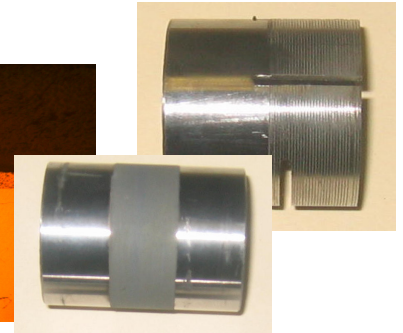


# SIFCO Process<sup>®</sup> Co-Cr<sub>3</sub>C<sub>2</sub>

Cobalt Chromium Carbide Metal Matrix Deposit

- Machinable
- Superior Wear Resistance
- High Temperature Oxidation Protection
- Ductile, Dense, Non-Porous Deposit
- Heat Treatment Improves Deposit Performance



Property	Unit	Brush Plated Co-Cr <sub>3</sub> C <sub>2</sub>	Brush Plated Co	Ti-6Al-4V	Carbon Steel
Cr <sub>3</sub> C <sub>2</sub>	Wt. %	10 – 50	0	0	0
Uniformity	Wt. %	± 3	-	-	-
Particle size	µm	1 – 5	-	-	-
Microhardness	VHN	360 – 500	360	330	150
Hardness change after 400 °C exposure	%	>+ 10%	>- 10%	>- 5%	>- 15%
Taber wear index	µg/cycle	8	17	21	16
Taber wear after 400 °C exposure	µg/cycle	4	15	21	17
Surface finish as deposited, Ra	µm	0.5 – 1.5	0.5 – 1.5	-	-

*SIFCO's Co-Cr<sub>3</sub>C<sub>2</sub> Deposit can be applied in thicknesses up to 7mils on to most common base materials, including Ti 6-4 and 6-2-2, with excellent adhesion.*