



ALCHEMY ROD 7014

Classification

AWS A 5.1 : E 7014 - EN 499 : E 42 0 RR 33

ISO 2560-A : E 42 0 RR 33

Features

- An iron powder heavy coated rutile type electrode
- Specially designed for fast welding speed.
- Gives excellent stable arc, least spatters, fine ripples and very easy slag removal.
- Weld metal is of radiographic quality.
- Deposition efficiency 115% approx.

Applications

- Suitable for all mild steel structures, pressure vessels, boilers, wagons, tanks, ships etc.
- Manufacturing - Architectural and Structural Metals, Mining, Agricultural, Motor Vehicles, Aerospace, Shipbuilding
- Construction - Residential, Commercial, Bridges, Dams, Utilities
- Or any other industry where welders may work

Technical Specifications

Base Materials: Construction steels for general use , Tube steels, Ship steels

EN- Designation:	S185 - S355	L210 - L360
	P235 - P355	
Ship steels:	Quality A and B	
ASTM:	A285 grade C	A414 grade C, D, E, F
	A442 grade 55, 60	A515 grade 55, 60, 65

Typical weld metal Chemical Composition (%)

C	Si	Mn	S	P
0.07	0.25	0.65	0.020	0.025

All weld metal mechanical properties (typical)

Heat Treatment	Tensile Strength R_m (N/mm ²)	Yield Strength R_m (N/mm ²)	Elongation A_5 %
>400	510-600	>24	>47

Welding recommendations:

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Welding positions:



PA PB PC

Current conditions:	Diameter (mm)	Length (mm)	Current (A)
	3.15	350 & 450	110-140
	4.00	450	140-180
	5.00	450	180-230

Usage Instructions

- Step 1: Prepare the metal to be welded. Attach clamps to hold your metal pieces together, if needed and attach ground clamp to the larger piece of stock that is being welded. Turn on your welding machine and select the correct amperage range for the work you are attempting.
- Step 2: Insert or clamp electrode to electrode holder. Hold the electrode holder in your dominant hand by the insulated handle, with the rod in a position so that striking the tip of it against the plate you are welding will be as natural a movement as possible.
- Step 3: Select the point where you wish to begin your weld. Strike the electrode against the surface of the metal, pulling it back slightly when you see an electric arc occur. Travel across the path of your weld with the electrode keeping a consistent arc, moving at a consistent speed, and in line with the path you want to weld. Keep the arc established as you move along the weld you are making and move the electrode in a sweeping motion to create a wider bead.