

# Common Wear Patterns: Cause & Remedy



## Flank Wear

**Cause:** Too high cutting speed, insufficient wear resistance

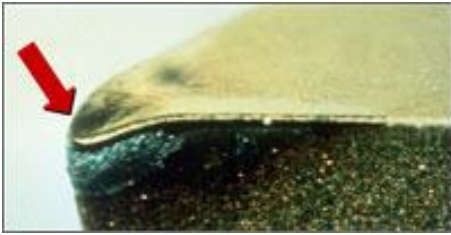
**Remedy:** Reduce cutting speed, select a more wear resistant grade



## Crater Wear

**Cause:** Too high cutting temperature

**Remedy:** Reduce cutting speed, select a more wear resistant grade (Al<sub>2</sub>O<sub>3</sub> coated grade)



## Plastic Deformation

**Cause:** Cutting temperature too high, combined with a high pressure

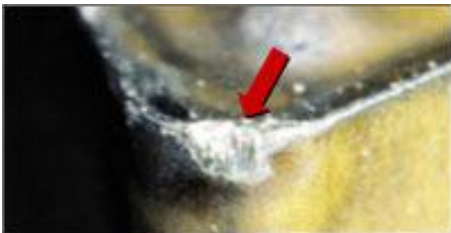
**Remedy:** Select a harder grade, reduce speed and feed



## Built-up Edge

**Cause:** Too low cutting speed, unsuitable grade

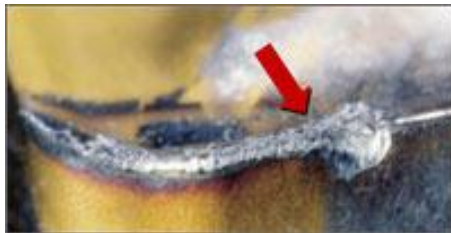
**Remedy:** Increase cutting speed, choose a tougher grade, preferably PVD-coated



## Chipping

**Cause:** The chips are deflected against the cutting edge

**Remedy:** Change the feed, select an alternative insert geometry



## Notch Wear

**Cause:** Cutting speed too high or insufficient wear resistance

**Remedy:** Select a more wear-resistant grade or reduce cutting speed