



## MAXFIL-42R

Rutile Type Flux Cored Wire

**CODIFICATION:**  
AWS/SFA 5.29  
E111T1-K4C

### CHARACTERISTICS AND APPLICATIONS:

Maxfil-42R is a low alloy steel flux cored wire designed for welding of high strength fine grained quenched & tempered steels to meet sub-zero impact resistance property down to -18°C. The wire is suitable for positional welding application, results easy slag removal and has excellent welders appeal. Weld bead is smooth & uniform and satisfies the requirements of radiographic quality.

Maxfil-42R is designed for single and multi-pass welding of similar composition steels and equivalent grade steels like; HY-80, NAXTRA-60/65, T-1, A/B grades of SA-203, A/B/C grades of SA-662, B/C grades of SA-737, etc. This wire is used for fabrication of penstock pipelines, crane plate, earth moving equipments and similar high strength applications, etc.

### CHEMICAL COMPOSITION OF ALL WELD METAL (%):

Element	C	Mn	Si	S	P	Cr	Ni	Mo	V
Range	0.15	1.20-2.25	0.80	0.030	0.030	0.20-0.60	1.75-2.60	0.20-0.65	0.03
Typical	0.062	1.50	0.33	0.014	0.018	0.36	2.34	0.38	0.005

### MECHANICAL PROPERTIES OF ALL WELD METAL:

Property	UTS (Mpa)	YS (Mpa)	%El (L=4d)	CVN Impact (Joules) at -20°C
Range	760-900	680 Min	15.0 Min	27 Min
As Welded	815	716	18.8	45

**WELDING POSITIONS:** H, F, VU, OH

**WELDING PARAMETER:** DC (+)

Diameter (mm)	HORIZONTAL/FLAT		VERTICAL UP		OVER HEAD	
	Volt, V	Current, A	Volt, V	Current, A	Volt, V	Current, A
1.20	24-28	160-260	20-22	100-160	22-25	100-160
1.60	24-28	180-300	20-22	110-200	22-25	110-200

**SHIELDING GAS:** Carbon Dioxide CO<sub>2</sub> (100%) at flow rate 12-15 litres per minute.

**PACKING :**

Standard size : 1.20 & 1.60mm. Other diameters may be available on request.

Quantity : Supplied approximately 15Kgs in a plastic spool. Each spool is sealed in an air tight polythene bag and then packed in a corrugated box.