

Datasheet SM16

KM-2594

Classification

Shielding Gas:

Ar+1~2%O₂

Ar+1~2%CO₂

AWS A5.9/A5.9M

ER2594

AS/NZS ISO 14343

B SS2594

Applications and Features

- (1) Weld metal is super duplex stainless steel with 25%Cr-9%Ni-4%Mo-0.25%N.
- (2) Higher strength and excellent resistance to pitting and stress corrosion cracking.
- (3) It is suitable for welding super duplex stainless steel with such as Zeron 100 and 2507

Welding Instruction

- (1) Use Ar blend with 1~2%O₂ for high current, spray transfer welding.
- (2) Use Ar blend with 1~2%CO₂ for low current, short-circuit transfer welding.

Typical Chemical Composition of Wire (wt%)

С	Si	Mn	Р	s	Cr	Ni	Мо	N
0.015	0.42	0.65	0.013	0.004	25.1	9.2	3.9	0.25

Typical Mechanical Properties of Weld Metal (Shielding Gas: Ar+2%O₂)

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Tensile Strength MPa	Yield Strength MPa	Elongation %
840	650	28

Size and Suggested Operating Range (DC+)

			Diameter (mn	า)	
Shielding Gas		0.9	1.0	1.2	
Ar+1~2%CO ₂	Amp	60~140	80~160	100~210	
AI+1~2%CO ₂	Volt	15~21	16~22	17~22	
	Amp	170~260	180~280	200~300	
Ar+1~2%O ₂	Volt	24~30	24~30	24~30	

Diam.	15 kg Spool		
0.9mm	KM25940915		
1.2mm	KM25941215		