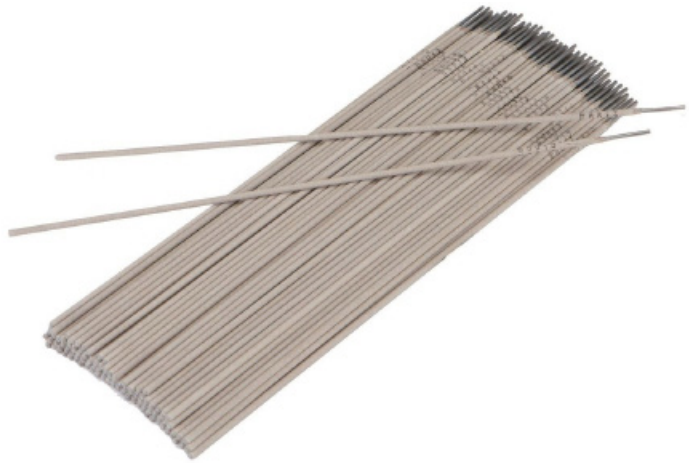
TECHNIWELDUSA

SPECIFICATION SHEET



LIGHTNING BOLT 7018

C-Mn and low-alloy steels

Classification

AWS A5.1: E 7018 H4 • EN 499: E 42 4 B 32 H5

EN ISO 2560: E 42 4 B 32 H5

Features

- Ultra smooth finely rippled weld beads.
- Less than 4.0 ml diffusible hydrogen level.
- Excellent impact notch toughness.
- Superior reliability for the critical welding of C-Mn microlloyed & low alloy structural steels.
- Recommended for critical security welding applications.
- Radiographic out of position welds including pipe welding.
- Suitable for off shore applications.
- Basic heavy coated, iron powder, low hydrogen electrode for producing tough and crack free welded joints even on steels having a carbon content up to 0.40%.
- Good operating characteristics when positional welding.
- Weld metal has good toughness properties down to -40°C.

Applications

- Used in structural engineering, boilers, tanks, bridges, ship building, vehicle constructions.
- 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: S(P)235-S(P)420; GP240-GP280; L245-L360
Approvals: ABS, BV, LRA
Country of Origin: India

All weld metal mechanical properties (typical)

Heat Treatment	Tensile Strength R_m (N/mm²)	Yield Strength R_m (N/mm²)	Elongation A_5%	Impact Energy ISOV (J)- 30°C
As welded	550-620	450	28	80 J

Typical weld metal Chemical Composition (%)

C	Si	Mn	P	S
0.07	0.40	0.65	0.020	0.020

Amperes (A)	2.40	3.20	4.00	5.00
	60-80	110-135	140-180	180-230

Welding recommendations:	= +	~

Welding positions:

Storage and Redrying: Keep dry and avoid condensation, HD≤5: Re-dry at 340-360°C for 2 hours, 5 times max

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.

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