## **Technical Details**



### Haas ID/OD Keyway Broach Tools





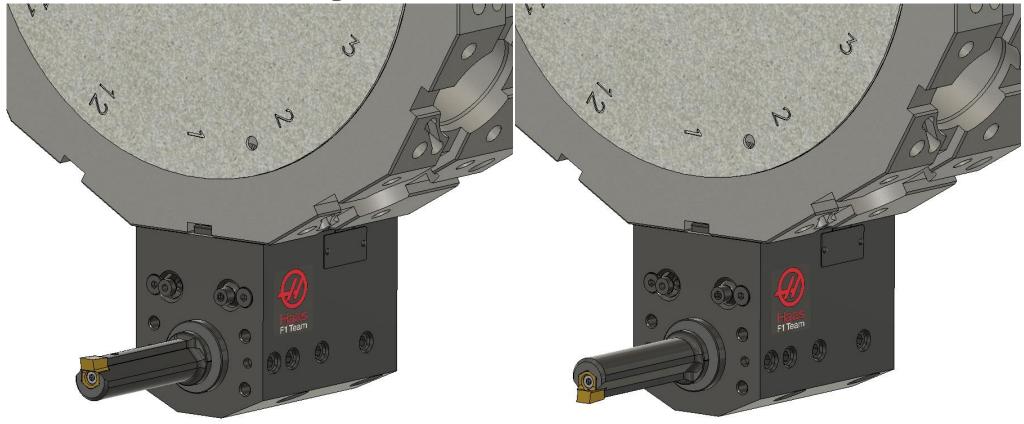
- Haas OD/ID Broach Tools are made with quenched and tempered tool steel.
- The section that houses the insert is hardened to 58/60 HRC, making it very resistant to compression.
- All OD/ID Broach Tools feature through tool coolant, in addition to lubricating and cooling the insert, are used to extract the chips, produced through broaching or slotting, out of the blind hole.
- All OD/ID broach tools feature 25mm shank diameter. And are available in standard and long shanks (identified by the suffix "L" in the code).
- Select holder size based on minimum machining diameter and Keyway length.
- No other tooling required for Y axis Haas Lathes. Load the tool, Insert and program.
- Use the eccentric bushing for easy alignment on Haas Lathes without Y axis capability.
- Use the alignment pin for easy alignment on Haas Mills.
- No Programming required. Use the provided Haas VPS templates for both lathes and mills to generate keyways, slots, splines, squares and hex features on your components using the unique G156 canned cycle.
- Flats on both sides of the shank diameter allow mounting in either direction to simply machine OD or ID features.



## **Technical Details**



#### **ID or OD Broaching**



- Flats on both sides of the shank diameter allow mounting in either direction to simply machine ID or OD features.
- · VPS templates to easily generate programs for ID or OD broaching are available on lathes and mills

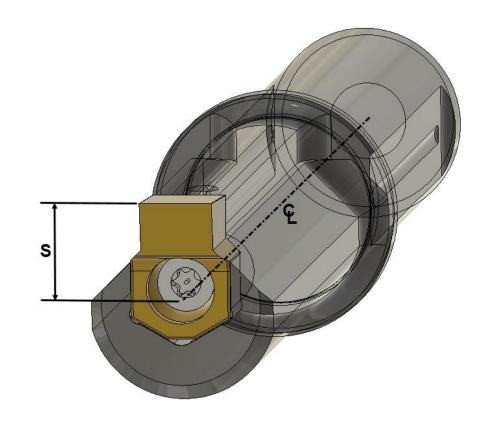


# **Technical Details**



### [S] Dimensions by Tool Description

Haas Tool Code	[S] Dimension (mm)	[S] Dimension (Inch)
HUTR - 02	3.50 mm	0.138"
HUTR - 03	4.50 mm	0.177"
HUTR - 04	5.50 mm	0.216"
HUTR - 05	6.50 mm	0.256"
HUTR - 06	9.00 mm	0.354"
HUTR - 08	11.00 mm	0.433"
HUTR - 10	14.00 mm	0.551"
HUTR - 12	16.50 mm	0.65"
HUTR - 14/16	19.00 mm	0.748"



- S dimension is taken from tool holder centerline to the tip of the Haas Broach inserts.
- Dimension maybe necessary when utilizing this tool on Haas mills where calibrating the diameter or radius is not possible.
- Required when using the VPS broaching templates for Haas Mills.

