

# ACME® Cast Cobalt Base Alloys

Used in Steel Galvanizing (Zinc Coating) Plants  
as Wear Bushing, Sleeves, & Rings to Combat  
Severe Galling (metal-to-metal) Wear, Abrasion and Erosion-Corrosion

Stellite # 6	1.0C-26Cr-5W-6Nb/Cb-Mo-Mn-Si-(Ni+Fe)-S-P-Balance Co
Stellite # 6B	0.6/1.50C-27/33Cr-3/6W-0.50/2.0Mo-3Ni-Si-Mn-Fe-S-P-Balance Co
Stellite # 6KC	1.7C-30Cr-4.5W-1.5Mo-3Ni-Mn-Si-Fe-S-P-Balance Co
Stellite # 6PM	1.1C-29Cr-4.5W-1.5Mo-3Ni-Mn-Si-Fe-S-P-Balance Co
Cobalt Alloy # 6	0.10C-26Cr-5W-Mn-Si-Fe-S-P-Balance Co

## Cobalt Base - Inter metallic Laves

Alloy T-400C (Casting)	0.10C-8.5Cr-28.5Mo-Ni-Fe-Mn-Si-S-P-Balance Co
Alloy T-700	0.10C-15.5Cr-32.5Mo-Ni-Fe-Mn-3.4Si-S-P-Balance Co
Alloy T-800C (Casting)	0.10C-17.5Cr-28.5Mo-Ni-Fe-Mn-3.4Si-0.07N-0.05O-S-P-Balance Co

### Metallurgical Notes:

Alloy T- series are Type 2 Inter-metallic Cobalt base alloys comprising of hard laves of  $\text{Co}_3\text{Mo}_2\text{Si}$  and  $\text{CoMoSi}$  that are stable at service temperatures of  $800^\circ\text{C}$  offering superior combination of high temperature wear and corrosion resistance. Alloy T-800 is a Co-Cr-Mo alloy which inhibits galling between sliding surfaces where lubrication is difficult. The alloy microstructure of T-800 consists of about 50% of the hard inter-metallic Laves phased dispersed in a softer cobalt alloy matrix. This provides the material with exceptional metal-to-metal wear bearing properties. The high levels of molybdenum and chromium present favours the formation of high hardness laves phase and also provide high level of corrosion resistance. The laves phase possess a melting point of  $1560^\circ\text{C}$  which helps retain its wear resistance at elevated temperature service.

Talk to us of requirements of bushing, sleeves, bearings at your steel plant (galvanizing coating plant) facility. In case, drawings are not available, new replacement part could be developed from sample, old or used OEM part.

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