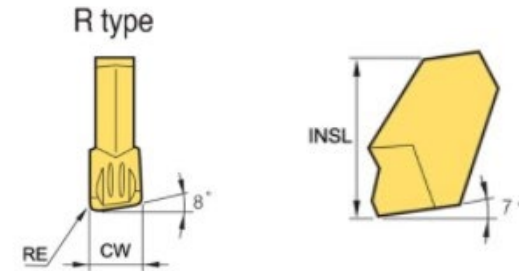


# Technical Details



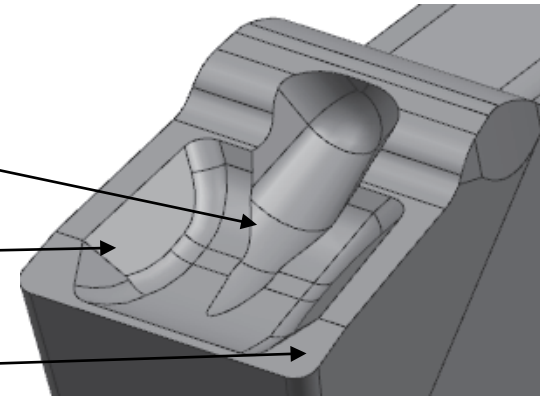
## Insert Features

- 8° cut off angle to minimize burrs
- 7° clearance angle to reduce cutting forces
- 2 way V-Rail on top and bottom for increased clamping force.



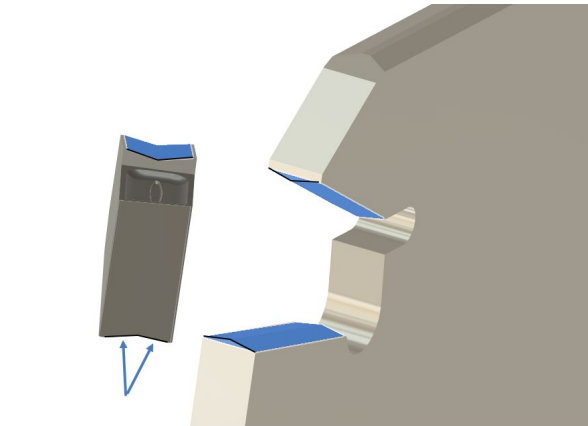
## Chip Breaker Features

- Optimal chip breaker bump to help roll then break off stubborn materials
- Side bumps to reduce chip width to effectively remove chips from narrow grooves.
- Negative land on cutting tip for high stability in interrupted cutting



## Blade Features

- 2 way V-Rail on top and bottom for increased clamping force.
- Minimized vibration during the machining increases stability.
- Stable high speed and high feed machining is available.



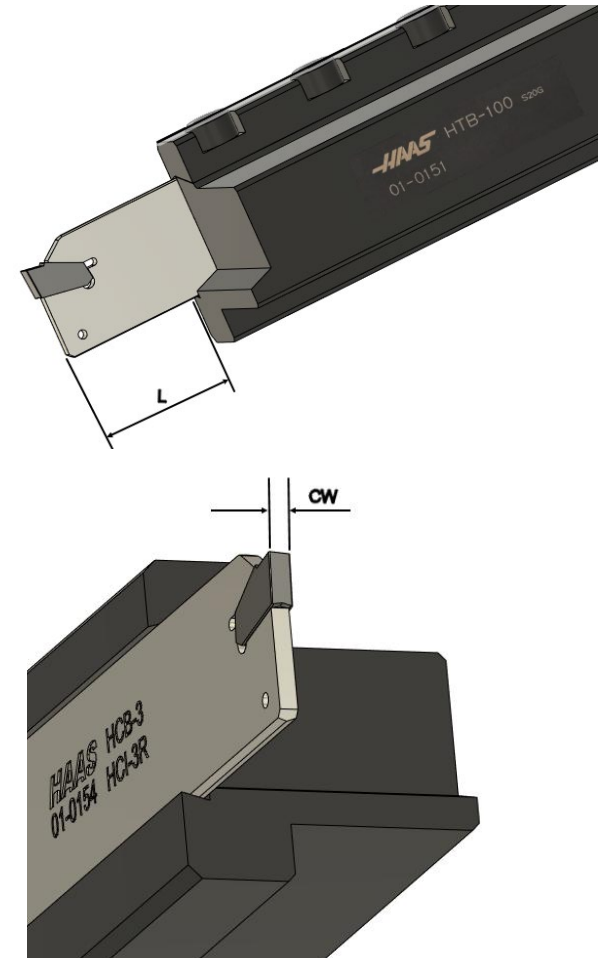
## Part off recommendations Blade Overhang

