

EXECUTIVE TUFF-WELD

WEAR RESISTANT CORED WIRE HARDFACING TECHNICAL DATA SHEET

DESCRIPTION

EXECUTIVE TUFF-WELD is a flux-cored, work hardening wire designed to resist impact, commonly referred to as a “Nickel-Chrome-Manganese”.

No preheat required. Minimize heat input by quenching with water. Do not exceed 500°F interpass temperature.

This high manganese wire will rapidly work harden.

APPLICATIONS & FEATURES

Executive TUFF-WELD is typically used as the overlay on manganese steel, carbon, and low alloy steels subjected to severe impact. Specific uses include: crusher rolls and cones, railroad frogs and crossings, bucket teeth, and impact hammers. It is also used as a buildup for abrasion resistant alloys such as Executive MAX-WEAR.

TYPICAL MECHANICAL CHARACTERISTICS

Abrasion Resistance:	Moderate	Hardness:	
Impact Resistance:	Severe	as welded	20 HRc
Machinability:	Work Hardens	work hardened	40+ HRc
Tensile Strength:	120,000 psi		

TYPICAL WELDING PARAMETERS

Diameter	Voltage	Amperage	Stick Out	Shielding Gas
.045"	21-23	140-180	½" – 1"	75%/25% Ar-CO2
1/16"	23-26	160-200	5/8" – 1 ¼"	75%/25% Ar-CO2
Size	1/8"	5/32"	3/16"	
Amps	100-145	125-185	150-220	

Deposition rate of 10 to 20 pounds per hour, relative to wire diameter

STANDARD PACKAGING

Spools	28-lb plastic spools	Electrodes	10-lb tubes in 1/8" and 5/32" diameters
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CLASSIFICATION

Executive TUFF-WELD is a nickel-chrome-manganese steel work hardening wire.

There is no AWS classification for this wire.

