

STOODITE® 1-M

Gas Metal Arc Welding Wire

AWS Classification A5.21:2011 ERCCoCr-C

Stoodite 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 MECHANICAL PROPERTIES

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

TYPICAL ALL WELD METAL COMPOSITION (WT%)

Carbon	2.6
Chromium	29.0
Iron	3.6
Manganese	0.8
Molybdenum	0.1
Nickel	0.2
Silicon	0.2
Tungsten	11.2
Cobalt	Balance

NOTE:

Chemical composition values are typical and were developed in accordance with AWS A5.21 procedures. Actual test results may vary depending on welding parameters, degree of dilution and base metal composition.

TYPICAL APPLICATIONS

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

OPERATIONAL CHARACTERISTICS/WELDING PARAMETERS (DCEP)

0.045" (1.2 mm)	
Current DCEP, amp	180 – 200
Voltage (volts)	25 – 27
Shielding Gas	Argon
Wire Extension, in (mm)	1/2" - 5/8" (12 - 16)
Position	Flat

1/16" (1.6 mm)	
Current DCEP, amp	280 – 300
Voltage (volts)	26 – 28
Shielding Gas	Argon
Wire Extension, in (mm)	5/8" - 3/4" (16 - 19)
Position	Flat

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

STANDARD SIZES & PACKAGING

Diameter	Packaging	Part #
0.045" (1.2 mm)	3 lb (1.36 kg) Spool	11881000
0.045" (1.2 mm)	25 lb (11.3 kg) WB	11455300
1/16" (1.6 mm)	3 lb (1.36 kg) Spool	11881100
1/16" (1.6 mm)	25 lb (11.3 kg) WB	810222182062

NOTE:
Level layer wound.

PDS-CO-W-001
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NOTICE - Failure to follow manufacturer's directions for use may result in equipment or material failure and void any applicable warranty. The data provided or referenced herein is provided for informational purposes only, without guarantee or warranty and represents "typical" results when Stoodly products are used in accordance with internal Stoodly procedures. Other tests and procedures may produce differing results. Stoodly expressly disclaims any liability resulting from reliance on this data.

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