It is generally recommended to adjust the blade length [L] to the shortest possible length necessary to cut off your material, this will provide maximum stability.

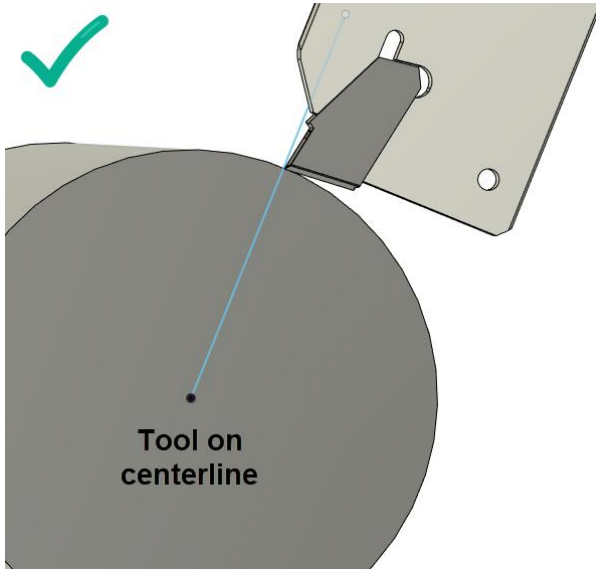
Recommended maximum length [L] for each blade and cutting width [CW] is shown below.

Haas Part Number	Blade Desc	Cutting Width [CW]	Maximum Blade Hangout [L]max
01-0153	HCB-2	0.080 in \ 2.00 mm	1.024 in \ 26.00 mm
01-0154	HCB-3	0.120 in \ 3.00 mm	2.362 in \ 60.00 mm
01-0155	HCB-4	0.160 in \ 4.00 mm	2.362 in \ 60.00 mm

\*If clearance is needed and overhanging beyond the recommendations is unavoidable, Be aware that this will increase the chances of the blade bending so adjust the recommended speeds and feeds accordingly to reduce the forces

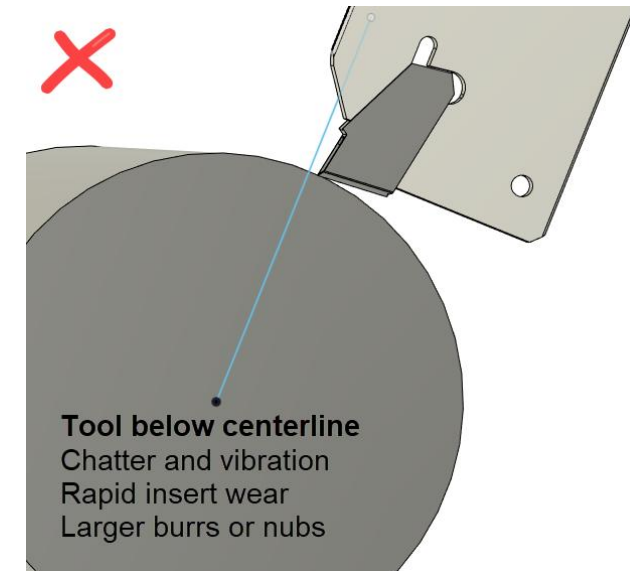
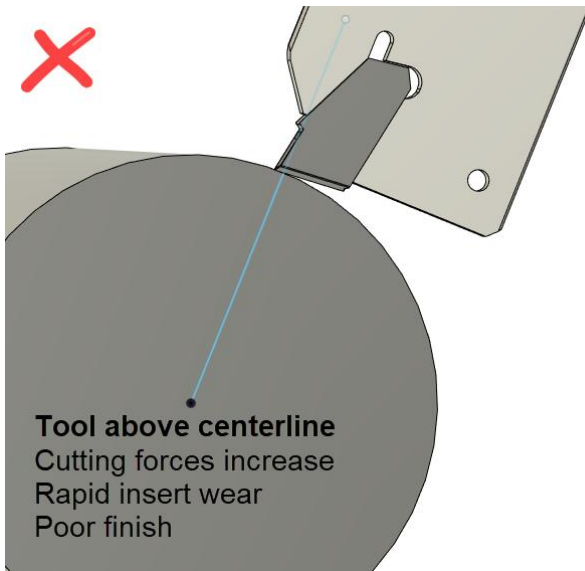


