



FCAW LOW ALLOY STEEL (Weathering Steel)
AUTOMIG FC 180R

FCAW WIRE FOR WEATHERING STEEL JOINING



CLASSIFICATION : AWS A/SFA 5.29

APPROVALS :

E81T1-W2 C/M

RDSO Class IV

KEY FEATURES :

- Rutile type gas shielded FCW wire
- Stable and smooth arc
- Low fumes, Minimal spatters
- Easy slag removal, smooth weld bead
- Excellent corrosion resistance
- Matches coloring of ASTM weathering type structural steels
- Optimum combination of strength, ductility and notch toughness
- Radiographic quality weld

WELDING POSITION :



DCEP

Shielding Gas	Gas Flow Rate, LPM	Stickout, mm
CO ₂	10-20	10-20
80Ar+20CO ₂	18-25	10-20

TYPICAL APPLICATIONS :

- Welding of typical weathering steel such as ASTM A242, A588, CORTEN A and B grade
- Joining medium high tensile steel type D40S used for ship-building

STORAGE / HANDLING :

Keep dry and follow handling instructions mentioned on the box

CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt% :

	C	Mn	Si	Ni	Cr	Cu	S	P
Specification	0.12 max	0.50-1.30	0.35-0.80	0.40-0.80	0.45-0.70	0.30-0.75	0.025 max	0.025 max

MECHANICAL PROPERTIES OF ALL WELD METAL :

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact at -30°C, J
Specification	As Welded	550-690	470 min	19 min	27 min

With mixed gas chemical composition and mechanical properties will be higher.

PARAMETERS - PACKING DATA :

Ø, mm	Voltage, V	Amperage, A	Kg/Spool
1.2	22 - 30	130 - 300	15
1.6	24 - 32	200 - 380	15

EQUIVALENT :

SMAW Electrode: **Ultracorten III**