

STOODITE® 6

Shielded Metal Arc Welding Electrode

AWS Classification A5.13/A5.13M:2010 ECoCr-A

Stoodite 6 coated electrodes produce a medium hardness cobalt-chromium deposit for high temperature applications with good abrasive wear and good impact resistance. Stoodite 6 is the most versatile and widely used cobalt alloy with a good balance of abrasion and impact resistance. Chromium carbides contained in the deposit have excellent resistance to many forms of chemical and mechanical degradation, including galling and cavitation erosion. It bonds well with all weldable steels, including stainless.

TYPICAL MECHANICAL PROPERTIES

Abrasion Resistance	Very Good
Impact Resistance	Good
Corrosion Resistance	Good
Hardness (2 layers), HRC	38 – 40
Hot Hardness	Excellent
Magnetic	No
Deposit Layers	2 Maximum
Surface Cross Check	No
Machinability	Use Carbide Tools

TYPICAL DEPOSIT CHEMISTRY (WT%)

Carbon	1.1
Chromium	28.8
Iron	3.2
Manganese	0.1
Molybdenum	0.1
Nickel	1.9
Silicon	1.0
Tungsten	4.5
Cobalt	Balance

TYPICAL APPLICATIONS

- Chemical and steam valve trim
- Bearing and bushing areas
- Food processing equipment
- Zinc tanks
- Forging dies
- Trunnions
- Trimmer dies
- Guide rolls
- Diesel engine valves

OPERATIONAL CHARACTERISTICS/WELDING PARAMETERS (DCEP)

1/8" (3.2 mm)	
Current, amp	90 – 100
Position	Flat
Length, in (mm)	14 (355)
5/32" (4.0 mm)	
Current DCEP, amp	135 – 160
Position	Flat
Length, in (mm)	14 (355)
3/16" (4.8 mm)	
Current DCEP, amp	160 – 180
Position	Flat
Length, in (mm)	14 (355)

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 #
1/8" (3.2 mm)	10 lb (4.5 kg) Vacuum Pak	10242700
5/32" (4.0 mm)	10 lb (4.5 kg) Vacuum Pak	10243100
3/16" (4.8 mm)	10 lb (4.5 kg) Vacuum Pak	10243500

PDS-CO-E-002
Revision 4
October 16, 2015

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.

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 Safety Data Sheets ("SDS"). The SDS and additional safety information may be found on materials or links at: Stoodly.com.