

DESCRIPTION

Stoodite® 1 bare rod has the highest hardness of the standard Stoodite® cobalt alloys and is used in elevated temperature wear applications. It has a large volume of chromium carbides in a cobalt matrix, giving the alloy excellent resistance to abrasion and solid particle erosion. It can be machined with difficulty using carbide tools or ground. It bonds well with stainless and other weldable grade steels.

TYPICAL DEPOSIT CHARACTERISTICS

Abrasion Resistance	Excellent
Impact Resistance	Moderate
Corrosion Resistance	Good
Hardness	HRC 53-54
Hot Hardness	Excellent
Magnetic	No
Deposit Layers	2 Maximum
Surface Cross Check	Not with proper preheat
Machinability	Use carbide tools/grind
Specifications	
AWS / SFA A5.21-2001	ERCoCr-C
Mil-R-17131C	Type Mil-RCoCr-C

TYPICAL DEPOSIT CHEMISTRY (wt%)

Carbon	2.4
Chromium	31.0
Iron	2.3
Manganese	0.06
Molybdenum	0.1
Nickel	2.2
Silicon	1.2
Tungsten	12.2
Cobalt	Balance

TYPICAL APPLICATIONS

Typical applications include:

- Mixer seals and rotors
- Hydro pulper disc segments
- Chemical valve balls and seats
- Oil drilling tools
- Carbon scrapers

Stoody Company

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OPERATIONAL CHARACTERISTICS / WELDING PARAMETERS

GTAW			
Diameter, In. (mm)	1/8 (3.2)	5/32(4.0)	3/16 (4.8)
Current, Amp. DCEN	90 - 120	120 - 140	140 - 160
Voltage	20 - 40	20 - 40	20 - 40
Shielding Gas	100% Argon	100% Argon	100% Argon

OAW			
Tip Size	4	4	5
Flame	3X - 4X	3X - 4X	3X - 4X
Position	Flat	Flat	Flat

GTAW			
Diameter, In. (mm)	1/4 (6.4)	5/16 (8.0)	
Current, Amp. DCEN	160 - 180		
Voltage	20 - 40		
Shielding Gas	100% Argon		

OAW			
Tip Size	6	6	
Flame	3X - 4X	3X - 4X	
Position	Flat	Flat	

STANDARD SIZES & PACKAGING

Diameter	Packaging	Part #
1/8" (3.2mm)	10# box	10240500
	20# box	11404400
5/32" (4.0mm)	10# box	11450100
	20# box	11408900
3/16" (4.8mm)	10# box	11379800
	20# box	11364200
1/4" (6.4mm)	10# box	11336800
	20# box	11409000
5/16" (8.0mm)	10# box	11336900
	20# box	11337700

PDS-CO-B-001

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