

Classifications

EN ISO 14343-A

AWS A5.9 / SFA-5.9

S 22 9 3 N L

ER2209

Characteristics and typical fields of application

Solid wire for submerged arc welding of duplex steel grades such as 1.4462 / S31803 used in offshore, shipyards, chemical tankers, chemical/petrochemical, pulp & paper, etc. Solid wire of S 22 9 3 N L / ER2209 type with high Cr and Mo-contents for good resistance to pitting corrosion and stress corrosion cracking in chlorine and hydrogen sulfide-bearing environment. Resistant to intercrystalline corrosion and wet corrosion up to 250°C. Over-alloyed in nickel to promote austenite formation. Suitable for service temperatures down to -40°C.

Recommended SAW flux:

Marathon 431

Base materials

TÜV-certified duplex stainless steels 1.4462 – X2CrNiMoN22-5-3 and others, also combinations of aforementioned steels and ferritic steels up to

S355J, 16Mo3 and 1.4583 – X10CrNiMoNb18-12 – UNS S31803, S32205

Typical analysis

	C	Si	Mn	Cr	Ni	Mo	N
wt.-%	0.015	0.40	1.5	23.3	8.8	3.2	0.15

Structure: Austenite/Ferrite

Operating data

Dimension mm

2.0

2.4

2.5

3.0

No preheating. Suggested heat input is max. 2.0 kJ/mm and interpass temperature max. 150°C. Post-weld heat treatment generally not needed. In special cases, solution annealing can be performed at 1050°C followed by water quenching.

Approvals

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