

# Choosing the Right Helix

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Within our aluminum product lines, we offer three helix configurations that can handle any aluminum application. Below is a guideline that can be used to help direct you to the correct helix angle for your job.



## 35° Helix

*(Noted throughout our catalog as H35AL)*

Slower helix design ensures:

- The highest overall tool strength within our aluminum tool offering
- Elevated feed rates due to increased tool strength
- Decreased axial forces and cutting aggressiveness
- Less of a chance for tool pull-out
- Much higher corner strength
- An ideal tool for demanding roughing applications



## 40° Helix

*(Noted throughout our catalog as H40ALV)*

Medium helix design ensures:

- Moderate tool strength
- Elevated speeds and feed rates utilizing its variable pitch design
- Moderate shear angle and cutting aggressiveness
- Excellent for both roughing & finishing assignments
- More chip clearance and chip management control
- A good combination of both optimum roughing and finishing characteristics



## 45° Helix

*(Noted throughout our catalog as H45AL)*

Higher helix design ensures:

- Superior surface finish results
- A high shear angle and overall cutting aggressiveness
- Lower tool strength, subject to torsional deflection as load is applied
- Good adaptation to high speed machining with low RDOC's and elevated
- Heightened probability of tool pull-out (depending on holder type being used)
- An ideal tool for the most demanding finishing applications