# WELDWIRE COMPANY, INC.

# **Technical Information**

### Flux Core Wire Cobalt

Alloy: WWCobalt #6 Flux Cored Wire

Conforms to Certification: AWS A5.21 ASME SFA A5.21

Class: ERCCoCr-A

Alloy: ERCCoCr-A Weld Process: GMAW Flux Core

#### **AWS Chemical Composition Requirements**

C = 0.7 - 1.4	Mo = 1.0  max
Mn = 2.0  max	Fe = 5.0  max
Si = 2.0  max	W = 3.0 - 6.0
Cr = 25 - 32	Co = Remainder
Ni = 3.0  max	Other $= 1.0 \text{ max}$

### Deposited Chemical Composition % (Typical)

C = 1.2	Mo = 0.1
Mn = 0.9	Fe = 2.4
Si = 0.6	W = 4.0
Cr = 28.1	Co = Balance
Ni = 2.5	

#### Deposited All Weld Metal Properties % (AW)

Hardness (2 layer) HRC 38 – 40

# Deposited Charpy-V-Notch Impact Properties %

Not Applicable

#### Recommended Operation of Welding Rods

#### Flat Welding

<u>Diameter</u>	Amps DCEP	<u>Volts</u>	Shielding Gas
.045	180 - 200	25 - 27	argon
1/16	280 - 300	26 - 28	argon

### Application

Cobalt #6 Flux Cored Wire (ERCCoCr-A) is a tubular wire version of a cobalt alloy that produces a medium hardness cobalt-chromium deposit for high temperature applications with good abrasive wear and good 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.

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