

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

## 9080N

EutecDur 9080N is designed for exacting applications involving elevated temperature service. Excellent broadbased 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.

## **TECHNICAL DATA**

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

DIAMETER	1/8" (3.2mm)	5/32" (4.0mm)
AMPERAGE	70 - 110	90 - 135

## PROCEDURE FOR USE

**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 ¾". 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 oʻclock 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.

## TYPICAL APPLICATIONS

- · Valve Plugs and Seats
- · Hot Work Dies Upset Dies
- Furnace Retorts
- Hot Forming/Forging Dies
- Hot Punches
- Trim Dies
- Coke Pusher Shoes



