

## Universal Wire Works No. 12 Cobalt Alloy Welding Wire

Category : Metal , Nonferrous Metal , Cobalt Alloy , Superalloy

### Material Notes:

Universal No. 12 is a cobalt-chromium-tungsten alloy suited for applications requiring extreme abrasion and corrosion resistance with moderate impact. The deposited hardness range of Rc 48 - 52 remains intact under operating temperatures of 1500°F. The excellent resistance to hot and cold abrasion, corrosion and erosion suits Universal 12 to numerous applications. Universal No. 12 applications include: rocker arms, trimming dies, mixers, cutters, extrusion and conveyer screws, seats and valves for oil and gas, chipper knives, paper rolls, bushings, saw teeth, entry guides, shafts, shaft bearings, thrust washers, brake drums, tappets, valve push rods and valve stem ends. Machinability: Carbide tools or grinding. Information provided by Universal Wire Works for their line of welding wire and filler metal.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Universal-Wire-Works-No-12-Cobalt-Alloy-Welding-Wire.php](http://www.lookpolymers.com/polymer_Universal-Wire-Works-No-12-Cobalt-Alloy-Welding-Wire.php)

Physical Properties	Metric	English	Comments
Density	8.66 g/cc	0.313 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	48 - 52	48 - 52	
Tensile Strength, Ultimate	524 MPa	76000 psi	
Compressive Strength	1330 MPa	193000 psi	

Thermal Properties	Metric	English	Comments
Melting Point	1260 °C	2300 °F	
Maximum Service Temperature, Air	816 °C	1500 °F	

Component Elements Properties	Metric	English	Comments
Carbon, C	1.65 %	1.65 %	
Chromium, Cr	28.5 %	28.5 %	
Cobalt, Co	55.4 - 56.4 %	55.4 - 56.4 %	As Remainder
Iron, Fe	2.0 %	2.0 %	
Molybdenum, Mo	<= 1.0 %	<= 1.0 %	
Nickel, Ni	2.0 %	2.0 %	
Silicon, Si	1.0 %	1.0 %	
Tungsten, W	8.5 %	8.5 %	

## **Contact Songhan Plastic Technology Co.,Ltd.**

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