

[Shop System™]

[Material Data Sheet]

CoCrMo **Cobalt Chrome**



COMPOSITION %	
Co	Balance
Cr	27 - 30
Мо	5 - 7
Mn	<1
Si	<1.3
Fe	<0.75
Ni	<0.5
С	<0.35
N	<0.25



MECHANICAL	PROPERTIES 1	

Jewelry

MEGHANICAL FROFERILES						
	Standard	Shop System™ As-Sintered	ISO 22674	Shop System [™] Sintered and HIP ²	ASTM F75 as cast	
Ultimate tensile strength - xy (MPa)	ASTM E8M	600 ± 13	_	672 ± 21	655	
Yield strength - xy (MPa)	ASTM E8M	424 ± 11	360	445 ± 9	450	
Elongation - xy (%)	ASTM E8M	6.0 ± 2.0	2	8.5 ± 1.9	8	
Young's modulus - xy (GPa)	ASTM E111	231 ± 7	_	231 ± 7	_	
Hardness (HRC)	ASTM E18	17.9 ±2.2	_	22.5 ± 0.9	_	
Density (g/cc)	ASTM B311	8.0 ± 0.1	_	8.28 ±0.02	_	
ATTRIBUTES & APPLICATIONS			0.	OTHER STANDARD DESIGNATIONS ³		
Dental industry		С	Cobalt-28 Chromium-6 Molybdenum			

Cobalt-28 Chromium-6 Molybdenum

UNS R30075

ISO 5832-4

Mechanical properties noted represent mean values +/- 1 standard deviation across Xy & Yz orientations for as-printed samples. 1.

Samples were hot isostatic pressed at 1200C in 1000 bar argon for 4 hours. 2.

High temperature applications (e.g. fuel nozzles)

З. Listed designations are for reference purposes only. Composition and mechanical properties may vary.

End-use material performance is impacted (+/-) by certain factors including but not limited to part geometry and design, application and evaluation conditions, etc.

ASTM F75