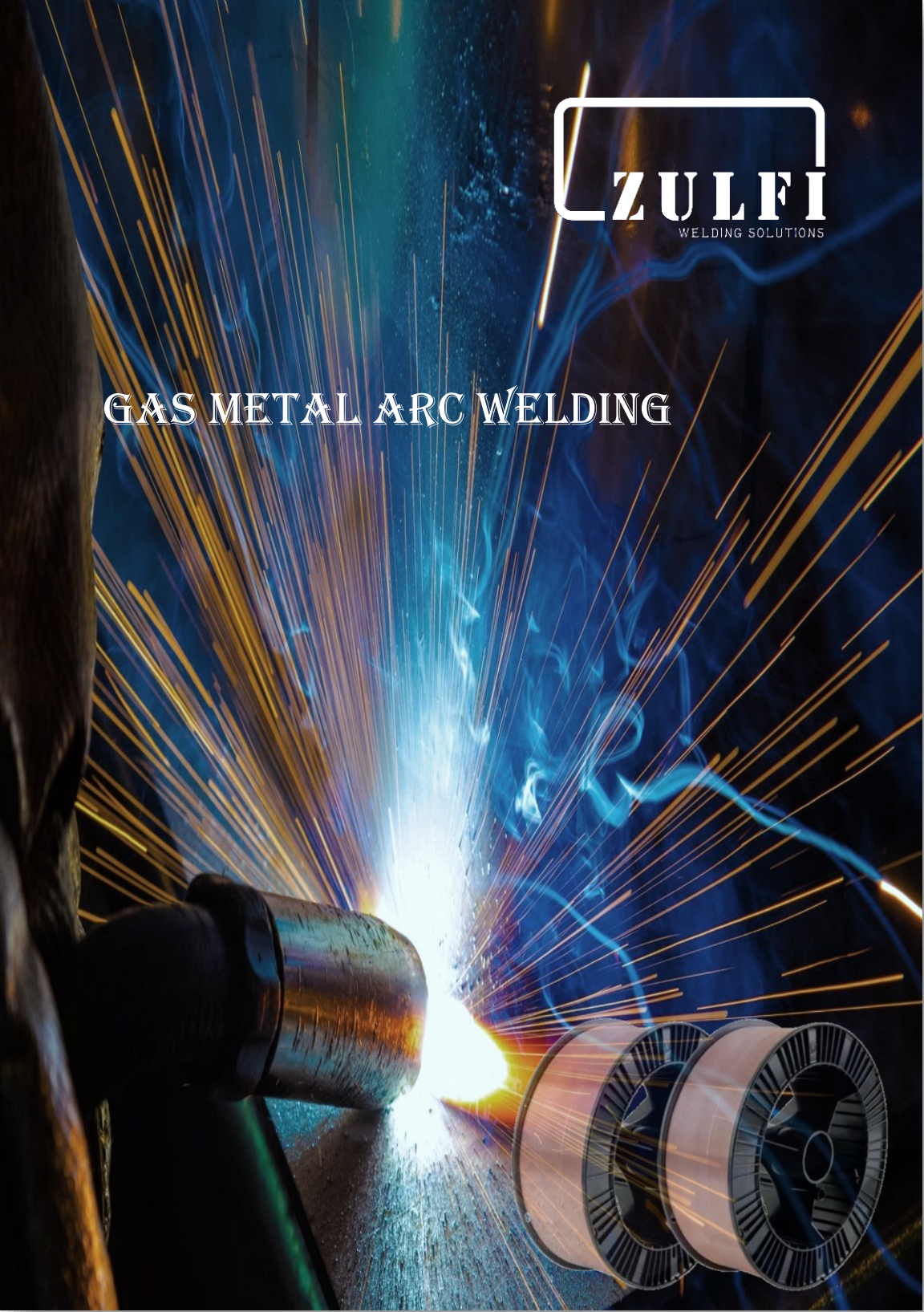




GAS METAL ARC WELDING



	EN \ DIN	SFA/AWS	Page
Mild steels			
ZULFI SW ER70S-6	G 42 3 C G3Si1, G 42 4 M G3Si1	ER70S-6	153
ZULFI SW ER70S-3	G 35 2 C1 2Si, G 35 2 M21 2Si	ER70S-3	154

