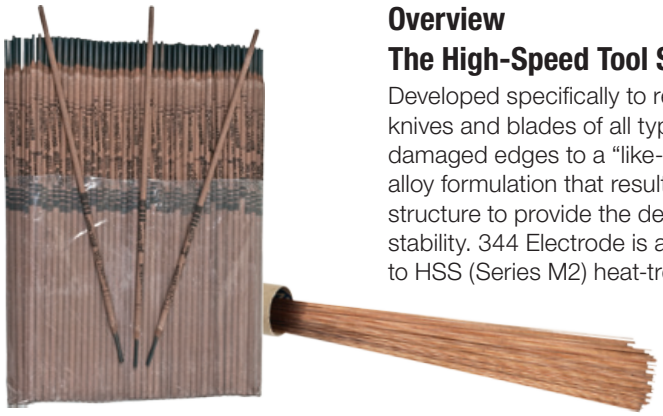
Technical Data Sheet

344 Electrode and 344T TIG Wire



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Overview

The High-Speed Tool Steel Alloy

Developed specifically to restore cutting edges to dies, augers, shears, drilling tools, knives and blades of all types. This highly specialized alloy can replace worn, broken or damaged edges to a “like-new” condition in minutes. 344 Electrode is an Equagrain™ alloy formulation that results in deposits of high purity that achieve the ultimate in grain structure to provide the desired characteristics of hardness, toughness and dimensional stability. 344 Electrode is a high-chrome, moly, tungsten, vanadium alloy that responds to HSS (Series M2) heat-treating procedures.

Features/Benefits

- Reduces cutting tool replacement costs dramatically
- Super-hard deposit retains sharp edge longer
- High resistance to heat; up to 1,150°F (620°C). Cutting or drilling tools can be made using low-cost, easily machinable steel and overlaying with 344
- Resists high shock conditions better than tungsten carbide
- No heat-treating required

Applications

- Re-edging dies
- Paper-cutter blades
- Punches and piercing tools
- Drills and augers
- Lathe cutting tools
- Metal shears
- Chisels

Method of Application

Arc weld AC or DC reverse polarity (electrode); DC straight (TIG wire)

Identification

Printed electrode; Flagged TIG wire

Directions for Use

Clean materials to be restored and resurfaced of grease, scale or loose particles. Preheat large or complex sections 500°F to 800°F (260°C to 425°C), or according to base-metal requirements. To obtain best results, deposit weld metal along 2" to 3", peen to relieve stress and continue same process until completed. Remove slag between beads. Postheating on large sections is recommended. For tempering curves and other additional information refer to Product Information Report PIRWE012.

Technical Specifications

Hardness: Rc 59 to Rc 63 as welded; Rc 63 to Rc 64 as tempered

Technical Tips

Strike an arc on a piece of scrap metal and transfer the arc to the weld area.