

DESCRIPTION

Stoodite® 6 bare rod provides resistance to many forms of chemical and mechanical degradation over a wide temperature range. It is the most versatile and widely used cobalt alloy, with a good balance of abrasion and impact resistance. Particular attributes of Stoodite® 6 are its outstanding anti-galling properties, high temperature hardness and high resistance to cavitation erosion that results in its wide use as a valve seat material. It bonds well to all weldable grade steels and stainless.

TYPICAL DEPOSIT CHARACTERISTICS

Abrasion Resistance	Excellent
Impact Resistance	Good
Corrosion Resistance	Good
Hardness	HRC 40 - 48
Hot Hardness	Excellent
Magnetic	No
Deposit Layers	2 Maximum
Surface Cross Check	Not with proper preheat
Machinability	Use carbide tools/grind
Specifications	
AWS / SFA A5.21:2011	ERCoCr-A
Mil-R-17131C	Type Mil-RCoCr-A-1

TYPICAL DEPOSIT CHEMISTRY (wt%)

Carbon	1.2
Chromium	29.0
Iron	2.1
Manganese	0.05
Molybdenum	0.10
Nickel	2.0
Silicon	1.2
Tungsten	4.7
Cobalt	Balance

TYPICAL APPLICATIONS

Typical applications include:

- Zinc tanks
- Forging dies
- Diesel engine valves
- Trimmer dies
- Guide rolls
- Trunnions

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TYPICAL APPLICATIONS (CONT.)

- Chemical and steam valve trim
- Bearing and bushing areas
- Plastic extrusion screws

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%	100%	100%
	Argon	Argon	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)	5# Screw Pack	11361100
5/32" (4.0mm)	5# Screw Pack	11347200
3/16" (4.8mm)	5# Screw Pack	11259600
1/4" (6.4mm)	5# Screw Pack	11259300

MIL-Spec certified products have unique part numbers. Contact Customer Service for assistance.

PDS-CO-B-002

Revision 7

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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 Stoody products are used in accordance with internal Stoody procedures. Other tests and procedures may produce differing results. Stoody expressly disclaims any liability resulting from reliance on this data.

PROTECT YOURSELF AND OTHERS - Users should read and follow all recommended guidance on health and safety from their employer, the supplier, the manufacturer, and government authorities. These, at a minimum including the Warning Labels on the products and the Material Safety Data Sheets ("MSDS"). The MSDS and additional safety information may be found on materials or links at: www.stoody.com.