**Troubleshooting**

**Cutting edge build-up**

**Cause:**
- Low cutting speed
- Excessive honing of cutting lip
- Bright finish cutting lip

**Remedy:**
- Increase cutting speed
- Reduce cutting lip honing
- Have tool coated

**Crumbling of outer corners**

**Cause:**
- Non-rigid conditions, insufficient workpiece clamping
- Excessive deviation from concentricity
- Interrupted cut

**Remedy:**
- Rigid clamping of workpiece
- Check and correct concentricity if possible
- Reduce feed

**Heavy wear and tear at flank**

**Cause:**
- Cutting speed too high
- Feed too low
- Clearance angle too small

**Remedy:**
- Decrease cutting speed
- Increase feed
- Increase clearance angle

**Crumbling on cutting lips**

**Cause:**
- Non-rigid conditions, insufficient workpiece clamping
- Interrupted cut
- Maximum wear and tear values have been exceeded
- Wrong tool type

**Remedy:**
- Rigid clamping of workpiece
- Reduce feed
- Reduce tool change intervals
- Apply suitable tool (see application recommendations)

**Land wear**

**Cause:**
- Non-rigid conditions, insufficient workpiece clamping
- Large deviation from concentricity
- Back taper too small
- Wrong coolant/lubrication (oil), soluble oil too thin

**Remedy:**
- Rigid clamping of workpiece
- Check and correct concentricity if possible
- Increase back taper
- Thicken soluble oil or use neat oil

**Scoring on tool body**

**Cause:**
- Non-rigid conditions, insufficient workpiece clamping
- Large deviation from concentricity
- Interrupted cut
- Abrasive workpiece material

**Remedy:**
- Rigid clamping of workpiece
- Check and correct concentricity if possible
- Reduce feed
- Thicken soluble oil or use neat oil
Troubleshooting

**Heavy chisel edge wear and tear**

*Cause:*  
Cutting speed too low  
Feed too high  
Excessive honing of cutting lip

*Remedy:*  
Increase cutting speed  
Decrease feed  
Reduce cutting lip honing

**Crumbling at intersection of web thinning and cutting lip**

*Cause:*  
Clearance angle too small  
Excessive honing of cutting lip  
Wrong tool type

*Remedy:*  
Increase clearance angle  
Reduce cutting lip honing  
Apply suitable tool

**Plastic deformation of outer corner**

*Cause:*  
Cutting speed too high  
Incorrect or no honing at corner  
Incorrect or no corner chamfer

*Remedy:*  
Decrease cutting speed  
Correct honing  
Apply correct corner chamfer

**Misalignment, axis shifting**

*Cause:*  
Non-rigid conditions, insufficient workpiece clamping  
Excessive deviation from concentricity  
Spotting area transverse  
Chisel edge too large

*Remedy:*  
Rigid clamping of workpiece  
Check and correct concentricity, if possible  
Use twin-fluted milling cutter for spotting  
Reduce chisel edge

**Heavy burring on breakthrough**

*Cause:*  
Feed too high  
Maximum wear and tear values have been exceeded  
Excessive honing of cutting lip

*Remedy:*  
Decrease feed  
Reduce tool change intervals  
Reduce cutting lip honing

**Unsatisfactory surface quality**

*Cause:*  
Non-rigid conditions, insufficient workpiece clamping  
Excessive deviation from concentricity  
Insufficient coolant

*Remedy:*  
Rigid clamping of workpiece  
Check and correct concentricity, if possible  
Increase coolant (volume, pressure)