

**Technical Data:**

**Product Description**

Neway provides a range of high-performance cobalt alloys optimized for metal injection molding applications. Our MIM cobalt grades include biocompatible CoCrMo and CoCrW, corrosion-resistant MP35N, and CoNiCrMo, high-temperature Haynes 25, and wear-resistant Stellite 6. These advanced cobalt materials deliver the specialized properties needed for medical, aerospace, industrial, and other demanding applications. Neway's MIM expertise in precision molding and sintering ensures cobalt components meet your exact mechanical, physical, and biocompatibility

**Features and Applications**

Grade	Features	Applications
MIM-CoCrMo (ASTM F75)	Biocompatible, excellent wear and corrosion resistance	Medical implants, orthopedic devices
MIM-CoCrW	High-temperature strength, oxidation resistance	Aerospace components, gas turbine blades
MIM-CoNiCrMo	High-temperature stability, corrosion resistance	Oil and gas equipment, chemical processing
MIM-MP35N	Exceptional strength and toughness, biocompatibility	Medical and dental instruments, springs
MIM-Haynes 25	High-temperature strength, oxidation resistance	Aerospace components, heat exchangers
MIM-Stellite 6	Wear resistance, high-temperature stability	Cutting tools, valves, industrial equipment

**Chemical Composition**

Alloy	Cobalt (Co)	Chromium (Cr)	Molybdenum (Mo)	Tungsten (W)	Nickel (Ni)	Iron (Fe)	Silicon (Si)	Manganese (Mn)	Carbon (C)
MIM-CoCrMo (ASTM F75)	61%	28%	6%	-	-	3% max	1% max	1% max	0.35% max
MIM-CoCrW	60%	28%	-	10%	-	1% max	1% max	-	0.25% max
MIM-CoNiCrMo	35%	20%	10%	-	35%	-	-	-	-
MIM-MP35N	35%	20%	10%	-	35%	-	-	-	-
MIM-Haynes 25	55%	20%	-	15%	10%	-	-	-	0.1% max
MIM-Stellite 6	60%	28%	-	-	-	3% max	1% max	1% max	0.25% max

**Physical and Mechanical**

Alloys	Status	Tensile Strength	Yield Strength	Impact Strength	Hardness	Young's Modulus	Poisson's Ratio	Elongation	Density
		Mpa	Mpa	J	HRB	Gpa	Ratio	% in 25.4 mm	g/cm <sup>3</sup>
MIM-304	as sintered	505	215	100	88	193	0.29	40	7.9
MIM-316L	as sintered	485	170	80	79	193	0.29	40	8

**Note**

The above data are reference material science data. This data reference is not binding and is not considered as authoritative test data. If your material requirements are extremely precise, please contact our material engineers. Tel | +86 18926788217 | Web | [www.newayprecision.com](http://www.newayprecision.com) | Contact Neway



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MIM-CoCrMo (ASTM F75)	Sintered	1260	1110	16	43	230	0.29	8	8.3
MIM-CoCrW	Sintered	1340	1210	18	44	243	0.3	7	8.4
MIM-CoNiCrMo	Sintered	1290	1200	15	48	260	0.31	5	8.44
MIM-MP35N	Sintered	1310	1220	14	47	248	0.33	6	8.46
MIM-Haynes 25	Sintered	1150	1050	12	45	218	0.29	10	8.9
MIM-Stellite 6	Sintered	980	840	10	39	205	0.3	7	8.2

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