

**DESCRIPTION**

Stoodite® 6-S is the submerged arc wire version of Stoodite®6 cobalt alloy that produces 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. Chromium carbides contained in the deposit provide 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 DEPOSIT CHARACTERISTICS**

Abrasion Resistance	Excellent
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
Specifications	
AWS A5.21-2001	ERCCoCr-A

\* With proper preheat and slow cooling.

**TYPICAL DEPOSIT CHEMISTRY (wt%)**

Carbon	1.2
Chromium	31.4
Iron	3.5
Manganese	0.9
Molybdenum	0.1
Nickel	2.2
Silicon	0.5
Tungsten	4.5
Cobalt	Balance

**Stoody Company**

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PDS-CO-W-004

Revision 2  
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**TYPICAL APPLICATIONS**

Typical applications include:

- Flights of extrusion screws
- Sinker roll bushings in steel mill
- Soaking pit tong bits
- Shafts

**OPERATIONAL CHARACTERISTICS / WELDING PARAMETERS**

Diameter, In. (mm)	<b>3/32 (2.4)</b>
Current, Amp. DCEP	250 - 450
Voltage	25 - 33
Flux	R-20
Shielding Gas	None
Wire Extension	1 1/4"
Position	Flat

**STANDARD SIZES & PACKAGING**

Diameter	Packaging	Part #
3/32" (2.4mm)	50# Coil	810602184094

Notice: The information contained or otherwise referenced herein is presented only as "typical", without guarantee or warranty. Stoody expressly disclaims any liability from any reliance thereon. Typical data are those obtained when welded and tested in accordance with Stoody's internal procedures. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique not controlled by Stoody.