

# ER 410

Stainless Steel **WIRE/GMAW**

## Standards

EN/ISO-Standard - 14343-A  
EN/ISO-Classification - G 13

AWS-Standard - A5.9  
AWS-Classification - ER 410

## Features and Applications

- Stainless steel wire designed to weld stainless steels of similar composition, including deposition of overlays on carbon steels to resist corrosion, erosion and abrasion.
- ER 410 contains sufficient carbon to enable air-hardening transformation of the weld metal to a predominately martensitic microstructure.
- Preheat and postweld heat treatments are required to achieve welds of adequate ductility for many engineering purposes.
- Ideal for welding or repairing 12% Cr air-hardenable stainless steels like types 410, 416, 420, 431 and cast C-15.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on applications for heat furnaces and turbine part production etc.
- Test Certificates can be found online @wilkinsonstar247.com**



## Typical Base Materials

Wrought or cast martensitic, types 403, 405, 410, and 416 stainless steel\*

\* Illustrative, not exhaustive list

## Welding Positions

EN ISO 6947 - PA, PB, PC, PD, PE, PF

## Shielding Gases

EN ISO 14175 - M12, M13

## Polarity

DC (+)

## Welding Parameters - M12

Ø mm	0.80	1.00	1.20
Current (A)	40-120	80-160	100-210
Voltage (V)	15-20	16-22	17-23

## Welding Parameters - M13

Ø mm	0.80	1.00	1.20
Current (A)	160-210	180-280	200-300
Voltage (V)	24-28	25-30	26-32

## Mechanical Properties

Tensile Strength (N/mm <sup>2</sup> )	Yield Strength (N/mm <sup>2</sup> )	Elongation (%)
≥450	≥250	≥15

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

## Chemical Composition % (Typical)

C %	Mn %	Si %	S %	P %	Ni %	Cr %	Mo %	Cu %
0.015	0.55	0.48	0.004	0.028	0.37	12.90	0.08	0.15

## Packaging Data

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
6011100369	0.80	15	D300 PLW	72
6011100371	1.00	15	D300 PLW	72
6011100375	1.20	15	D300 PLW	72

**Liability:** Whilst all reasonable efforts have been made to ensure the accuracy of the information contained, this information is subject to change without notice and can be only considered as suitable for general guidance.



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