



Technical Tip #12 – Reducing Chatter in End Milling

Chatter in the form of vibration and noise is a frequent challenge when end milling. It can cause scalloping and uneven finishes.

To reduce chatter, try the following:

1. Ensure that the starting places for speeds and feeds are correct for the workpiece material and the cut.
2. Increase the feed, or chipload per tooth/tool.
3. Make the workpiece as secure and rigid as possible.
4. Reduce excess overhang between the workpiece and spindle.
5. Select an end mill with more flutes.
6. Check the tool run-out.
7. Review the tool geometry to ensure the cutting face, relief, fluting and helix angle are appropriate for the workpiece material.
8. If conventional milling, try climb milling.