

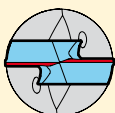
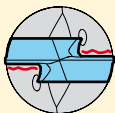




## 12 tips to help diagnose problems

Problem	Cause	Remedy
<b>1 Cutting edge build up</b> 	<ul style="list-style-type: none"> <li>■ low cutting speed</li> <li>■ excessive honing of cutting lip</li> <li>■ bright finish cutting lip</li> </ul>	<ul style="list-style-type: none"> <li>■ increase cutting speed</li> <li>■ reduce cutting lip honing</li> <li>■ have tool coated</li> </ul>
<b>2 Crumbling of outer corners</b> 	<ul style="list-style-type: none"> <li>■ non rigid conditions, insufficient workpiece clamping</li> <li>■ deviation from concentricity too large</li> <li>■ interrupted cut</li> </ul>	<ul style="list-style-type: none"> <li>■ rigid clamping of workpiece</li> <li>■ check and correct concentricity if possible</li> <li>■ reduce feed</li> </ul>
<b>3 Heavy wear at flank</b> 	<ul style="list-style-type: none"> <li>■ cutting speed too high</li> <li>■ feed too low</li> <li>■ clearance angle too small</li> </ul>	<ul style="list-style-type: none"> <li>■ reduce cutting speed</li> <li>■ increase feed</li> <li>■ increase clearance angle</li> </ul>
<b>4 Crumbling on cutting lips</b> 	<ul style="list-style-type: none"> <li>■ non rigid conditions, insufficient workpiece clamping</li> <li>■ interrupted cut</li> <li>■ max. wear values exceeded</li> <li>■ incorrect tool type</li> </ul>	<ul style="list-style-type: none"> <li>■ rigid clamping of workpiece</li> <li>■ reduce feed</li> <li>■ reduce tool change intervals</li> <li>■ apply suitable tool</li> </ul>
<b>5 Land wear</b> 	<ul style="list-style-type: none"> <li>■ non rigid conditions, insufficient workpiece clamping</li> <li>■ deviation from concentricity too large</li> <li>■ back taper too small</li> <li>■ incorrect coolant (oil), coolant too weak</li> </ul>	<ul style="list-style-type: none"> <li>■ rigid clamping of workpiece</li> <li>■ check and correct concentricity if possible</li> <li>■ increase back taper</li> <li>■ increase strength of coolant or use neat oil</li> </ul>
<b>6 Scoring on tool body</b> 	<ul style="list-style-type: none"> <li>■ non rigid conditions, insufficient workpiece clamping</li> <li>■ deviation from concentricity too large</li> <li>■ interrupted cut</li> <li>■ abrasive workpiece material</li> </ul>	<ul style="list-style-type: none"> <li>■ rigid clamping of workpiece</li> <li>■ check and correct concentricity if possible</li> <li>■ reduce feed</li> <li>■ increase strength of coolant or use neat oil</li> </ul>