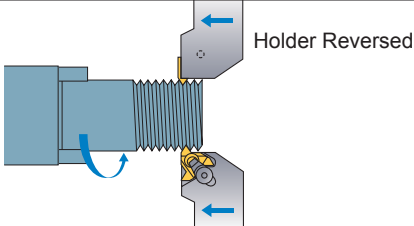
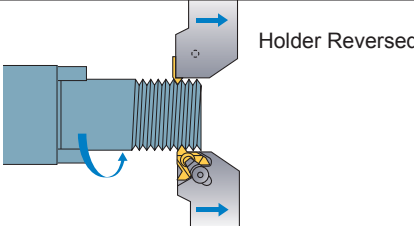
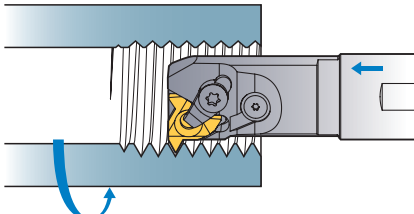
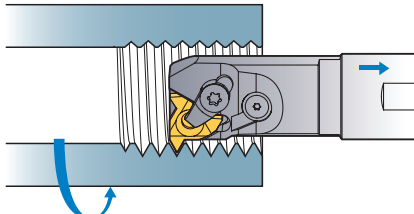
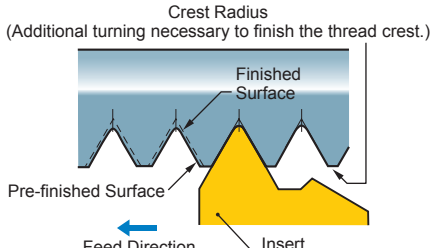
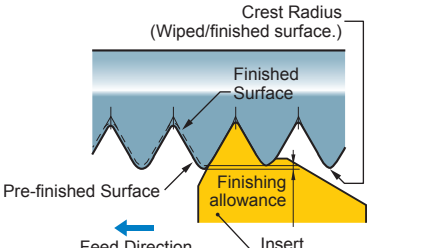
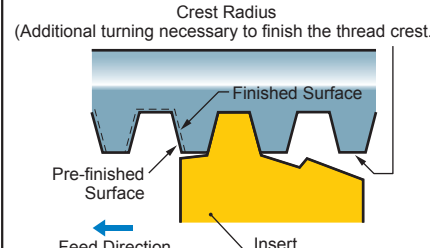


THREADING

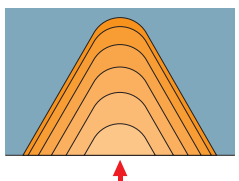
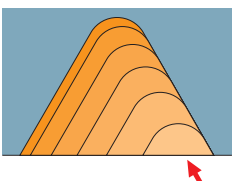
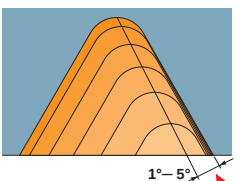
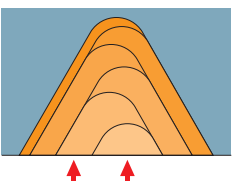
THREADING METHODS

	Right Hand Thread	Left Hand Thread
EXTERNAL	 Holder Reversed	 Holder Reversed
INTERNAL		

INSERT TYPES

Partial Form	Full Form	Semi-Full Form (Trapezoidal threads only)
● The same insert can be used for a range of pitches. ● Shorter tool life because the nose radius of the insert is smaller than that of the full form insert. ● Finishing with another operation is necessary.	● No deburring needed after threading. ● Requires different threading inserts.	● No deburring needed after threading. ● Requires different threading inserts. ● Finishing with another operation is necessary.
Crest Radius (Additional turning necessary to finish the thread crest.)  Pre-finished Surface Finished Surface Feed Direction Insert	Crest Radius (Wiped/finished surface.)  Pre-finished Surface Finished Surface Finishing allowance Feed Direction Insert	Crest Radius (Additional turning necessary to finish the thread crest.)  Pre-finished Surface Finished Surface Feed Direction Insert

INFEEED METHODS

	Radial Infeed	Flank Infeed	Modified Flank Infeed	Incremental Infeed
Features	 Radial Infeed	 Flank Infeed	 Modified Flank Infeed	 Incremental Infeed
Advantages	● Easiest to use. (Standard programme for threading) ● Wide application. (Cutting conditions easy to change.) ● Uniform wear of the right and left sides of the cutting edge.	● Relatively easy to use. (Semi-standard programme for threading.) ● Reduced cutting force. ● Suitable for large pitch threads or materials that peel easily. ● Good chip discharge.	● Preventing flank wear on the right side of the cutting edge. ● Reduced cutting force. ● Suitable for large pitch threads or materials that peel easily. ● Good chip discharge.	● Uniform flank wear of the right and left sides of the cutting edge. ● Reduced cutting force. ● Suitable for large pitch threads or materials that peel easily.
Disadvantages	● Difficult chip control. ● Subject to vibration in the later in stages of cutting. ● Ineffective for large pitch threading. ● Heavy load on the nose radius.	● Large flank wear on the right side of the cutting edge. ● Relatively difficult to change cutting depth. (Re-programming necessary)	● Complex machining programming. ● Difficult to change cutting depth. (Re-programming necessary)	● Complex machining programming. ● Difficult to change cutting depth. (Re-programming necessary) ● Difficult chip control.