

Suitable for all-position rapid welding of carbon steel and low alloy steel, commonly used in outdoor operations such as building steel structures, pipeline maintenance, and agricultural machinery

Recommended process: self-shielded flux-cored welding (FCAW-S), no external shielding gas required

■ Features:

■ Strong environmental adaptability: wind resistance up to 8m/s (3 times higher than solid welding wire), suitable for field construction

■ High-efficiency deposition: deposition efficiency $\geq$ 85% (30% higher than ER70S-6)

■ Process tolerance: can weld rusted/mildly oily base materials, low pretreatment requirements



Chemical properties

Element	C	Mn	Si	P	S	Other
Content	≤ 0.15	0.8-1.25	0.3-0.6	≤ 0.025	≤ 0.035	Aluminum powder + fluoride deoxidizer

Material properties

Characteristics	Value/Description
Tensile strength	≥ 480 MPa
Yield strength	≥ 400 MPa
Elongation (gauge length 50mm)	$\geq 22\%$
Impact toughness (-20℃)	≥ 27 J @ -20℃
Deposition efficiency	85%-92%
Splash rate	$\leq 3\%$