



Co6 – 6G

HARDFACING

DESCRIPTION

Machinable cobalt-based alloy with chromium and tungsten carbide particles for hardfacing steel, stainless steel, cast iron and nickel alloy parts subjected to **very high temperatures** in the presence of **corrosion, impacts, abrasion** and/or **metal-to-metal friction**.

CHARACTERISTICS

- **Ductile and machinable deposit**
- Maintains excellent hardness at high temperatures
- Conforms to specifications AWS A5.13 : ECoCr-A
- Excellent all-position weldability
- Smooth and stable arc, spatter free
- Low friction coefficient
- Good corrosion and heat resistance, up to 800°C (1472°F)

Deposit rating scale

ABRASION										
METAL-METAL										
HEAT										
CORROSION										
	1	2	3	4	5	6	7	8	9	10

Hardness (as-welded) : 40 - 45 HRC at 600°C (1112°F) : 30 HRC
 Deposit thickness : 2 passes maximum

TYPICAL APPLICATIONS

Valve seats, augers, hot shear blades, ingot tong ends, valves, extrusion screw, etc.

PROCEDURE

Remove any trace of oil, grease and/or dirt from the surface. To avoid cracking and facilitate spreading of the filler metal, preheat the parts according to their thickness and composition and maintain the same temperature during hardfacing. Maintain a medium arc with the electrode slightly tilted. Low amperage welding required to limit dilution. Let cool down slowly. Depending on the application, use a cushion with **Soudotec 265** electrode.

WELDING PARAMETERS

Co6 = Electrode; 6G = Bare rod or TIG
 Diameter (Co6 - 6G): 3.2 mm (1/8") Other diameters available upon request
 Amperage (Co6): 90 - 110 A
 Polarity (Co6): AC/DC+
 Type of flame (6G): Slightly carburizing

Also available in flux-cored wire MCAW: **Soudotec MC 8306G**

Rév. : 21_08

Specialized welding alloys and technology. For technical assistance or for ordering: