



**WA ALLOY CO.**

Quality Management System  
in accordance with  
**ISO 9001**  
Cert # 05-R0925

## Cobalt No. 1 Bare Cobalt No. 1 Coated

AWS/SFA 5.13 RCoCr-C (Bare), ECoCr-C (Coated)

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### DESCRIPTION

Cobalt No. 1 is a cobalt based alloy designed for applications that require extreme abrasion resistance at elevated temperatures, but where impact resistance is not a consideration. Cobalt No.1 has a higher carbon and Tungsten content than other cobalt alloys yielding a high volume of carbide in the microstructure. Weld deposit is not as "tough" as other cobalt alloys (#6,#21) and will stress relief crack check upon cooling in some cases. However, it is far superior in wear resistance and erosion.

### APPLICATIONS

Mixer blades, extrusion dies, saw blades, rolling mill guides, pump impellers, gate valves, rubber mixer rotors

### ALL WELD METAL DEPOSIT CHEMISTRY (Typical)

Carbon	2.50
Chromium	30.00
Tungsten	12.50
Cobalt	Balance

### HARDNESS (HRc)

One Layer	41-43
Two Layer	47-49

### AVAILABLE SIZES

Bare: 1/8, 5/32, 3/16, 1/4, 5/16  
Coated: 1/8, 5/32, 3/16, 1/4

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