cast Iron	0.003-0.012	150-220
Short Clipping Iron	0.003-0.012	100-250
Titanium	0.001-0.003	40-80

IMPORTANT

Tool holder must be modified with blade locking mechanism for spindle speeds above 6,000 RPM.

Troubleshooting

Problem	Probable Cause	Solution
Chamfer is too small	<ul style="list-style-type: none"> • Selected blade is too small • Blade force is too small • Feed rate is too high 	<ul style="list-style-type: none"> • Choose larger blade (if possible) • Increase blade force • Reduce feed rate
No chamfer at all	<ul style="list-style-type: none"> • Tool is incorrectly programmed • Blade force is too small • Blade is dull • Too heavy of a burr 	<ul style="list-style-type: none"> • Check programming depths • Increase blade force • Replace the blade • Replace the drill tool
Chamfer is too large	<ul style="list-style-type: none"> • Selected blade is too large • Feed rate too small • Blade force too high 	<ul style="list-style-type: none"> • Choose a smaller blade • Increase the feed rate • Reduce the blade force
Chamfer differs from front to back	<ul style="list-style-type: none"> • Feed varies between forward and reverse feed • Variation of burr between front and back 	<ul style="list-style-type: none"> • Select a constant feed rate • Reduce the feed rate when too small or increase feed rate when too large • Increase blade tension
Poor surface finish	<ul style="list-style-type: none"> • Tool or part not held properly • Tool is unstable • Speed rate is too high 	<ul style="list-style-type: none"> • Ensure tool and part are secured • Reduce Speed • Check workpiece and holder
Inconsistent Chamfer	<ul style="list-style-type: none"> • Varying feed rate • Incorrect programming position • Tool is unstable 	<ul style="list-style-type: none"> • Ensure constant feed rate • Check workpiece and holder • Check programming • Reduce Speed
Poor blade life (chipping) (excessive wear)	<ul style="list-style-type: none"> • Workpiece or tool not secured • Insufficient machine stability • Poor cutting conditions 	<ul style="list-style-type: none"> • Ensure tool or part is secured • Recondition or rectify machine faults • Check speed and feed and coolant supply



WARNING: Grinding may produce hazardous dust. To avoid adverse effects, use adequate ventilation and read MSDS. Cutting tools may break during use. To avoid injury, use proper safety precautions and protective equipment.

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