



RCI 100

GENERAL PURPOSE WELDING ROD FOR CAST IRON TORCH

APPLICATIONS AND USES

TORCH WELDING FOR MAINTENANCE AND PRODUCTION OF HEAVY AND LIGHT CASTINGS. COMMONLY USED ON PARTS WHERE COLOR MATCH IS CRITICAL SUCH AS FILLING OF SURFACE DEFECTS AND BUILDING UP WORN OR MISSING SECTIONS. ALSO USED TO REPAIR MACHINE BASES, ENGINE BLOCKS, CYLINDER HEADS, AND GEAR HOUSINGS.

GENERAL CHARACTERISTICS

RCI 100 CAST IRON WELDING RODS ARE USED WITH RCI F BRAZING FLUX. DEPOSITS ARE EASILY MACHINED AND HAVE EXCELLENT COLOR MATCH TO GREY CAST IRON. THEY ALSO RUST LIKE CAST IRON AND, THEREFORE, MACHINED REPAIRS ARE NOT NOTICEABLE.



SPECIAL CHARACTERISTICS

* ALL POSITION * MOISTURE RESISTANT COATING * HIGH EFFICIENCY
* AC/DC OPERATION * HIGH DEPOSITION * REQUIRES LOW AMPERAGE
* LOW DILUTION * LOW HEAT INPUT

TECHNICAL DATA

TENSILE STRENGTH.....UP TO 53,000 PSI (375 N/MM²)
HARDNESS (HB).....APPROX. 200
COLOR MATCH.....EXCELLENT
WORKING TEMPERATURE.....1600°F (870°C)
DIAMETER
(IN.) 3/16, 1/4, 5/16, 3/8
(MM) 5.0, 6.4, 8.0, 9.5

PROCEDURE

REMOVE RUST, DIRT, AND GREASE BY CHISELING OR GRINDING. BEVEL HEAVY SECTIONS TO FORM A 75° VEE. ALWAYS USE A SLIGHTLY CARBURIZING FLAME TO PREVENT POROSITY DUE TO OXIDATION OF CARBON. PREHEAT PART TO 800°F (430°C) BEFORE STARTING TO WELD. HEAT END OF ROD, DIP INTO PL 8020, AND TRANSFER TO WELD AREA. MELT OFF A SMALL AMOUNT OF ROD, CONTINUE HEATING UNTIL DEPOSIT FLOWS OUT. ADD FILLER METAL A DROP AT A TIME MAKING SURE EACH DEPOSIT IS FUSED TO THE BASE METAL; USE SUFFICIENT FLUX FOR GOOD CLEANING AND PROTECTION. AFTER WELDING ALLOW PART TO COOL SLOWLY TO PREVENT HARDENING AND CRACKING.

TYPICAL WELD METAL ANALYSIS

C	SI	MN	NI	TI	P	S	FE
3.5	2.92	.61	.66	.03	.04	.008	BAL.

United Alloys R&D Inc
716-488-2275
1-800-356-WELD(9353)
www.unitedalloysrd.com
unitedalloysnetsync.net
125 Blackstone Ave,
Jamestown, NY 14701