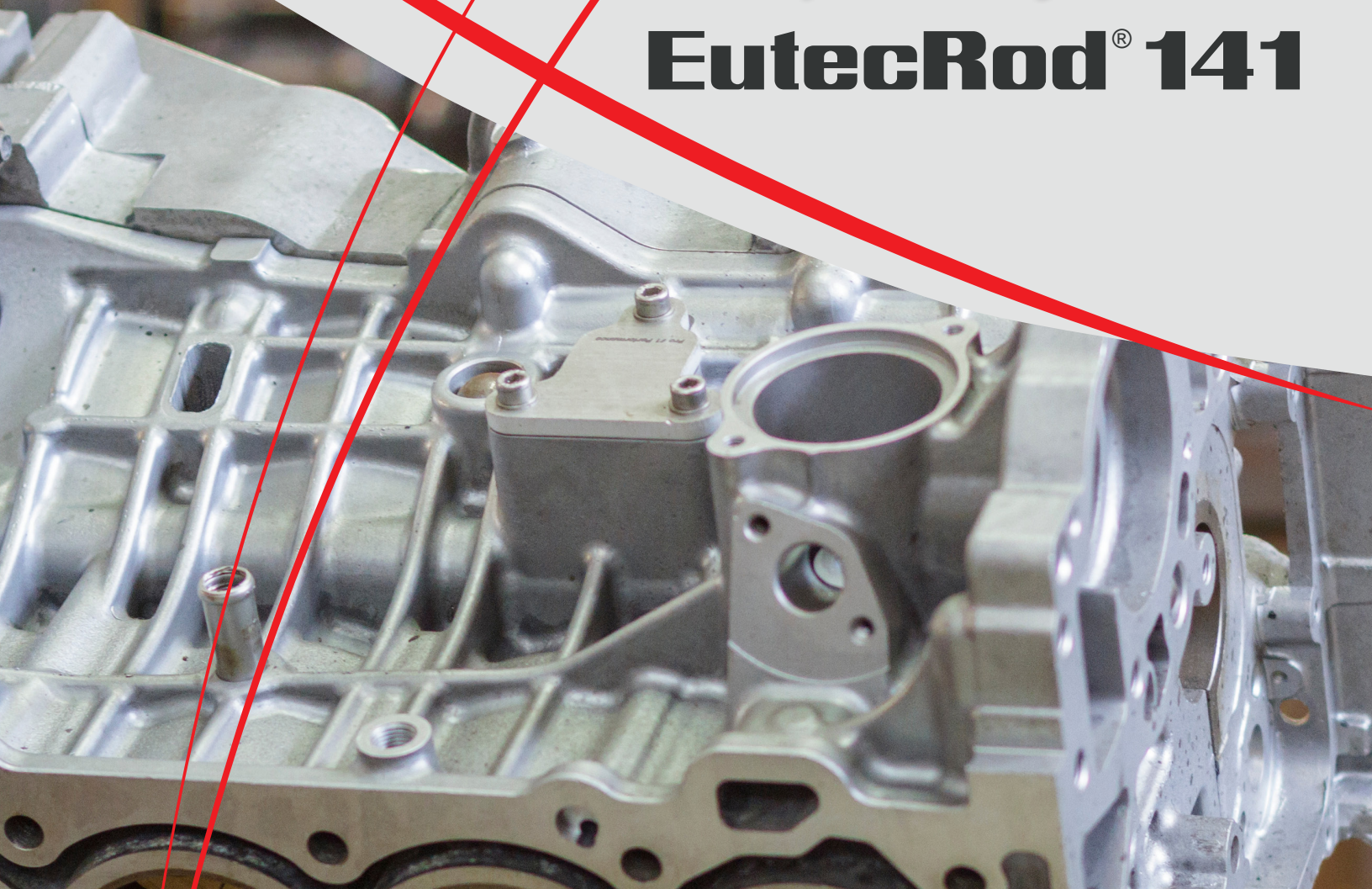




For Oxy-Fuel Fusion Welding of  
Major Casting Defects in Most Grades  
of Gray Irons Including Ductile Irons

# EutecRod® 141



- High silicon content for “hot fusion” welding of worn or broken surfaces
- Excellent color match for base metals
- Soft, ductile weld deposits are excellent for machining

# EutecRod® 141

EutecRod 141 is cast rod, high in silicon for “hot” fusion welding of broken and major worn surfaces. When applied using the correct procedure the weld deposit is soft, ductile, and extremely machinable. Deposits typically match those of the base metal.

## TECHNICAL DATA

### Typical Values

<b>Tensile Strength:</b>	40,000 psi (275 N/mm <sup>2</sup> )
<b>Hardness (BHN):</b>	200
<b>Color Match Properties:</b>	Excellent, will match the base metal.
<b>Heating System (Preheating):</b>	Furnace preferred with preheating to 1500°F (815°C)
<b>Torch:</b>	High capacity oxy-fuel torch with optimized BTUs.

## PROCEDURE FOR USE

**PREPARATION:** Prepare broken and/or cracked sections by either pneumatic chiseling or grinding. Machined surfaces will need to be protected during both the preheating and fusion welding steps. Molybdenum disulfide is suitable as a barrier. Slowly preheat to 1500°F (815°C) and temperature check frequently. Make sure to have heat-retardant blankets available to prevent heat loss.

**BRAZING:** Preheat EutecRod 141 and dip it into the 14D flux. Keep a steady but not excessive amount of flux on the rod and along the joint surface. Note that excessive flux use can cause flux entrapment. Add filler metal until the repair surface is slightly oversize which will allow for machining to-size.

**POST-WELDING:** Slow cooling is mandatory after oxy-fuel fusion welding. The preferred method is to slow cool in a preheated furnace set to cool-down at about 100°F/hr. If not available cover with heat-retardant materials such as vermiculite, or continue to cover with the heat-retardant blanket.

## TYPICAL APPLICATIONS

Common applications are cracked engine and pump cylinder heads, valve seat rebuilding, repairing cracked engine manifolds, and for repairs where the deposit must be fully machinable and be similar in composition and properties to the cast iron.



**Eutectic Corporation:**  
N94 W14355 Garwin Mace Dr.  
Menomonee Falls WI, 53051 USA  
+1 800. 558. 8524 • eutectic.com

**Eutectic Canada:**  
428, rue Aimé-Vincent Vaudreuil-Dorion,  
Québec J7V 5V5 Canada  
+1 800. 361. 9439 • eutectic.ca



Follow Us On...

