

# Technical Data Sheet

## 345 Electrode and 345T TIG Wire



**Cronatron™**  
A LAWSON BRAND



### Overview

#### The Premium-Quality Tool-Steel Electrode for Impact and Wear

345 Electrode is a modified hot-work tool steel that is compatible with H11, H12, H13, and a wide variety of tool steel alloys for complete rebuilding or minor touch-up of tools and dies. The fully-alloyed core wire, combined with a unique flux coating, provides a deposit that is the ultimate in homogeneity, freedom from porosity and service life.

### Features/Benefits

- Easy to use – all positions
- Instant restrike – no spatter
- Air hardens – not necessary to heat-treat
- Completely homogeneous deposit
- Combines high impact and excellent wear resistance
- Versatile – use on a variety of tool steels
- May be heat treated using standard procedures
- Outwears ordinary H-12 tool steel 2-to-1

### Applications

- Forging dies
- Hot trim shears
- Upsetter dies
- Coining dies
- Punches
- Header dies
- Composite dies
- Sledge-hammer faces
- Repairing cutting edges
- Resurfacing die cavities

### Method of Application

AC or DC straight polarity for SMAW; DC straight polarity for TIG

### Identification

Printed Electrode; TIG .035 yellow tipped, other sizes individually numbered



**Directions for Use**

Prepare area to be welded by removing all cracks, heat checks or other defects by grinding or gouging with Cronacut Eagle™ 1100. Clean area of any slag, scale, rust, grease or drawing compounds. Preheat part to be welded to the proper heat for the base metal. Use a stringer bead technique, holding a close arc, and peen the weld while still hot to relieve stress. Remove slag between passes. For tempering curves and other additional information refer to Product Information Report PIRWE012.

**Technical Specifications**

Hardness: Rc 54 to Rc 58 as welded  
Hardening Temperature: 1,850°F (1,000°C)  
Tempering Temperature: 700°F to 1,000°F (370°C to 540°C)  
Preheat on Hot Work Steel: 800°F (425°C)