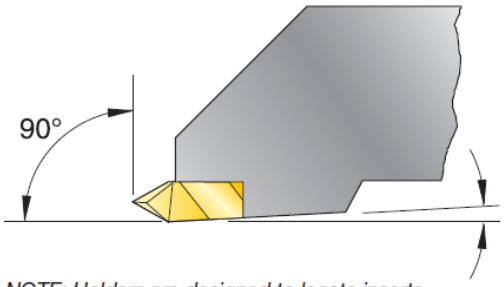
Technical Details



NOTE: Holders are designed to locate inserts inclined to 3° to provide back clearance down open side.

The Simple Solution

With the Haas Notch solution, there is no need to worry about costly setup mistakes. Haas notch thread insert selection is easy, quick, and enables accurate indexing to keep your machine spindle turning.

- Rigid design for increased insert stability during threading applications.
- Good quality threads, improved tool life, and improved surface finishes.
- Locking forces in three directions for superior resistance to tangential force.
- Unique 3° insert relief angle for back clearance.
- Available in partial profile inserts for 60° thread forms.

Technical Details

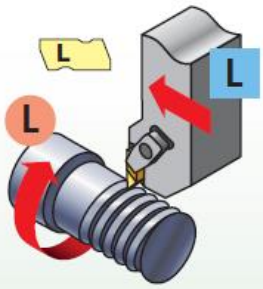
Step 1 • Select Threading Method and Hand of Tooling

Required Information:

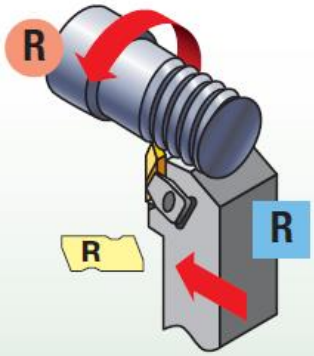
- External/internal operation.
- Spindle rotation/hand of thread.
- Feed direction.

hand of thread | hand of toolholder | hand of insert

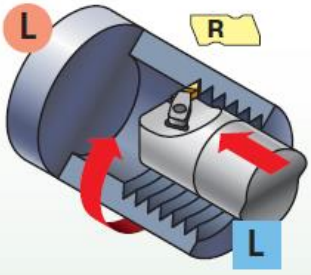
Feed direction toward the chuck • RECOMMENDED



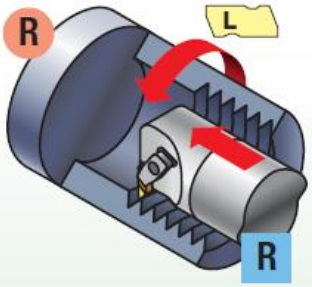
external left-hand thread



external right-hand thread

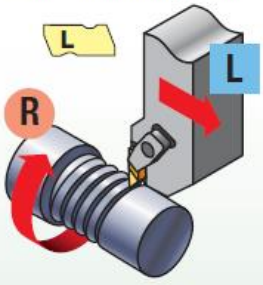


internal left-hand thread

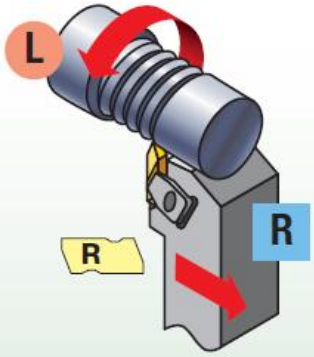


internal right-hand thread

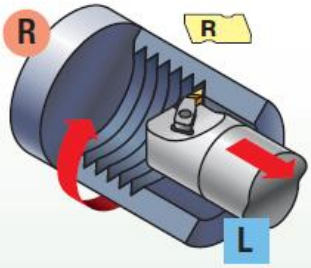
Feed direction away from the chuck



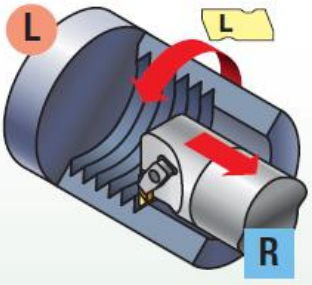
external right-hand thread



external left-hand thread



internal right-hand thread



internal left-hand thread

Technical Details

Step 2: Select Holder

The insert size must match the gage insert size of your toolholder selection:

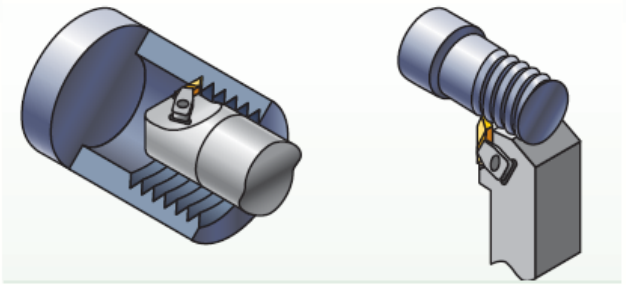
Required Information:

- External/internal operation.
- Minimum bore diameter (for internal operations).
- Hand of tool.
- Insert size (gage insert).

Haas Holder Description	Insert Size
HNSR163D	3
HNSR164D	4

NOTE: Haas Notch toolholders and boring bars are listed with a gage insert to indicate the size and hand required. They are compatible with both grooving and threading inserts of the same size.

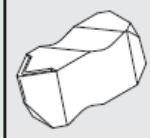
Select the appropriate holder for the insert size and hand:



Technical Details

Step 3 • Choose Insert for Application

- partial profile inserts can cut a variety of thread pitches.
- Note insert size for toolholder selection.



insert size	Haas Description	HU25
2	HNT-2RK	•
3	HNT-3RK	•
4	HNT-4RK	•

Step 4 • Select Speed for HU25 Grade

Recommendations for Grade and Speed Selection — m/min (SFM)

workpiece material	steel	stainless steel	cast iron	non-ferrous metals	high-temp alloys
insert style	chip control 	chip control 	chip control 	chip control 	chip control 
optimum cutting conditions	50–230n (160–750)	50–185 (160–600)	70–210 (230–700)	—	20–120 (65–400)
first choice	40–200 (130–650)	40–135 (130–450)	60–145 (200–475)	50–360 (160–1150)	10–100 (35–330)

Examples:

Chip Control: *NT-K (partial profile only)*

Technical Details

style		thread profile	standard	tolerance class	cresting	application
chip control — K						
NT-K		Partial Profile 60°	–	–	N	General use for 60° thread forms, such as ISO and UN, where non-cresting inserts are desired to cut a variety of pitches.

- All Haas Notch Thread inserts are precision-ground to provide accurate edge location and secure locking of the insert in the toolholder pocket.
- Thread inserts can be used in either toolholders or boring bars.
- All partial profile threading inserts can be used for either external or internal applications.
- Right-hand Thread toolholders use right-hand inserts. Left-hand Thread toolholders use left-hand inserts.
- Right-hand Thread boring bars use left-hand inserts. Left-hand Thread boring bars use right-hand inserts.