DURAMAX COBALT #12 -- COBALT STICK ELECTRODE

Classification: **ECoCr-B** ***Specification:*** AWS A5.13 / ASME SFA 5.13

Product Description:

DURAMAX Cobalt #12 SMAW electrodes provide excellent hot hardness and abrasion resistance and good corrosion resistance. These properties make DMCobalt#12 well suited for wood cutting saws and bars and for industrial cutting applications for carpet, plastics, paper and chemical industries. This electrode is recommended for metal–to-metal abrasion involving high temperature and/or corrosive media with moderate impact. The weld deposits are smooth and it acquires a high polish in use. This alloy is nonmagnetic and is not forgeable. It can be machined with difficulty using carbide tools. It bonds well to all steels, including stainless.

Typical Applications:

- Chain Saws Blades
- Chain Saw Bars
- Saw Teeth
- Extrusion Dies

Typical Chemical Composition (%)

C	Mn	Si	Cr	Ni	Mo	Fe	W	Co
1.0 - 1.7	2.0 max	2.0 max	25.0 - 32.0	3.0 max	1.0 max	5.0 max	7.0 - 9.5	Bal
1.50	0.90	1.10	28.70	2.60	0.10	3.10	8.50	Bal

Typical Deposit Characteristics:

- Abrasion Resistance	Excellent	- Hardness	HRC 34 - 47
- Impact Resistance	Good	- Hot Weld Hardness	Excellent
- Corrosion Resistance	Good	- Deposit Layers	2 Layers Maximum
- Magnetic	No	- Metal-to Metal Wear	Excellent
- Machineability	Difficult Use Carbide Tools	- Surface Cross Checks	No

Available sizes & recommended current: DC, Electrode Positive (reverse polarity)

Polarity	DC + (DCEP)	DC + (DCEP)	DC + (DCEP)
Size	1/8	5/32	3/16
Amperage Range	115 - 135	145 - 165	175 - 195

Note: Minimum preheat recommended is 400°F (204°C). Required preheat will depend on base material composition and component dimensions.

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The above information is to be use as a guideline and is taken directly from the manufacturers Technical Data Sheet. If additional information is needed please contact us at 1-800-692-5930