STOODY
A THERMADYNE Company

Stoodite® 12-M
Gas Metal Arc Welding Wire

DESCRIPTION

Stoodite® 12-M is the tubular fabricated wire version of a cobalt alloy that produces a high hardness cobalt-chromium deposit for high temperature applications with good abrasive wear associated with corrosion. Chromium carbides contained in the deposit provide excellent resistance to many forms of chemical and mechanical degradation, including galling. It bonds well with all weldable steels, including stainless.

TYPICAL DEPOSIT CHARACTERISTICS

Abrasion Resistance	Excellent
Impact Resistance	Good
Corrosion Resistance	Good
Hardness (2 layers)	HRC 44 - 45
Hot Hardness	Excellent
Magnetic	No
Deposit Layers	2 Maximum
Surface Cross Check	No*
Machinability	Use carbide tools
Specifications	
AWS A5.21-2001	ERCCoCr-B

* With proper preheat and slow cooling

TYPICAL DEPOSIT CHEMISTRY (wt%)

Carbon	1.4
Chromium	27.3
Iron	3.9
Manganese	0.9
Molybdenum	0.1
Nickel	0.2
Silicon	1.1
Tungsten	8.3
Cobalt	Balance

TYPICAL APPLICATIONS

Typical applications include:

- Valve and pump parts
- Chain saw bars and saw teeth
- Aircraft turbine blades
- Cutter rolls and bar mill twist rolls

OPERATIONAL CHARACTERISTICS / WELDING PARAMETERS

Diameter, In. (mm)	**1/16 (1.6)**
Current, Amp. DCEP	280 - 300
Voltage	26 - 28
Shielding Gas	Argon
Wire Extension	5/8” - 3/4”
Position	Flat

STANDARD SIZES & PACKAGING

Diameter	Packaging	Part #
1/16” (1.6mm)	25# Spool	811222182062

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