

Flux-cored Wire Cobalt

Alloy: WWCobalt #1 Flux Cored Wire

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

Class: ERCCoCr-C

Alloy: ERCCoCr-C

Weld Process: GMAW Flux Core

AWS Chemical Composition Requirements

C = 2.0 – 3.0	Mo = 1.0 max
Mn = 2.0 max	Fe = 5.0 max
Si = 2.0 max	W = 11.0 - 14.0
Cr = 25 - 33	Co = Remainder
Ni = 3.0 max	Other = 1.0 max

Deposited Charpy-V-Notch Impact Properties %

Not Applicable

Recommended Operation of Welding Rods

Flat Welding

Deposited Chemical Composition % (Typical)

C = 2.6	Mo = 0.10
Mn = 0.6	Fe = 2.6
Si = 0.2	W = 11.2
Cr = 25.8	Co = Balance
Ni = 2.2	

<u>Diameter</u>	<u>Amps DCEP</u>	<u>Volts</u>	<u>Shielding Gas</u>
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.045	180 – 200	25 – 27	argon
1/16	250 – 300	26 – 28	argon

Application

Type #1 Flux Cored Wire (ERCCoCr-C) is a tubular wire version of the highest hardness standard cobalt alloy used with chromium carbides that impact outstanding abrasive wear resistance. The addition of tungsten enhances high temperature hardness and matrix toughness for excellent adhesive and solid particle erosion wear resistance. It bonds well with all weldable steels including stainless.

Deposited All Weld Metal Properties % (AW)

Hardness (2 layer)	HRC	48 – 50
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