



PHOENIX
WELDING WIRES
Melt Away Your Worries...

PHOENIX MIG WIRE



PHOENIX 70S_6



Grade :- AWS SFA 5.18 ER70S_6
EN ISO 14341-A G42 2 C1 4Si1
G46 5 M21 4Si1

Phoenix 70s_6 is a wire with a high deoxidizer content, made of low carbon steel, for welding steels with moderate amounts of scale or rust. Compared to other carbon steel welding wires, Type ER70S-6 wire has a higher deoxidizer content. This wire is suitable for welding steel with a moderate amount of scale or rust.

When using ER70S-6 in combination with gas shielded metal arc welding , use pure CO_2 or a mixture of argon + CO_2 .

It is a good choice for welding pressure vessels. It is an excellent choice for pressure vessels, structural steel, piping, steel buildings, and automotive repair.

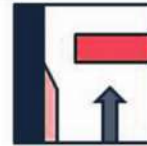
Sizes (mm) :- 0.60, 0.80, 1.00, 1.20, 1.60

Packaging :- 15kg/12.5kg Plastic Spool & Wire Spool
100 kgs and 250 kgs Drum Pack

Approvals :-



Welding Positions :-



Notes on Usage :-

- Pay attention to the gas purity and mixture ratio.
- Keep the gas flow rate between 15 ~ 25 L / Min.
- The extension length keep between 15 to 20mm.
- Clear the oil, rust, moisture, dust and other debris of the welded parts.
- Keep the welding hood clean and unobstructed.

MECHANICAL PROPERTIES & CHEMICAL COMPOSITION OF ALL WELD METAL OF PHOENIX 70S_6



Diameter mm :- 1.20mm

Flow Rate (l/min.) :- 20

Amp./Volt. :- 280/30

Stick Out (mm) :- 20-25

Interpass Temp. (C) :- 150 ± 15

Polarity :- DC (+)

Typical Chemical Composition of Weld Metal

Shielding Gas	C	Mn	Si	S	P	Mo
Ar + 20%	0.08	1.45	0.859	0.006	0.015	0.001
CO ₂	0.08	1.4	0.80	0.006	0.015	0.001

All Weld Mechanical Properties

Shielding Gas	UTS (MPA)	YS (MPA)	EL	CVN Impact Value Joule at -30°C
Ar + 20% CO ₂	620	510	27%	110
CO ₂	520	450	29%	92

Welding Position	Wire Dia (mm)		
	0.80mm	1.00mm	1.20mm
F & HF	150-300 Amp	150-310 Amp	150-330 Amp
Vertical Up	150-200 Amp	150-200 Amp	150-220 Amp

PHOENIX 70S_G



Grade :- AWS SFA 5.18 ER70S_G

Phoenix 70S_G is a low carbon steel wire that contains higher levels of manganese and silicon than other standard grades of MIG wire, producing high quality welds when used on dirty, oily or rusty steels. It is designed for flat and fillet welding and is to be used with a high current welding with Ar + Co₂ mixed shielding Gas. This filler wire is typically used to weld low-alloy steels, such as those that contain molybdenum or chromium. It is often used in the construction of pressure vessels, storage tanks, and other structures that require high strength and good toughness.

Sizes (mm) :- 0.80, 1.00, 1.20, 1.60, 2.00, 2.50, 3.15, 3.50

Packaging :- 15kg/12.5kg Plastic Spool & Wire Spool,

Above 1.60mm sizes 1Mtr. Cut length, Packed in 5 Kgs Plastic Tube

Welding Positions :- H, F, VU, OH

Typical Chemical Composition of Weld Metal						
Elements %	C	Mn	Si	S	P	Mo
Typical	0.08	1.00	0.38	0.008	0.015	0.001

All Weld Mechanical Properties					
Properties	UTS (MPA)	YS (MPA)	EL	CVN Impact Value Joule at 0°C	CVN Impact Value Joule at -30°C
Typical	555	475	27%	150	100

Welding Position	Wire Dia (mm)		
	1.20mm	1.40mm	1.60mm
F & HF	80-350 Amp	150-400 Amp	200-500 Amp
Vertical Up	80-150 Amp	-	-
Over Head	80-150 Amp	-	-

PHOENIX 70S_2



Grade :- AWS SFA 5.18 ER70S_2
EN ISO 14341-B G49A 3 C1 S2

Phoenix 70s_2 is a triple deoxidized copper coated mild steel GMAW wire, available in bright finish, gives smooth flow, stable arc and spatter free under optimum welding conditions. Because of the de-oxidizers (Ti, Zr, Al) ER70S-2 can be used on mild steels that are rusty or dirty. The as-welded filler metal deposit exhibits adequate strength and hardness. It gives radiographic quality welds. Normal applications include structural steel, carbon steel plate, pipe, fittings, castings, and forgings.

Sizes (mm) :- 0.80, 1.00, 1.20, 1.60, 2.00, 2.50, 3.15, 3.50

Packaging :- 15kg/12.5kg Plastic Spool & Wire Spool,

Above 1.60mm sizes 1Mtr. Cut length, Packed in 5 Kgs Plastic Tube

Welding Positions :- H, F, VU, OH

Typical Chemical Composition of Weld Metal											
C	Mn	Si	S	P	Ti	Zr	Al	Cu	Ni	Cr	Mo
0.05	1.25	0.55	0.02	0.02	0.1	0.09	0.09	0.06	0.10	0.10	0.10

Typical All Weld Mechanical Properties				
Properties	UTS (MPA)	YS (MPA)	EL	CVN Impact Value Joule at -30°C
Typical	530	440	28%	60

	Wire Dia (mm)		
	0.80mm	1.20mm	1.60mm
Current (A)	170-200	260-290	330-360
Volt (V)	28-32	27-31	26-30