

Stellite™ 1 Data Sheet

Specifications:

AWS A5.13 AWS Class ECoCr-C ASME SFA 5.13

Deposit Properties:

Hardness: 43-58 HRC
Abrasion Resistance: Excellent
Impact Resistance: Fair
Corrosion Resistance: Good
Magnetic: No

Deposit Properties:

Machinability: Use Carbide tools/grind Hot Weld Hardness: Excellent Deposit Layers: 2 Layers max Deposit Cross Checks: Some cracking

possible

Description:

Stellite™ 1 is an electrode that has the highest hardness of cobalt alloys. Primary hypereutetic carbides are found in the microstructure which gives the alloy higher wear resistance and reductions in impact and corrosion resistance. Due to the higher hardness there is greater likelihood for stress cracking during cooling, but can be minimized with close monitoring during preheat, interpass temps, and post heating. The alloy deposits are immune to tempering. Typical applications include drawing blocks, screw presses, pump sleeves, wear pads, etc.

Chemical Composition (Wt%)

Co	Cr	W	С	Mn	Si	Ni	Mo	Fe
BAL		11.0- 14.0		2.0	2.0	3.0	1.0	5.0

Note: Single values are maximum unless otherwise noted.

Maintaining a proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of material being welded.

CAUTION: Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standards A49.1, "Safety in Welding and Cutting," published by the American Welding Society, 8669 NW 36 Street, #130, Miami, FL 33126: OSHA Safety and Health Standards 29 CRF 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210.