

COATED ELECTRODES AND BARE RODS

STOODITE® 6 - BARE, COATED & MIL BARE

STOODITE 6 is the most generally used cobalt alloy, having excellent resistance to many forms of mechanical and chemical degradation over a wide temperature range. Particular attributes are its outstanding self-mated, anti-galling properties, high temperature hardness, and a high resistance to cavitation erosion, which result in its wide use as a valve seat material. The alloy is ideally suited to variety of hardfacing processes. Machinable with carbide tools. Bonds well with weldable alloy steels, including stainless.

Welding Procedures/Characteristics: Weld DC reverse polarity. Use minimum amperage; apply weave bead 3/4" to 1½" (20-38 mm) wide. For check-free deposits, preheat and slow cool. In applying bare rod, use a larger torch tip than is generally used for same diameter mild steel. Use excess acetylene feather 3x length of inner cone. With the gas tungsten arc process, use 100% Argon. Generally a 2 layer deposit.

Applications: Sintering Machine Seat, Covers, Flapper Gates, Valves and Seats, Coke Pusher Shoes, Cooling Bed Rolls, Hot Trimming Dies, Forging Die Blocks, Chain Saw Guide Bars, Blow Valves, Pulp Digester, Plastic Extrusion Screws

Can be certified to AWS and military specifications. Must be requested at time of order.

Typical Chemical Composition:

Alloy Content: C 1.1, Cr 28, W 4
Cobalt Base

Average Hardness, Rockwell C:

Gas Tungsten Arc, Two Layer Deposit:.....40 HRC
Oxy Acetylene, One Layer Deposit:.....42 HRC
Shielded Metal Arc, Two Layer Deposit:.....39 HRC

Part Number	Packaging	Dimensions	Length	Amperage DC+
STOODITE 6 - BARE				
11361100	5 lb Tube (2.26 kg)	1/8" (3.2 mm)	14" (35.6 cm)	90 – 120
11411800	5 lb Tube (2.26 kg)	1/8" (3.2 mm)	36" (91.4 cm)	90 – 120
11347200	5 lb Tube (2.26 kg)	5/32" (4.0 mm)	14" (35.6 cm)	135 – 160
11259600	5 lb Tube (2.26 kg)	3/16" (4.8 mm)	14" (35.6 cm)	160 – 180
11259300	5 lb Tube (2.26 kg)	1/4" (6.4 mm)	14" (35.6 cm)	220 – 270

Flame: 3X Certification to AWS A5.21 ERCrCo-A

STOODITE 6 - COATED

10242700	10 lb VacPak (4.5 kg)	1/8" (3.2 mm)	14" (35.6 cm)	90 – 120
10243100	10 lb VacPak (4.5 kg)	5/32" (4.0 mm)	14" (35.6 cm)	135 – 160
10243500	10 lb VacPak (4.5 kg)	3/16" (4.8 mm)	14" (35.6 cm)	160 – 180

Certification to AWS A5.13 ECrCo-A

STOODITE 6 MIL - BARE

11449300	5 lb Tube (2.26 kg)	1/8" (3.2 mm)	14" (35.6 cm)	90 – 120
11491500	5 lb Tube (2.26 kg)	1/8" (3.2 mm)	36" (91.4 cm)	90 – 120
11449100	5 lb Tube (2.26 kg)	5/32" (4.0 mm)	14" (35.6 cm)	135 – 160
11449400	5 lb Tube (2.26 kg)	1/4" (6.4 mm)	14" (35.6 cm)	220 – 270

Flame: 3X Certification to MIL R-17131C Amd 1, Type MIL-RCrCo-A-1

STOODITE 6H - BARE & MIL BARE

STOODITE 6H, like its base product STOODITE 6, provides resistance to many forms of chemical and mechanical degradation over a wide temperature range. While the chemistry of STOODITE 6H bare rod will fall within the prescribed chemical analysis for STOODITE 6, the amounts of several elements in 6H are more closely controlled within the range to provide better transfer across an arc, thus yielding a smoother gas tungsten arc deposit. This premium version of STOODITE 6 has outstanding consistency, anti-galling properties, high temperature hardness and high resistance to cavitation erosion. It bonds well with weldable grade steels, including stainless.

Welding Procedures/Characteristics: Weld DC reverse polarity. Use minimum amperage; apply weave bead 3/4" to 1½" (20-38 mm) wide. For crack-free deposits, preheat and slow cool. In applying bare rod, use a larger torch tip than is generally used for same diameter mild steel. Use excess acetylene feather 3x length of inner cone. With the gas tungsten arc process, use 100% Argon. Generally a 2 layer deposit.

Applications: Valves and Valve Seats, Bearing and Bushing Areas, Dies

Can be certified to AWS and military specifications. Must be requested at time of order.

Typical Chemical Composition:

Alloy Content: C 1.3, Cr 30.6, W 4
Cobalt Base

Average Hardness, Rockwell C:

Hardness: 40 - 48 HRC

Part Number	Packaging	Dimensions	Length	Amperage DC+
STOODITE 6H - BARE				
11410100	5 lb Tube (2.26 kg)	1/8" (3.2 mm)	14" (35.6 cm)	90 – 120
11450600	5 lb Tube (2.26 kg)	1/8" (3.2 mm)	36" (91.4 cm)	90 – 120
11448700	5 lb Tube (2.26 kg)	5/32" (4.0 mm)	14" (35.6 cm)	135 – 160
11858300	5 lb Tube (2.26 kg)	3/16" (4.8 mm)	14" (35.6 cm)	160 – 180

Flame: 3X Certification to AWS A5.21 ERCrCo-A

STOODITE 6H MIL - BARE

812901107125	5 lb Tube (2.26 kg)	1/8" (3.2 mm)	14" (35.6 cm)	90 – 120
11480400	5 lb Tube (2.26 kg)	1/8" (3.2 mm)	36" (91.4 cm)	90 – 120
11481000	5 lb Tube (2.26 kg)	3/16" (4.8 mm)	14" (35.6 cm)	160 – 180
11965600	5 lb Tube (2.26 kg)	3/16" (4.8 mm)	36" (91.4 cm)	160 – 180

Flame: 3X Certification to MIL R-17131C Amd 1, Type MIL-RCrCo-A-3