



Hot Seat Valve

Work hardening Cobalt based Surfacing alloy with Hot Impact Resistance & Edge Retention Properties

Typical Applications:

Hot working tools like Forging, Stamping & Trimming dies, Punches, Cutting, Piercing tools & Shear blades and Extrusion dies, Wire drawing dies, Tong, Plungers, Extrusion screws, Press and drawing tools. Applications involving steam erosion and hot metal corrosion, Hot work dies, Furnace retorts, Coke pusher shoes. EWAC COB 21 is also recommended for overlaying of components subjected to oxidizing and reducing atmospheres at temperatures up to 1100 °C.

Outstanding Features:

- Work hardenable, crack-free deposit.
- Resistant to metal-to-metal friction, galling & cavitation.
- Superior resistance to thermal shock & thermal cycle.
- Good creep resistance & retain hot hardness properties.
- Hot & Cold cutting, piercing properties.
- Tough deposit and resistant to temper embrittlement.
- Easily machinable deposit using tungsten carbide tip tool.

Procedure:

Clean weld area by grinding and remove fatigued/damaged material. Remove sharp corners and edges. Minimum preheat of 150 °C is recommended for mild steels more than one inch thick. Preheating of complex shaped components, high carbon steels and low alloy steels depending on its carbon equivalent. Apply a buttering layer of NucleoTec 2222 on air-hardenable steels, Xyron 224 on cast iron and Terra HT 96 on SS before deposition of EWAC COB 21. This products can be applied directly on low carbon steels. Deposit stringer beads by holding electrode at 90 degree angle and maintain a short arc length. Use the lowest Amperage range to minimize dilution. Remove slag after each pass. Use larger diameter electrode for overlay for thick section and smaller diameter electrode for edge build up applications. Back whip craters to reduce crater-cracking tendencies. Cool slowly to room temperature.

Recommended Amperages:

Size(mm)	I-Range
3.15	70-110
4.00	90-130

Hardness: 28 - 35 HRC (As welded);
45 - 50 HRc (Work hardened)