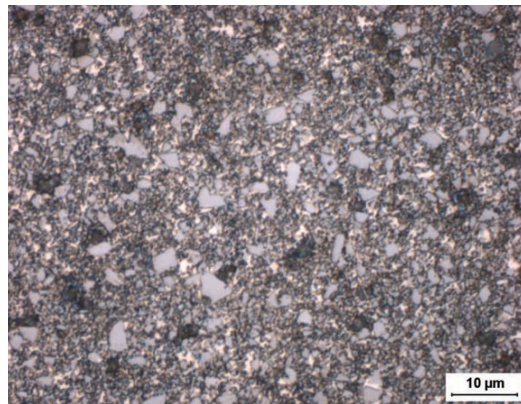


Stamping 1006 Cold Rolled Steel



Note the mixed grain structure for enhanced performance.

Application Background

A customer manufacturing automotive electrical connectors was stamping 1006 cold rolled steel of 0.009" thickness at 1200 strokes per minute with no lubricant. A competitor grade of tungsten carbide required resharpener of the wire cut punch and die after 17 coils of material. General Carbide introduced grade **GC-813CT** into the application and the customer ran 63- 65 coils before the tooling needed re-sharpener. That is a 350% increase in tool life! This grade has established itself as a premier stamping tooling grade.

GC-813CT has a multi-grain size matrix coupled with a medium binder content to provide an excellent wear resistant grade with resistance to impact. The tantalum carbide addition effectively withstands galling, a condition that is often present in cold rolled steel and stainless steel stamping. In addition, it provides thermal edge deformation resistance. The chromium carbide addition ensures resistance to corrosion in the EDM process and prevents atmospheric corrosion from residual lubrication on the die surfaces while in tooling stores.

To ensure the highest metallurgical quality, General Carbide processes all grades in sinter-HIP furnaces.