E6013 is a mild-steel, all position, general purpose cellulose-base rod. It operates on AC or DC welding current and works well on low voltage AC machines. E6013 is an excellent choice where there is poor fit-up in the joint. It deposits easily and smoothly producing medium to shallow penetration. Small sizes are well adapted to low heat on thin metals. Medium to heavy slag is easily removed and provides for excellent weld cleaning action during the welding process. E6013 is a great selection for all types of mild steel fabrications or repairs where ease of operation and good bead appearance are required.

Typical Applications

• General-purpose fabrication • Metal buildings and structures • Machine parts • Shaft buildup

AWS Specification

AWS A5.1/A5.1M:2004 AWS Classification E6013

Welding Current

AC - DC

Typical Wire Chemistry

C 0.20 Mn 1.20 Si 1.00 P *N.S. S *N.S. Ni 0.30 Cr 0.20 Mo 0.30 V 0.08 **Combined Limit** for Mn+Ni+Cr+Mo+V *N.S.

Typical Mechanical Properties

(As Welded) Yield Strength, ksi 48 Tensile Strength, ksi 60 Elongation%, min 17

Welding Positions

F,V,OH,H

Available Diameters

1/16", 5/64", 3/32", 1/8", 5/32" & 3/16"

Operating Range in Amps

1/16" 20 - 40 5/64" 25 - 60 3/32" 45 - 90 1/8" 80 - 130 5/32" 105 - 180 3/16" 150 - 230

*N.S. means Not Specified SINGLE VALUES LISTED ARE MAXIMUM