

DESCRIPTION

Executive Cobalt 6 is a cobalt based alloy that combines all the outstanding properties of cobalt alloys such as erosion and corrosion resistance, wear resistance, maintained hardness at elevated temperatures, with the necessary toughness to resist some degree of impact.

Executive Cobalt 6 is inherently good at resisting metal-to-metal wear, particularly in high load situations that are prone to galling. The alloy has excellent gliding characteristics and polishes well with high toughness properties. It can be machined by grinding or with tungsten carbide tools and is non-magnetic. Additionally, it bonds well with all weldable steels, including stainless and high nickel alloys and the deposits have a low coefficient of friction, and consequently develop a high polish in service.

APPLICATIONS & FEATURES

Executive Cobalt 6 is typically used for hard facing parts subject to a combination of erosion, corrosion, cavitation, compression, impact, abrasion and high temperatures.

Examples include fluid flow valves, tight surfaces on fittings, valve seats and cones for combustion engines, metal to metal gliding surfaces, highly stressed hot working tools, milling, mixing and drilling tools.

TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES

C	Cr	W	Mn	Si	Fe	Co	TOE
1.05	28.5	4.5	1.0	1.0	4.0	Rem	<0.50

Abrasion Resist:	Very Good	Corrosion Resist:	Excellent	Machineability:	Grinding or with carbide tools
Impact Resist:	Very Good	Hardness as welded:	42-46 RC	Hot Hardness:	Good to (650°C) 1200°F

TYPICAL WELDING PARAMETERS

Diameter	Voltage	Amperage	Stick-Out	Position	Shielding Gas
.045"	18-30	120-230	1/2"	Flat	100% CO ₂
.062"	20-30	150-250	1/2"	Flat	or Ar / CO ₂ Mixtures

STANDARD PACKAGING

Spools	33-lb spools
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CLASSIFICATION

AWS A5.21/ASME SFA A5.21 Class ERCCoCr-A

