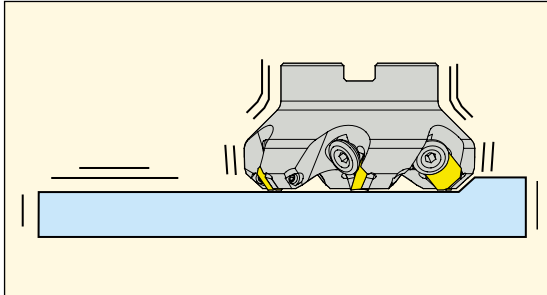


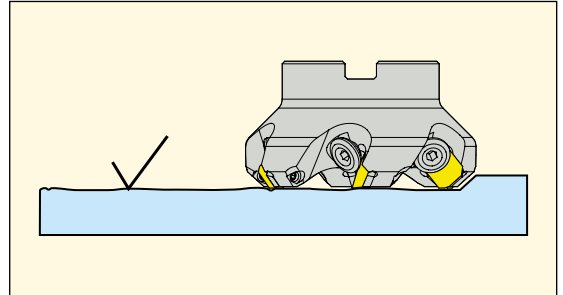
# Milling - Troubleshooting

## Vibrations



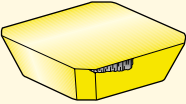
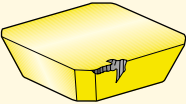
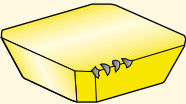
- Improve the stability of cutter and workpiece.
- Change cutter positioning.
- Minimize tool overhang.
- Reduce the cutting speed.
- Increase the feed rate.
- Reduce the depth of cut.

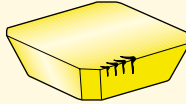

## Poor surface finish



- Improve the stability of cutter and workpiece.
- Minimize tool overhang.
- Reduce the feed rate.
- Increase the cutting speed.
- Use a coolant.
- Use wiper inserts.

## Tool life problems

<p><b>Rapid flank wear</b></p> 	<ul style="list-style-type: none"> <li>• Reduce the cutting speed.</li> <li>• Increase the feed rate.</li> <li>• Climb milling.</li> </ul>
<p><b>Rapid notch wear</b></p> 	<ul style="list-style-type: none"> <li>• Reduce the cutting speed.</li> <li>• Increase the feed rate.</li> <li>• Increase the depth of cut.</li> <li>• Climb milling.</li> <li>• Change cutter positioning.</li> </ul>
<p><b>Chipping</b></p> 	<ul style="list-style-type: none"> <li>• Increase the cutting speed.</li> <li>• Reduce the feed rate.</li> <li>• Conventional milling.</li> <li>• Improve chip evacuation.</li> <li>• Change cutter positioning.</li> <li>• Minimize tool overhang.</li> <li>• Improve stability.</li> </ul>

<p><b>Comb cracks</b></p> 	<ul style="list-style-type: none"> <li>• Reduce the cutting speed.</li> <li>• Reduce the feed rate.</li> <li>• No coolant.</li> <li>• Change cutter positioning.</li> </ul>
<p><b>Built up edge</b></p> 	<ul style="list-style-type: none"> <li>• Increase the cutting speed.</li> <li>• Increase the feed rate.</li> <li>• No coolant.</li> <li>• Climb milling.</li> <li>• Change cutter positioning.</li> </ul>