

**DESCRIPTION**

Stoodite<sup>®</sup> 1-M is the tubular wire version of the highest hardness standard cobalt alloy used with chromium carbides that impart outstanding abrasive wear resistance. The addition of tungsten enhances high temperature hardness and matrix toughness for excellent adhesive and solid particle erosion wear resistance. It bonds well with all weldable steels, including stainless.

**TYPICAL APPLICATIONS**

Typical applications include:

- Screw components
- Cross heads
- Hydropulper disc segments
- Soaking pit-tong bits
- Mixer rotors, bodies and tip sides
- Pump sleeves
- Valves & pumps

**TYPICAL DEPOSIT CHARACTERISTICS**

Abrasion Resistance	Excellent
Impact Resistance	Fair
Corrosion Resistance	Good
Hardness (2 layers)	HRC 46-50
Hot Hardness	Excellent to 1400°F
Magnetic	No
Deposit Layers	2 Maximum
Surface Cross Check	Yes
Machinability	Use carbide tools/grind
Specifications	
AWS A5.21-2001	ERCCoCr-C

**OPERATIONAL CHARACTERISTICS / WELDING PARAMETERS**

Diameter, In. (mm)	.045 (1.2)	1/16 (1.6)
Current, Amp. DCEP	180 - 200	280 - 300
Voltage	25 - 27	26 - 28
Shielding Gas	Argon	Argon
Wire Extension	1/2" - 5/8"	5/8" - 3/4"
Position	Flat	Flat

**TYPICAL DEPOSIT CHEMISTRY (wt%)**

Carbon	2.6
Chromium	25.8
Iron	3.6
Manganese	0.6
Molybdenum	0.1
Nickel	0.2
Silicon	0.2
Tungsten	11.2
Cobalt	Balance

**STANDARD SIZES & PACKAGING**

Diameter	Packaging	Part #
.045" (1.2mm)	25# Spool	11455300
1/16" (1.6mm)	25# Spool	810222182062

**Stoody Company**

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PDS-CO-W-001

Revision 2  
12/03/01

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