Description & Applications

ZULFI SW ER70S-6 is a precision layer wound copper coated CO₂ wire having highest combination of Mn and Si deoxidizers. Higher levels of deoxidizers make it suitable for applications where dirt, rust or mill-scale is present. It permits high current welding with CO₂ & ArCO₂ shielding gas. It is good for out-of-position welding using short circuiting transfer. Controlled cast and layer wound makes this wire have very smooth feeding without any disturbance even with high-speed robotic welding.

High-speed robotic, automatic, and semi-automatic welding applications, construction and mining equipment, pressure vessels, LPG Cylinders, root pass pipe welding, tanks, Structural steel components, railcar construction and repair, frame fabrication, thin sheet metal, auto body, farm implements, Steel casings, shaft build up, and general fabrication.

Shielding Gas

CO₂ or Argon/CO₂ mixes

Welding current

DC+

Classifications

SFA/AWS A5.18	ER70S-6
EN ISO 14341-A	G 42 3 C G3Si1
EN ISO 14341-A	G 42 4 M G3Si1

All weld metal typical composition, %

	C	Si	Mn
100% CO ₂	0.09	0.50	1.00
80% Ar + 20% CO ₂	0.08	0.60	1.10

All weld metal typical mechanical properties,

Shielding Gas	CO ₂	Ar+CO ₂
Yield strength, MPa	≥420	≥420
Tensile strength, MPa	500-650	510-650
Elongation, %	≥22	≥24

Charpy V

Test temperature, °C	-30	-40
Impact values, J	50	50

Approvals

Welding parameters

Diameter, mm	Voltage, V	Current, A	Gas flow rate, LPM	STICK OUT, mm	Spool weight, kg
0.8	17-27	80-250	12-18 100%CO ₂ 17-22 ArCO ₂	10-20	15
1.0	18-30	100-350		10-20	15
1.2	20-34	120-400		10-20	15
1.6	-	-		-	-

- Available in D270 & D300 plastic spool.

Description & Applications

ZULFI SW ER70S-3 is a precision layer wound copper coated CO₂ wire A copper coated, G2Si/ER70S-3 solid wire for GMAW of all general structural and engineering unalloyed and low-alloyed carbon-manganese steels. The electrode may be welded with either a gas mixture or with pure CO₂ as the shielding gas.

ZULFI SW ER70S-3 is well suited for welding pipes, pressure vessels, steel buildings, and sheet steel. The sheet steel applications are varied and include ventilation ductwork, air conditioner compressors and frames, steel furniture, and many others. Care should be taken to avoid welding steel which has oil, mill scale, or other contaminants.

Shielding Gas

CO₂ or Argon/CO₂ mixes

Welding current

DC+

Classifications

SFA/AWS A5.18	ER70S-3
EN ISO 14341-A	G 35 2 C1 2Si
EN ISO 14341-A	G 38 3 M21 2Si

All weld metal typical composition, %

	C	Si	Mn
100% CO ₂	0.08	0.45	0.68
80% Ar + 20% CO ₂	0.08	0.51	0.70

All weld metal typical mechanical properties,

Shielding Gas	CO ₂	Ar+CO ₂
Yield strength, MPa	≥410	≥430
Tensile strength, MPa	500-650	510-650
Elongation, %	≥26	≥24

Charpy V

Test temperature, °C	-20	-30
Impact values, J	90	90

Approvals

Welding parameters

Diameter, mm	Voltage, V	Current, A	Gas flow rate, LPM	STICK OUT, mm	Spool weight, kg
0.8	17-27	80-250		10-20	15
1.0	18-30	100-350	12-18 100%CO ₂	10-20	15
1.2	20-34	120-400	17-22 ArCO ₂	10-20	15
1.6	-	-			-

- Available in D270 & D300 plastic spool.