TECHNICAL BULLETIN

88/12 TUNGSTEN CARBIDE COBALT CT2121-2

OVERVIEW

CT2121-2 is a Tungsten Carbide Cobalt 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. CT2121-2 is especially effective in applications where the component is exposed to abrasive media. Use up to 1,000ºF.

TYPICAL PROPERTIES

Nominal Composition:	88% WC – 12% Co
Bond Strength:	In excess of 10,000 psi
Coating Porosity:	Less than 1%
Coating Hardness:	Vickers 1150-1350
As-sprayed Surface Roughness:	90-120 Ra

FOR THE FOLLOWING APPLICATIONS

CT2121-2 is used for severe service conditions of abrasive wear, hard surface wear, low temperature erosion and fretting. Typical components coated with this coating are steel mill rolls, paper mill rolls, corrugating rolls, pulp pumps, slurry pumps, concrete block manufacturing wear parts, etc.

FINISHING

Finish CT2121-2 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

CT-2121-2 meets the following specifications:

Rolls Royce:	EPS-10414

CTS-Midwest
5901 Creek Rd.
Cincinnati, OH 45242
(513) 793-0670 | F: (513) 793-4254

CTS-South
11766 NC Highway 210
Rocky Point, NC 28457
(910) 675-2909 | F: (910) 675-0806

CTS-East
80 Fadem Rd.
Springfield, NJ 07083
(973) 379-0003 | F: (973) 379-4066

CTS-Texas
4011 Chance Ln.
Rosharon, TX 77583
(281) 431-1629 | F: (281) 431-2179