

Product Data Sheet

SUPERMIG 410

SS MIG WELDING WIRE
Stainless and Heat resistant steels

Classification:

AWS A 5.9 : ER 410
EN ISO 14343- A: G 13

Description: SUPERMIG 410 is a ER410/G13 type solid MAG welding wire supplied precision layer wound, depositing a C-13%Cr weld metal. Suitable for use with Ar-CO₂ mix shielding gases. SUPERMIG 410 is mainly used for deposition of overlays on carbon steels to resist corrosion, erosion or abrasion.

Precision layer winding technologies ensure smooth, virtually trouble-free feeding.

Materials to be welded

1.4000 (X6Cr13); 1.4006 (X12Cr13) ,AISI 410

Typical Chemical Composition (%)

| C | Mn | Si | Cr | Ni | Mo | Cu | S | P |
|----------|----------|----------|-------------|----------|----------|-----------|-----------|-----------|
| 0.12 Max | 0.60 Max | 0.50 Max | 11.50-13.50 | 0.60 Max | 0.75 Max | 0.75 max. | 0.03 max. | 0.03 max. |

Typical All Weld Mechanical Properties

| Yield Strength N/mm ² | Tensile Strength N/mm ² | Elongation A5 (%) | Impact Energy ISO – V (J) 20° C |
|-------------------------------------|---------------------------------------|----------------------|------------------------------------|
| ≥350 | ≥450 | ≥20% | ≥47 |

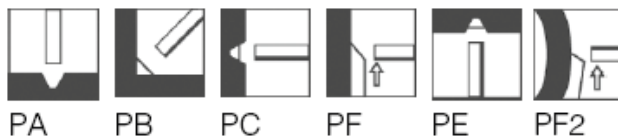
The chemistry and all weld mechanical properties will vary with the type of shielding gas used. Recommended shielding gas as per EN ISO 14175 : 98%Ar+2%O₂, Ar+0.5≤CO₂≤5.

Welding Directions :- MIG welding can be performed as short, spray or pulsed arc. Short arc is preferably used for thin gauges, both for horizontal and positional welding. Spray arc increases the deposition rate. Welding with pulsed arc gives excellent possibilities for a good result in varying plate thicknesses in all positions. The highest flexibility using pulsed arc is achieved with 1.20 mm

Current Conditions:- DC (+)

Storage: - Keep dry and avoid condensation.

Welding position:-





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Recommended Welding Data:-

| Diameter (mm) | | 0.8 | 1.0 | 1.2 |
|------------------------|------|---------|---------|---------|
| Operating range | | | | |
| Ar+1~2%CO ₂ | Amp | 40~120 | 80~160 | 100~210 |
| | Volt | 15~20 | 16~22 | 17~22 |
| Ar+1~2%O ₂ | Amp | 160~210 | 180~280 | 200~300 |
| | Volt | 24~28 | 24~30 | 24~30 |

Packing Data:

| Size (mm) | 0.80 | 0.90 | 1.00 | 1.10 | 1.20 | 1.60 |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Weight (kg) | 12.50/15.00 | 12.50/15.00 | 12.50/15.00 | 12.50/15.00 | 12.50/15.00 | 12.50/15.00 |

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