# Technical Details

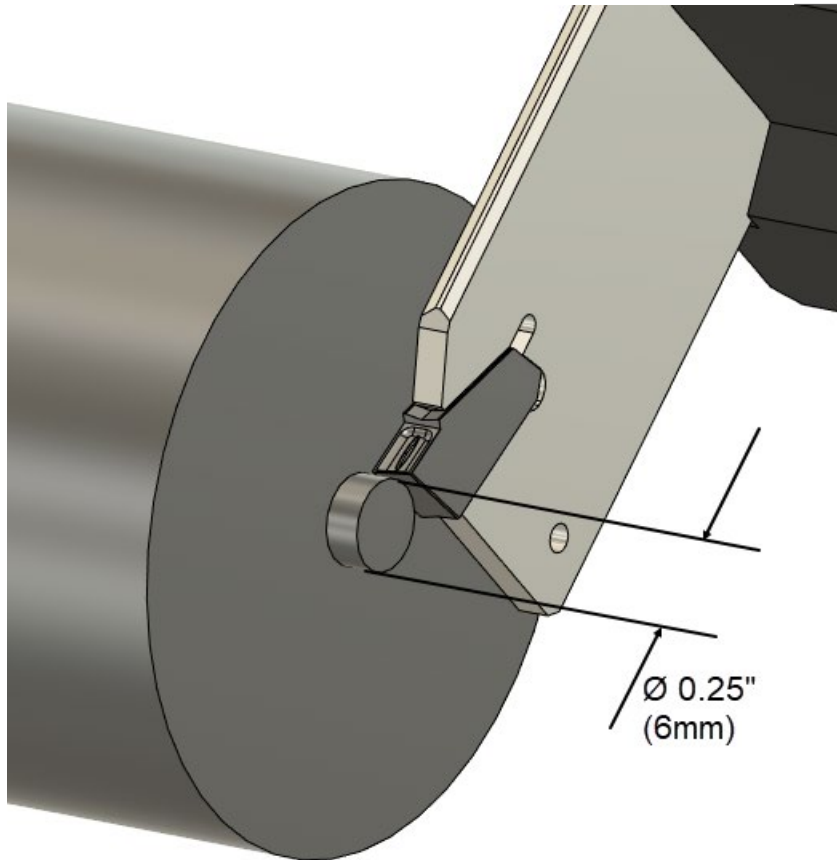


## Part off recommendations. Tool Centerline

For the tools and inserts to work at their optimum capacity, especially when parting off a solid to the center, It is essential that the tool is on centerline within .005". If deviation exceeds these recommendations, tool life may decrease and the chances of insert failure will increase.



