**Alloy for Clean Cast Iron** 

AC/DCEN
All Position



30105 Stephenson Hwy, Madison Heights, MI 48071 (248) 588-3790 (800) 521-7878 <a href="https://www.crownalloys.com">www.crownalloys.com</a>

## **High Nickel Alloy for Cast Iron**

## **Typical Applications**

**Crown 295** is an economical nickel electrode for general repair on all <u>clean</u> cast, ductile, nodular and meehanite iron. Use on engine blocks, machine bases, gear housings, manifolds and other thin sections of cast iron. It is also used to fill sand holes and foundry defects in cast iron. **Crown 295** is ideal for building up worn or missing sections which must be machined to final dimension after welding. Deposits can be filed, drilled and tapped. The **Crown 295** is also used to weld <u>clean</u> sections of cast iron to stainless steel. **Please see the Royal 290 technical data sheet if welding on dirty, scaly or oil soaked castings.** 

### **Specifications**

AWS A5.15 E Ni-Cl

Tensile Strength up to 50,000 psiYield Strength up to 45,000 psi

Color MatchElongation in 2"3.0%

Hardness approx. 160 - 200 Brinell

#### **Procedure**

Clean weld area if possible. Use AC or DC straight polarity (DCEN). Bevel or use **Chamfer 204** to form a "U" groove. Prepare the groove by grinding or filing it clean. Preheating is not necessary, although warming to 400°F to 500°F will produce a softer weld and minimize stresses on heavier sections. Locate the ends of all cracks. Use the **Crown 295** to weld 1-1½" long beads perpendicular to the ends of the crack. Begin welding from the center of the crack and weld alternately to the right and left. Select lowest possible amperage. Maintain a medium long arc with electrode tilted slightly in the direction of travel. Short stringer beads or narrow weave beads should be used to prevent excessive heat build-up. When breaking the arc, always fill the crater and drag rod back over the weld deposit. Stopping to peen often will help relieve stresses. When re-striking the arc, start on previously deposited weld metal, not on the base material. Allow part to cool slowly.

## Sizes, Amps and Part Numbers

Diameter	Amps	Part Numbers		
		1# Package	Standard Package	
3/32	30 – 75	NE295/EN-BP	5 lb pkg	NE295/EN
1/8	55 – 110	NE295/EO-BP	10 lb pkg	NE295/EO
5/32	75 – 135	NE295/EP-BP	10 lb pkg	NE295/EP
3/16	100 – 175	NE295/EQ-BP	10 lb pkg	NE295/EQ



# !!!! **WARNING** !!!!



WELDING FUMES AND GASES CAN BE DANGEROUS TO YOUR HEALTH.

BEFORE USING THIS PRODUCT THE WELDER (END-USER) MUST READ AND UNDERSTAND THE COMPLETE PRODUCT WARNING LABEL AND THE NEW 16 SECTION SAFETY DATA SHEET (SDS).

THE SAFETY DATA SHEET (SDS) WHICH OUTLINES THE POTENTIAL HEALTH HAZARDS AND SAFETY INFORMATION RELATED TO THIS PRODUCT CAN BE DOWNLOADED FROM THE SDS PORTION OF THIS WEBSITE. IT IS ALSO AVAILABLE FROM YOUR EMPLOYER AND WELDING SUPPLY DISTRIBUTOR.

DO NOT PROCEED WITH USE OF THIS PRODUCT UNTIL YOU READ AND UNDERSTAND THE SAFETY DATA SHEET (SDS) AND PRODUCT WARNING STATEMENT.

BE SURE TO CONSULT THE LATEST VERSION OF THE SDS.

SEE THE PRODUCT WARNING LABEL AND SDS FOR COMPLETE WARNING INFORMATION.



