

MIDALLOY ER410NiMo BARE WIRE

CLASSIFICATION

- AWS 5.9 Class ER410NiMo / ASME SFA 5.9 Class ER410NiMo (UNS S41086)

DESCRIPTION

- MIDALLOY ER410NiMo bare welding wire is a martensitic stainless steel. Normally the chromium is kept on the low and the nickel high to avoid ferrite formation in the weld metal.

APPLICATIONS

- Typical applications include welding, repairing and overlaying of type 410 and 410NiMo castings (ASTM CA6NM)9 and wrought materials.
- ER410NiMo is used in the hydropower industry to combat erosion corrosion.
- Other welding applications include valves, valve seating surfaces, gears, propeller shafts, and impellers.
- Normally ER410NiMo has better weldability than ER410 due to its low carbon content.

TYPICAL CHEMISTRY

| C | Mn | Si | Cr | Ni | Mo | Cu | S | P | Fe |
|-----|-----|-----|-------|------|------|-----|------|------|------|
| .02 | .44 | .33 | 11.80 | 4.50 | 0.55 | 0,3 | .021 | .017 | BAL. |

TYPICAL MECHANICAL PROPERTIES*

| | |
|------------------|-------------|
| TENSILE STRENGTH | 118,000 PSI |
| YIELD STRENGTH | 98,000 PSI |
| ELONGATION IN 2" | 17% |

*Note: Mechanical properties listed reflect a post weld heat treatment @ 1125°F for 1 hour. Temperature above 1150°F may result in re-hardening in the weld metal.

WELDING PARAMETERS (see Page 2)

OTHER INFORMATION

Preheat and inter-pass temperatures are usually 350°F.

STANDARD PACKAGING

- TIG 10 lb. tube / 60 lb. carton
- MIG 30 lb. spool
- SAW 60 lb coils

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