DMCO#1 -- DURAMAX COBALT #1 -- BARE WIRE

Classification: **ERCoCr-C** ***Specification:*** AWS A5.21 / ASME SFA 5.21

Description:

DMCO#1 bare rod is an excellent high temperature wear resistance alloy, consisting of a rich cobalt matrix with a high degree of chromium and tungsten carbides. This alloy is excellent when used in high temperature abrasive wear applications. It can also be specified in a number of different corrosive medias such as down hole sour gas applications.

Typical applications include steam turbine parts, mixer blades, extrusion dies, saw blades, pump impellers

Typical Chemical Composition (%)

C	Mn	Si	Cr	Ni	Mo	Fe	W	Co
2.0 - 3.0	1.0 max	2.0 max	26.0 - 33.0	3.0 max	1.0 max	3.0 max	11.0 - 14.0	Remainder
TOE = 0.50 max								

Typical Deposit Characteristics:

- Abrasion Resistance	Excellent	- Cold Abrasion	Good
- Impact Resistance	Not Recommened	- Hot Abrasion	Good
- Erosion Resistance	Excellent	- Deposit Layers	2 layers
- Corrosion Resistance	Excellent	- Machinability	Use Carbide tools
- Typical Hardness	HRC 40 - 55	*With Proper Preheat and Slow Cooling	

Sizes available and recommended currents GTAW

Diameter	Process	Current	Voltage	Amperage	Shielding Gas
3/32" (2.4mm)	GTAW	DCEN	20 - 40	80 - 100	Argon
1/8" (3.2mm)	GTAW	DCEN	20 - 40	90 - 120	Argon
5/32" (4.0mm)	GTAW	DCEN	20 - 40	120 - 140	Argon
3/16" (4.8mm)	GTAW	DCEN	20 - 40	140 - 160	Argon

Sizes available and recommended setting for Oxyfuel

Diameter	Process	Tip Size / Flame
3/32" - 3/16" (2.4mm - 4.8mm)	OAW	#4 or #5 / 3X - 4X