



## MANGALAM® Mig Wire - FCW

### Flux Cored Excellence For High-Performance Welding

Mangalam MIG Wire - FCW is engineered to deliver consistent, high-quality welds for demanding applications. This rutile-type, gas-shielded flux cored wire ensures optimal performance with 100% CO<sub>2</sub> shielding gas, producing low fumes, minimal spatter, and smooth welds with radiographic quality. Its easy slag removal and all-position welding capability make it a reliable choice for various industrial uses.

#### Built For Seamless, High-Quality Welds

- Rutile-type gas shielded flux cored wire
- Designed for optimum performance with 100% CO<sub>2</sub> shielding gas
- Low fumes and minimal spatter for cleaner work environments
- All-position welding capability for versatile applications
- Easy slag removal with weld metal free of inclusions and porosity
- Radiographic quality welds for superior structural integrity

#### Versatile Solutions Across Heavy-Duty Industries



Welding C-Mn Steel With Tensile Strength Up To 550 N/Mm<sup>2</sup>



Chemical Plant Machinery, Ship Hulls, And Structural Steel Fabrication



Bridges, Towers, Cranes, And Shipbuilding



Construction Equipment, Farm Machinery, And Rolling Stock



Joining Steels Conforming To ASTM SA 36/36M; Grade A/B/C/D Of SA 283/283M And SA 414/414M

#### Packaging Data

- Vacuum Pack: 15 kg wire layer wound on plastic spool
- Drum Packing: Available in 100 kg and 250 kg options

#### Welding Parameters

Diameter (Mm)	Flat & Horizontal (Current/Volt)	Vertical Up (Current/Volt)	Overhead (Current/Volt)
1.20	150 - 250 A / 24 - 30 V	100 - 200 A / 20 - 26 V	120 - 200 A / 22 - 30 V
1.60	180 - 300 A / 24 - 32 V	120 - 220 A / 20 - 26 V	150 - 250 A / 22 - 32 V

Shielding Gas: 100% CO<sub>2</sub>, Flow rate 15-25 LPM

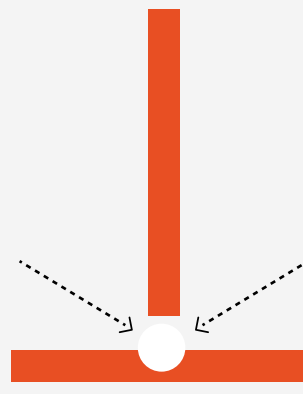
#### Chemical Composition Of Weld Metal (%):

Element	Component	Specification
Carbon (C)	0.06	0.12
Manganese (Mn)	1.20	1.75
Silicon (Si)	0.40	0.90
Sulfur (S)	0.010	0.030
Phosphorus (P)	0.015	0.030
Chromium (Cr)	0.020	0.20
Nickel (Ni)	0.015	0.50
Molybdenum (Mo)	0.010	0.30
Vanadium (V)	0.010	0.08
Copper (Cu)	0.010	0.35

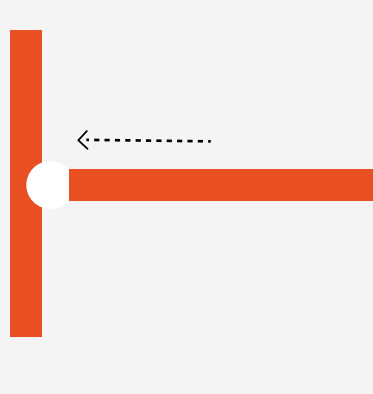
#### Mechanical Properties Of Weld Metal

Condition	UTS (N/Mm <sup>2</sup> )	YS (N/Mm <sup>2</sup> )	Elongation (%)	CVN Impact At -20°C (J)
Typical (As welded)	550	460	27	60
Specification	490 - 670	390 Min	22 Min	27 Min

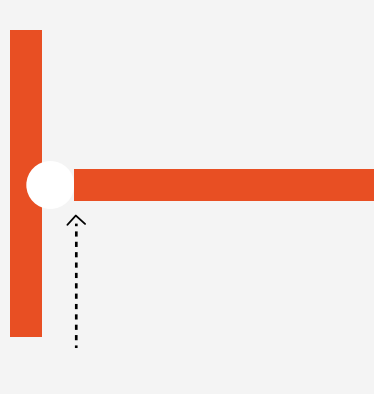
#### Welding Position - F, H, V, OH



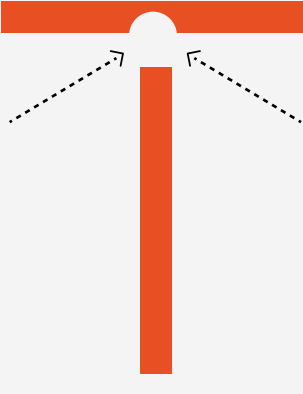
F



H



V-u



OH