



Quality Management System
in accordance with
ISO 9001
Cert # 05-R0925

E6012 Carbon Steel Coated Electrode

U.S. ALLOY CO.
dba Washington Alloy
7010-G Reames Rd.
Charlotte, NC 28216
www.weldingwire.com



Description

E6012 high titania coated electrodes were developed for usage on thin sections and poor fit-up joints where shallow penetration is required. This electrode produces a quiet arc forceful enough to prevent slag build-up during vertical down welding. E6012 electrodes produce smooth, uniform weld deposit with low spatter and low porosity. Maximum deposition efficiency is attained even at increased currents and travel speeds on thick and thin base plates. E6012 electrodes may be used in any position.

Applications

E6012 is used for welding steel window frames, sheet steel, metal furniture, railway freight cars, automobiles, ships, barges, rolling stocks, pipes, castings and tanks. It is an excellent electrode to use for lap fillet joint welding on bottom plates in tanks.

TYPICAL WELDING PROCEDURES; DCEN or AC

Diameter	Amps (Flat)	Volts
3/32"	35-100	19-25
1/8"	90-160	20-24
5/32"	130-210	19-23
3/16"	140-250	18-21

Procedures may vary with change in position, base metals, filler metals, equipment and other changes.

TYPICAL WELD METAL CHEMISTRY (%) & PROPERTIES

	AWS Spec.	Weld Metal		AWS Spec.	Weld Metal
Carbon	0.20 max	0.09	Chromium	0.20 max	0.01
Manganese	1.20 max	0.46	Molybdenum	0.30 max	0.02
Silicon	1.00 max	0.26	Vanadium	0.08 max	<0.01
Phosphorus	N/S	0.14	Elongation in 2" (%)	17% min	26%
Sulphur	N/S	0.13	Yield Strength (ksi)	48 min	61
Nickel	0.30 max	0.01	Tensile Strength (ksi)	60 min	72
Mn + Ni + Cr + Mo + V	N/S		Charpy V-notch at	N/S	65

AVAILABLE SIZES: TE 6012 = 3/32", 1/8", 5/32", 3/16"

SPECIFICATIONS; ANSI/AWS A5.1 E6012
ASME SFA 5.1 E6012



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