



NP/Chromium Cobalt

Product Description

CMC uses NP discs for our non-precious/chromium cobalt. NP discs provide us with the ability to manufacture high-quality chromium cobalt steel for all PFM applications. Its high degree of processing ensures reliability and consistent quality.

Composition (in wt. %)

Cobalt:	63%
Chromium:	29%
Molybdenum:	6%
Mn, Si, Fe (trace):	< 2%

Properties

Density:	8,8 g/cm ³
Vickers hardness:	300 HV 5/30
CTE (25 – 500 °C):	14,4*10 ⁻⁶ K ⁻¹
Oxidize without vacuum:	1,000 °C
Tensile strength:	610 MPa
0,2%-proof stress:	400 MPa
Elongation:	7%
E-Modulus:	200,000 MPa
Solders (working temperature):	Before firing: Co – Cr Lot 1,150 (1,150 °C); after firing: Porta Smart laser welding rod
Flux:	Wilanol B/Paste
Anti-Flux:	Contraflux S/Soft

Benefits

- High degree of processing and reliability
- Consistent quality superior to cast alloys
- Nickel- and beryllium-free for biocompatibility and life-like esthetics