Premium Electrode with Optimized Properties Against Hot Impact, Erosion, Cavitation and Hot Abrasion

EutecDur[®] 9080N





- Outstanding high temperature hot-hardness properties
- Excellent resistance to impact and thermal cycle cracking
- Temperature tolerant up to 1500°F



DESCRIPTION:

EutecDur 9080N is designed for exacting applications involving elevated temperature service. Excellent broad-based mechanical and thermal properties coupled with superior machinability position this alloy for critical surfacing and repair operations across a wide range of applications.

Weld deposits resist steam erosion and contact erosion from liquid metals. Ideal for withstanding hot metal erosion

TYPICAL APPLICATIONS:

APPLICATIONS

INDUSTRY

Valve Plugs and Seats Hot Work Dies - Upset Dies **Furnace Retorts** Hot Forming Dies - Forging Dies Forging Steel Works Hot Punches - Trim Dies Coke Pusher Shoes

Thermal Power Plants Stamping, Forging Cement, Power Stamping Steel Works, Foundry

TECHNICAL DATA:

Typical Hardness (2-passes): HRC: 28 - 30 Typical Hot Hardness (2-passes): HRC: 18 avg. at 1200°F Current & Polarity: AC or DCEP (+)

Availability and Recommended Amperages

Dia.	1/8" 3.2mm	5/32" 4.0mm	3/16" 5.0mm
Amp.	70-110	90-135	130-175

WELDING PARAMETERS:

Preparation: Remove all contaminants, particularly oil and grease. Lightly grind surface to remove superficial oxides. Preheat according to the base metal make-up and its potential to air harden. For tool steel surfacing use the recommended preheat and inter-pass temperatures for the grade and type.

Technique: Always use the lowest practical amperage range to minimize dilution. Deposit width should be between ½" and $\frac{3}{4}$ ". De-slag. Second and subsequent passes should tie into the weld deposit toe so as to avoid inter-pass "valleys". Alternate weld layer deposit sequence going from 9 o'clock to 3 oʻclock then 12 oʻclock to 6 oʻclock. Utilize a run-off strip or back whip craters to reduce crater-cracking tendencies.

Post-Welding: For air-hardening steels, slow cool using available insulating materials. For less sensitive base metals slow cool out of drafts.

YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



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