

# Select 70C-8GT

Carbon Steel / Gas Shielded / Metal Cored

PRODUCT DATA SHEET

## FEATURES

- This product is intended for single and limited multiple pass welding of carbon steels, in horizontal fillet and flat position applications.
- Select 70C-8GT is ideal for those difficult-to-weld items such as heavily rusted and scaled surfaces. It can also be used when the steel is coated with oil or paint. This is due to special deoxidation that makes it very effective when welding over these surfaces.
- There are several advantages over welding with solid electrodes; increased travel speeds, better fusion into base material and sidewalls, and the virtual elimination of subsurface porosity.
- Strength levels and CVN toughness make it well suited for welding ordinary and fine grained steels such as ASTM A36, A285, A516, Grade 70 and A515 Grade 70.

## CONFORMANCES

AWS A5.36M	E490T15-M20A3-CS1-H4
AWS A5.36	E70T15-M20A2-CS1-H4

## DIAMETERS (in [mm])

0.045 (1.2), 1/16 (1.6), 5/64 (2.0)

## POSITIONS



## SHIELDING GAS

75-95% Ar / Balance CO<sub>2</sub>

Flow Rate: 40 - 50 CFH

## POLARITY

Direct Current Electrode Positive (DCEP)

## TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

Shielding Gas	C	Cr	Cu	Mn	Mo	Ni	P	S	Si	V
75%Ar / 25%CO <sub>2</sub>	0.04	0.05	0.05	1.62	0.004	0.03	0.010	0.010	0.68	0.007

## TYPICAL MECHANICAL PROPERTIES

Shielding Gas	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp	CVN @ -20°F (-30°C) ft-lb (J)
75%Ar / 25%CO <sub>2</sub>	92 (634)	81 (559)	28	As-Welded	-	60 (81)



Notice: Be sure to follow all your employers safety practices, policies and procedures when using this product. Refer to CSA W117.2 and ANSI Z49.1 Safety in Welding, Cutting and Allied Processes for further information and the manufactures SDS sheet. The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.

## RECOMMENDED WELDING PARAMETERS \*\*

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
0.045 (1.2 mm)	75% Ar/25% CO2	Flat & Horizontal	260 (6.6)	200	25	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	305 (7.7)	220	26	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	360 (9.1)	240	27.5	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	405 (10.3)	255	29	5/8 - 3/4 (16 - 19)
1/16 (1.6 mm)	75% Ar/25% CO2	Flat & Horizontal	200 (5.1)	250	25	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	245 (6.2)	290	26	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	275 (7.0)	310	27.5	3/4 - 1 (19 - 25)
		Flat & Horizontal	285 (7.2)	330	29	3/4 - 1 (19 - 25)
5/64 (2.0 mm)	75% Ar/25% CO2	Flat & Horizontal	170 (4.3)	350	25	3/4 - 1 (19 - 25)
		Flat & Horizontal	185 (4.7)	370	26	3/4 - 1 (19 - 25)
		Flat & Horizontal	210 (5.3)	400	28	1 - 1 1/4 (25 - 32)
		Flat & Horizontal	255 (6.5)	415	29	1 - 1 1/4 (25 - 32)

\* WFS = Wire Feed Speed, CTWD = Contact Tip To Work Distance

\*\*The parameters listed are recommended starting points of operation and the ranges for amperage, wfs, and voltage could be extended based on fitness for application. For products with "all-position" capability, as determined and listed in classification, the position recommendation can be determined based on operator skill and material thickness and isn't limited to the listing.

Welding parameters are for 75% Ar /25% CO2, at higher levels of argon the voltage should be gradually decreased: ½-1 volt for 85% Ar/15% CO2, 1-1 ½ volts for 90% Ar/10% CO2, and 1-2 volts for 95% Ar/5% CO2.

## APPROVALS

Agency	Approval	Shielding Gas	Diameter(s) in (mm)
CWB CSA W48-23	E490T15-M20A3-CS1-H4	M20 (90%Ar / 10%CO2)	0.045 (1.2) - 5/64 (2.0)

## PACKAGING [lbs (kgs)]

33 (15) Spools, 60 (27.2) Coils, 500 (226.8) Round Drum, 800 (362.9) Hex Drum, 900 (408.2) Hex Drum

\*Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.

## STORAGE AND HANDLING

All products should be stored in original packaging, in dry conditions and handled with care. For more information refer to our website.



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