## Part off recommendations. Machining to center



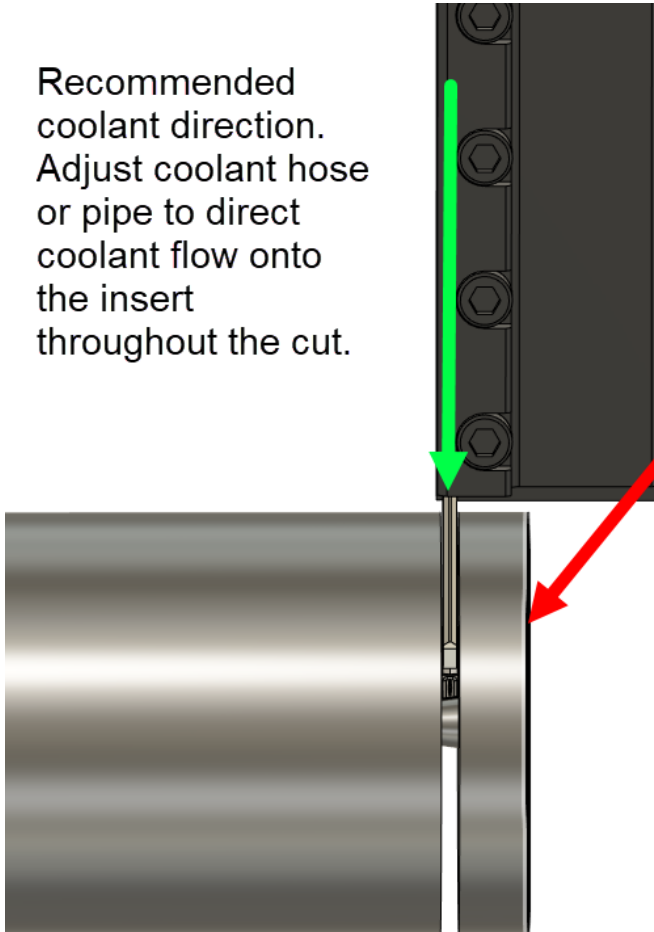
It is generally recommended to reduce the feed by 50-75% after the maximum spindle speed is reached or around 0.250" (6mm) from center.

Losing SFM and maintaining the same feed rate after the spindle speed limit may result in loss of chip control. In addition cutting forces and insert wear will increase and the insert may fail.

## Part off recommendations. Coolant flow and direction

Recommended coolant direction. Adjust coolant hose or pipe to direct coolant flow onto the insert throughout the cut.

Coolant direction from standard toolholder block



Always use coolant when parting off.

**High pressure coolant is preferred if available.**

Lack of coolant flow can lead to undesirable finishes and reduced tool life.

Coolant not only keeps the insert cool and lubricated while cutting, it is critical in chip evacuation and chip control.

Coolant direction shown here is also critical in maintaining insert life. Especially as the insert nears the center. Directing coolant to the insert from a regular turret or turret block may be obstructed by the material being cut.

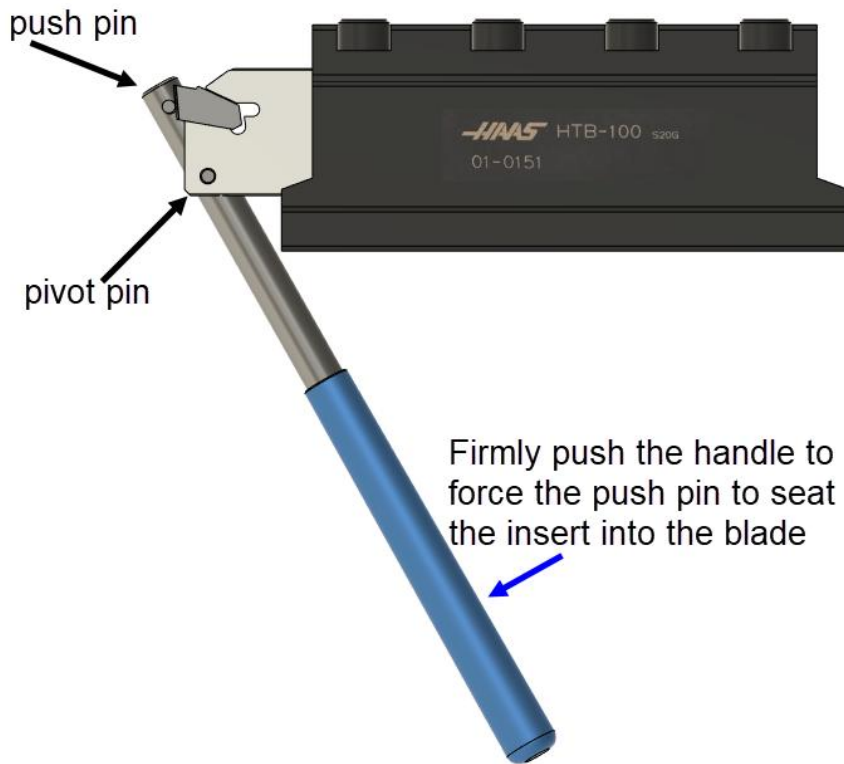
Adjusting the direction as shown is recommended to help maintain chip control and insert life

