



E7015-A1

Built for heat, engineered for reliability

ENGINEERED FOR ELEVATED TEMPERATURE PERFORMANCE

ISOARC E7015-A1 is a premium low hydrogen, sodium-coated electrode developed for welding 0.5% molybdenum heat-resistant steels operating at elevated temperatures. The electrode deposits a high-quality weld metal with excellent strength, creep resistance and crack resistance, making it suitable for pressure equipment and high-temperature service.

This electrode produces a smooth, stable arc with excellent fusion characteristics and superior mechanical properties. It is ideally suited for critical fabrication and maintenance work in power generation, petrochemical and refinery industries where long-term reliability is essential. E7015-A1 is a DCEP-only electrode and is commonly used for welding boiler tubes, pressure vessels and 0.5% Mo steels operating up to approximately 510°C.

Features & Benefits	Typical Applications
■ Premium Low Hydrogen coating ■ 0.5% Molybdenum weld deposit ■ Excellent elevated temperature performance ■ Superior creep resistance ■ Excellent crack resistance ■ Smooth, stable arc and easy slag removal ■ Suitable for DCEP ■ All-position welding (except vertical down)	■ for use on petrochemical plants ■ Boilers ■ Pressure vessels ■ Steam piping ■ High Temperature process equipment ■ Mining equipment ■ Heat Exchangers ■ Maintenance shutdowns

Technical Information

Classification	AWS A5.5 E7015-A1
Polarity	DCEP
Welding Positions	Flat ■ Horizontal ■ Vertical Up ■ Overhead
Base Materials	Carbon steels and low alloy steels ASTM A204,A355 P1,A182, A387 grade 11
Storage	Store dry. After opening vacuum pack store in Holding oven 120–150°C

Mechanical Properties	Typical	Typical Chemical Composition	
Tensile Strength	520 – 550 MPa	C < 0.12	Molybdenum < 0.5
Yield Strength	≥ 400 MPa	Mn 0.5 - 0.9	P+ S <0.03
Elongation	≥ 22%	Si < 0.5	

Current Range	
2.5mm	70 - 100A
3.2mm	90 - 140A
4.0mm	120 - 180A
5.0mm	170 - 240A

Manufactured by Thuthuka Welding Products (Pty) Ltd

Manufactured under an ISO 9001 quality management system using internationally proven formulations to deliver consistent welding performance and dependable quality.