

OVERVIEW

CT2115-2 is a Tungsten Carbide Nickel coating applied using the HVOF process. The coating is very dense, very hard, very well bonded and suitable for use in the most aggressive wear environments. CT2115-2 is especially effective in applications where the component is exposed to abrasive media and the coating exhibits more ductility than Tungsten Carbide Cobalt coatings with better resistance to chipping. Use in any acids and alkalis where nickel can be used – avoid nitric acid. Use up to 1000° F.

TYPICAL PROPERTIES

Nominal Composition:	88% WC – 12% Ni
Bond Strength:	In excess of 10,000 psi
Coating Porosity:	Less than 2%
Coating Hardness:	Vickers 1150-1350
As-sprayed Surface Roughness:	80-240Ra

FOR THE FOLLOWING APPLICATIONS

CT2115-2 is used for severe service conditions of abrasive wear, hard surface wear, low temperature erosion and fretting. Typical components coated with this coating are broke tank beaters, brine pumps, mixer blades etc.

FINISHING

Finish CT2115-2 by diamond grinding. Flood cool with 2% oil solution. For roughing use 150 grit diamond wheels, work rotation should be 400 SFPM, .080” per pass crossfeed, .0005” per pass infeed. Finish with 400 grit diamond wheels, work rotation should be 400 SFPM, .040” per pass crossfeed, .0005” per pass infeed.

Finishes of 2-4 Ra are possible by grinding. This coating may also be superfinished to a 1 Ra finish.

SPECIFICATIONS

CT2115-2 meets the following specifications:

Internal CTS specifications only