# Technical Details

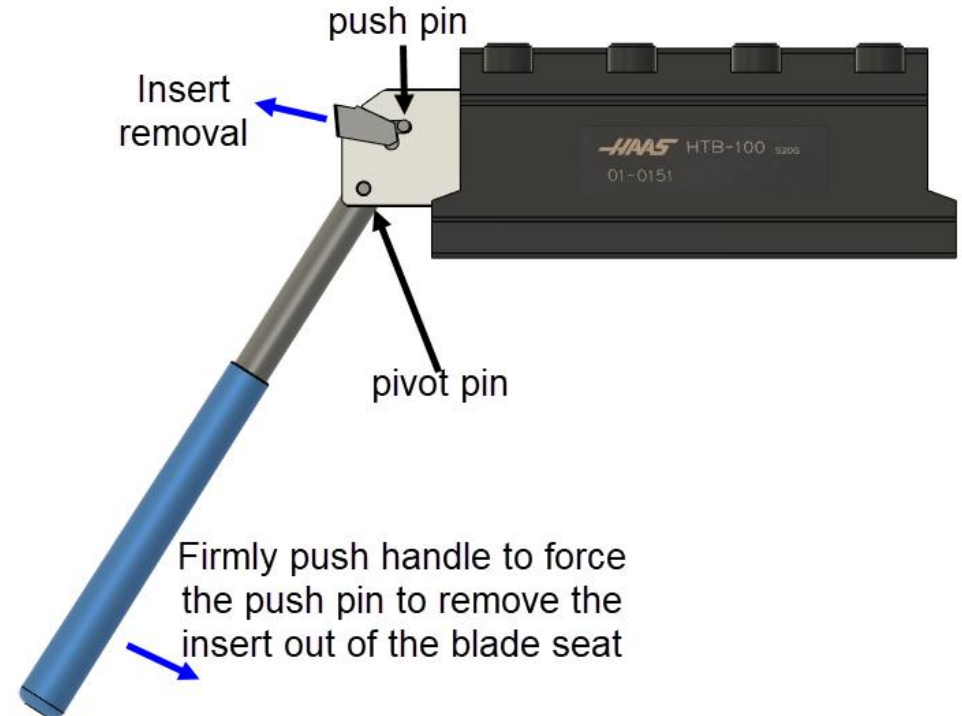


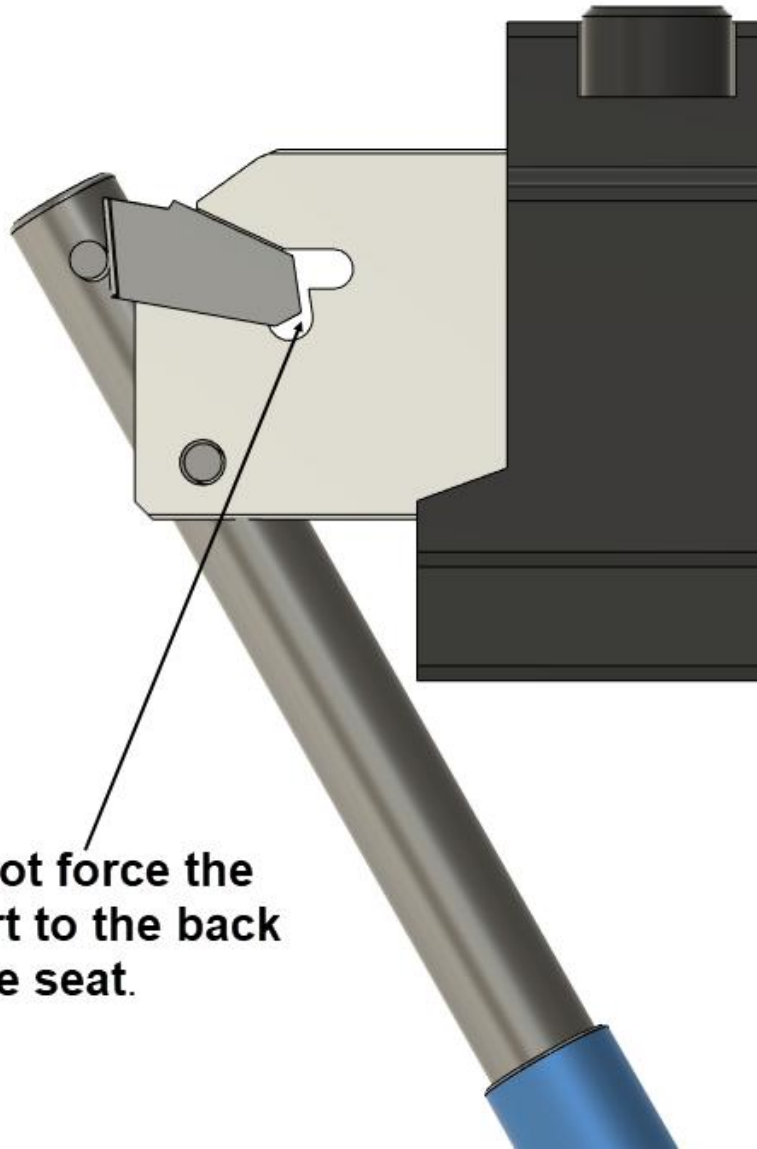
## Part off recommendations. Haas Cut-Off Wrench

Insert Loading



Insert Removal





## Part off recommendations. Haas Cut-Off Wrench

### Insert Loading

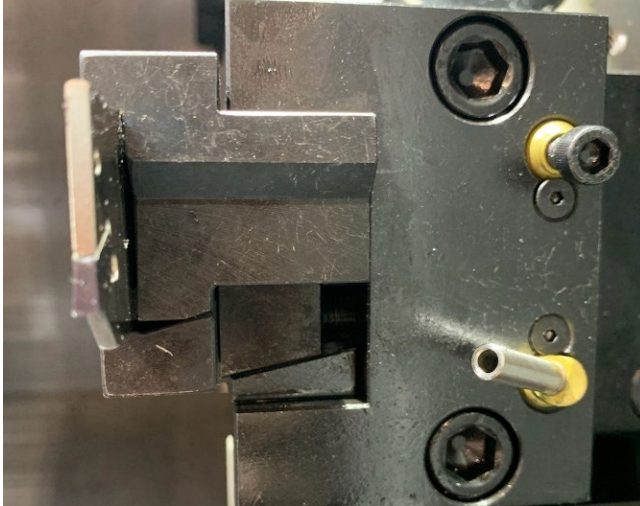
A small gap between the back of the insert and the back of the blade seat is acceptable. Do not use 2 hands, body weight or extension sleeves on the wrench handle to force the Insert to rest on the back of the blade seat. When forces are applied to the insert while cutting, the 'spring' in the blade seat may allow the insert to fully rest on the back of the blade seat. Once the insert is removed the seat will snap back to its original state.

\*Excessive force may break the push pin or chip the insert

# Technical Details



## Part off recommendations. Mounting the Cut off Tool



It is not possible to mount a fully assembled cut off tool into the turret. There is no access to the clamp wedge bolts to tighten them down

To clamp correctly, fully remove the 4 bolts and the obstacle top clamp from the tool block.



You now have access to the wedge clamp bolts. Clamp the tool block into the turret or holder.

Finally add the top clamp, position the blade and tighten the 4 bolts

