YOUR SOURCE FOR QUALITY WELDING PRODUCTS SINCE 1968

ARCFUSION XM81

PRODUCT DESCRIPTION

ARCFUSION XM81 is an Advanced Seamless Metal Cored welding wire. This premium quality low temperature steel wire is alloyed with ~1% Nickel. It has all position capabilities and superior low temperature impact properties. XM81 is engineered to H4 classification to exceed your low hydrogen requirements.

KEY FEATURES & APPLICATIONS

- **Seamless technology eliminates moisture absorption.**
- **Low levels of diffusible hydrogen results in a lower risk of hydrogen induced cracking. Hydrogen levels in the 1-3ml/100g of weld metal for rutile and metal core wires can be expected.**
- **Excellent wire feeding characteristics and extended contact tip life up to 3X.**
- **No torsion twist provides outstanding automated welding performance.**
- **Improved penetration and porosity free welds in both spray and globular arc transfer modes.**
- **Faster welding speeds results in more deposited weld metal, increased productivity and lower production cost.**
- **Single and multi-pass capability with high welder appeal.**
- **Major industry applications; Maintenance & Repair, Oilsands, Fabrication, Mining, Construction, Railway, Agriculture, Pulp & Paper, Forestry, Petro Chemical, Oil & Gas, Ship Building, Hydro Power**

AVAILABILITY, PACKAGING & HANDLING

ARCFUSION XM81 is part of the ARCTEC® custom order program and is available on a special order basis. This MCAW welding wire is available on 15kg(33lbs) D300 spools. One pallet contains 63 spools (945kg/2211lbs and 250kg drums are also available. As with all welding wire products and best practices, handle this product with care to avoid damage to the spool and wire. Keep this product in original packaging prior to use.

RELATED ARCFUSION PRODUCT LINE

XR71 & XM71 - FCAW multipurpose steel wire with low temperature properties

XR81 - FCAW for low temperature steels and alloyed with ~1% Ni.

XR91 & XM91 - FCAW & MCAW for steel and pipe welding with low temperature properties.

XR111 - FCAW wire for high strength and low temperature steels and alloyed with Ni and Mo.

PRODUCT CLASSIFICATIONS

AWS A5.36	E81T15-M20-AP8-NI1-H4, E81T15-M21-AP8-NI1-H4
AWS A5.36M	E551T15-M20-AP6-NI1-H4, E551T15-M21-AP6-NI1-H4
AWS A5.28	E80C-NI1-H4
AWS A5 .28M	E55C-NI1-H4

SUPPLEMENTAL CLASSIFICATIONS & APPROVALS

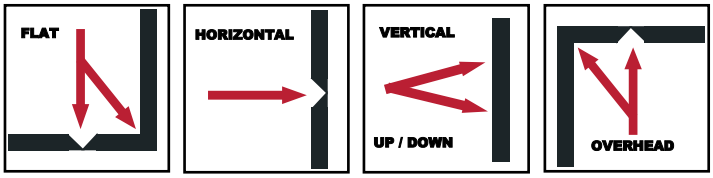
ISO 17632-A: T50 6 1NI M M 1 H5, ISO 17632-B: T576T15-1MA-N2-UH5

CWB: Certification Pending

MECHANICAL PROPERTIES

TENSILE	80 - 100 ksi	550 - 690 MPa
YIELD	> 68 ksi	>470 MPa
ELONGATION	≥ 19%	
IMPACTS	≥ 27J at –62 deg.C	≥ 20 ft-lbs at (-80 deg.F)
HYDROGEN	≤ 4ml/100g of weld metal	

Mechanical properties in the preceding tables are all weld results and represent the minimum and/or maximum range specifications for the associated wire. Actual results exceed values shown. ARCFUSION wires have full traceability and are supported with lot/heat specific MTR chemistry, mechanical and diffusible hydrogen results.



OPERATING PARAMETERS

PROCESS	METAL CORED ARC WELDING (MCAW)	
POLARITY	DCEP / REVERSE	
DIAMETER	0.045" / 1.13 mm	1/16" / 1.58 mm
VOLTAGE (V)	16 - 32	24 - 37
AMPERAGE (A)	120 - 320	270 - 400
WIRE FEED	120 - 400 in/min / 3 - 10 m/min	120 - 320 in/min / 3 - 8 m/min
SHIELDING GAS	M20–85-95% Argon, remainder CO2 / M21–75-85% Argon, remainder CO2	
GAS RATE	30 - 36 cfh / 15 - 18 l/min	
STICK OUT	1/2" - 7/8" / 12 mm - 22 mm	

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