

Dual Core COBALT 12-G

Cobalt CORED/MCAW

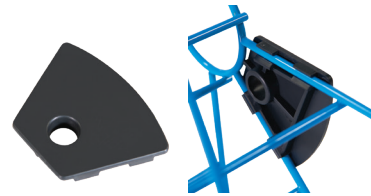
Standards

EN/ISO-Standard - 14700
EN/ISO-Classification - T Co2

AWS-Standard - A5.21
AWS-Classification - ERCCoCr-B

Features and Applications

- Cobalt base tubular wire for gas-shielded metal arc hardfacing.
- Exceptional resistance in corrosive media at high temperatures, including erosion and thermal shocks.
- Ideal for hardfacing parts undergoing the single or combined effects of heavy metal-to-metal wear or abrasion, temperatures ranging from RT to 800°C and corrosive environments.
- Preheating at 200-300°C is recommended to avoid cracks in the deposit.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on saw teeth, cams, shafts, tappets and push rods for engines, screw conveyors and augers for rubber and plastics, seats and valves for oil and gas etc.
- **Test Certificates can be found online @wilkinsonstar247.com**



Optional Plastic Alignment Hole Clip
Order Code: BS300-CLIP

Welding Positions

EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

Shielding Gases

EN ISO 14175 - I1 (Argon)

Wear Type Suitability

Abrasion	████████████████████
Impact	██████████████████
Metal-Metal	████████████████████
Corrosion	██████████████████
Temperature	██████████████████

Welding Parameters

Ø mm	1.20	1.60
Current (A)	100-250	140-350
Voltage (V)	16-29	16-30

Hardness (HRC)

Current Type	Hardness - Third Layer
DC+ / Pulsed	46

Mechanical properties are approximate and may range based on the heat, shielding gas, welding parameters and other factors. Higher hardness (up to 50 HRC) is possible in the first layer when dilution is minimised (Ø 1.2 mm wire welded at approximately 16 V).

High Temperature Hardness

20°C	200°C	400°C	600°C	800°C
450 Hb	420 Hb	380 Hb	360 Hb	230 Hb

High deposition rates and low dilution are facilitated by pulsed current. High heat inputs favour lower hardness.

Chemical Composition % (Typical)

C %	Mn %	Si %	Cr %	W %	Fe %	Co %
1.60	1.50	1.00	29.0	8.00	3.00	Bal.

Structure is chromium and tungsten carbides in an austenitic type matrix

Packaging Data

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
6031100502	1.20	15	BS300 PLW	72
6031100503	1.60	15	BS300 PLW	72

Liability: Whilst all reasonable efforts have been made to ensure the accuracy of the information contained, this information is subject to change without notice and can be only considered as suitable for general guidance.

