# شركة مصنع الزلفي لاسلاك اللحام المحدودة .Zulfi Welding Electrodes Factory Co. Ltd



## **ZULFI SW ER100S-G**

CLASSIFICATION	APPROVALS	GRADE	
AWS A5.28 ER100S-G	ABS	-	
	BV	-	
	DNV	-	
	LRS	-	

### **PROPERTIES**

ZULFI SW ER100S-G is a precision layer wound copper coated CO<sub>2</sub> wire having highest combination of manganese and silicone deoxidizers. Higher levels of de-oxidizers make it suitable for applications where dirt, rust or mill-scale is present. It permits high current welding with CO<sub>2</sub> gas shielding, and it can also be applied with ArCO2 shielding as well. 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.

### **APPLICATIONS**

 $CO_2$ 

It is widely used for welding structures fabricated by 690-720MPa grade tensile strength low alloy steels of X80, WH590, DB590, such as heavy trucks, high pressure vessels, industrial boilers, engineering & construction machineries, handling equipment's, pipelines and so on.

#### CHEMICAL ANALYSIS [TYPICAL VALUES IN %] CONDITION C Mο S Mn Si Cu Wire 0.08 1.45 0.70 0.10 1.30 0.45 0.015 0.015 Weld metal (100% 0.09 1.20 0.40 0.064 1.25 0.40 0.013 0.013

CURRENT CONDITION & WELDING POSITION

DC+

#### ALL-WELD METAL MECHANICAL PROPERTIES

CONDITION	YIELD STRENGTH (MPa)	TENSILE STRENGTH (MPa)	ELONGATION %	IMPACT STRENGTH
As welded (100% CO <sub>2</sub> )	≥ 620	700 - 760	≥ 20	50J at -40 ∘C

PACKING DATA									
DIAMETER (MM)	VOLTAGE (V)	CURRENT (A)	GAS FLOW RATE (LPM)	STICK OUT (MM)	WEIGHT PER SPOOL (KG)				
0.80	17-27	80-250	12-18 (100% CO <sub>2</sub> )		15				
1.0	18-30	100-350		10-20	15				
1.20	20-34	120-400	17-22 (ArCO₂)		15				
1.60	22-36	150-450			15				