

Solid wire corrosion resistant steel

## Classifications

AWS A5.28	EN ISO 14341-A
ER80S-G	G42 4 M GO

## Characteristics and typical fields of application

Solid wire for single or multipass welding of corrosion resistant steels such as Corten with Ar-CO<sub>2</sub> shielding gas. The exceptional mechanical properties of this wire make it suitable also for welding high yield strength steels.

## Base materials

EN 10025-5: S235J0W - S235J2W - S355J0WP - S355J2WP - S355J0W - S355J2W - S355K2W

## Typical analysis of solid wire (wt.-%)

C	Mn	Si	P	S	Cr	Ni	Cu
0.10	1.40	0.80	<0.025	<0.025	0.40	0.85	<0.40

**Structure:** Austenite with small amount of ferrite

## Mechanical properties of all-weld metal

Heat-treatment	Yield strength R <sub>p</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J
	MPa	MPa	%	-40°C
aw	440	550-660	22	47

## Operating data

	Ø (mm)	Current (A):	Voltage (V):
	0.80	35-250	14-30
	0.90	35-270	15-30
	1.00	45-270	15-32
	1.20	50-330	16-35
	1.40	60-370	20-39
	1.60	65-390	20-40