UGIWELD 25.9.4 (MIG SuperDuplex)

AWS A5.9 ER2594
EN ISO 14343-A 25 9 4 N L

Spesialutviklet MIG-tråd for sveising av superdupleksstål.

General description:

Ugiweld 25.9.4 is a solid wire designed for gas metal arc welding (GMAW/MIG) of super duplex stainless steels such as SAF 2507, Zeron 100, and equivalent grades. It is suitable for both manual and mechanized/robotic welding on pipes and plates.

Argon/CO_2 mixed shielding gases are typically used during welding. For root backing gas, pure argon, nitrogen, or argon/nitrogen gas mix is recommended.

The resulting weld metal microstructure is influenced by welding parameters, gas composition and cooling rate.

Purity is a critical factor when welding high-alloyed materials. Keep weld zone free of any contaminations.

Single-sided welding requires the use of an appropriate purge (backing) gas to protect the root side of the weld and to ensure optimum corrosion properties and surface quality of the root bead.

The interpass temperature should not exceed 100 °C, and the heat input should be limited to a maximum of 1.5 kJ/mm to maintain the desired microstructure and mechanical properties.

Welding positions:

Welding current:

DC+

Gas flow:

14-18 l/min.

Chemical composition of welding wire:

C	Si	Mn	Ni	Cr	Mo	Cu	N	W	
Max 0.03	Max 1.0	Max 2.5	8.0-10.5	24.0-27.0	2.5-4.5	Max 1.50	0.20-0.30	Max 1.0	

Shielding gas:

Shielding gas : Ar, Ar + O2, Ar+CO2, (Ar+He+O2)
Backing gas : Pure Ar, Pure N2 or Ar+N2 mix

Mechanical properties of all-weld-metal:

Yield and Tensile Strengths				
Yield Mpa(Rp0.2)	Tensile Mpa(Rm)	Elongation %		
650	800	30		

Packaging information:

0,8 mm: 5kg spool / 15kg spool / 250kg drum
1,0 mm: 5kg spool / 15kg spool / 250kg drum
1,2 mm: 5kg spool / 15kg spool / 250kg drum
1,6 mm: 15kg spool / 250kg drum

Approvals:

DB, CE

Reference / date:

UGIWELD 25.9.4 (MIG SuperDuplex), English, 15.04.2026.