Stainless Steel
Solid GMA Welding Wire

TALWELD WELDING ALLOYS

Datasheet SM06

KM-312

Classification

Shielding Gas:	Ar+1~2%O_2	AWS A5.9/A5.9M	ER312
	Ar+1~2%CO_2	AS/NZS ISO 1434	B SS312

Applications and Features

(1) Weld metal is austenite structure with 30%Cr-9%Ni.

(2) Superior crack resistance and high strength due to high ferrite content.

(3) Good corrosion resistance at high temperature due to high Cr content.

(4) It is suitable for welding dissimilar metals, clad steel, stainless steel sheet linings, alloy steel with high hardenability and may be used as buffer layer before hardfacing.

Welding Instruction

(1) Weld metal becomes brittle at high service temperature or interpass temperature

(2) Use Ar blend with 1~2%O_2 for high current, spray transfer welding .

(3) Use Ar blend with 1~2%CO_2 for low current, short-circuit transfer welding.

Typical Chemical Composition of Wire (wt%)

C	Si	Mn	P	S	Cr	Ni
0.12	1.62	0.49	0.012	0.011	28.98	10.09

Typical Mechanical Properties of Weld Metal (Shielding Gas : Ar+2%O_2)

Tensile Strength MPa	Yield Strength MPa	Elongation %
740	600	25

Size and Suggested Operating Range (DC+)

Shielding Gas		Diameter (mm) 0.9	1.2
Ar+1~2%CO_2	Amp	60~140	100~210
	Volt	15~21	17~22
Ar+1~2%O_2	Amp	170~260	200~300
	Volt	24~30	24~30

Diam.	15 kg Spool
0.9mm	KM3120915
1.2mm	KM3121215

TALARC Pty Ltd
10-16 Syme St
Brunswick, Vic 3056
Ph. +61 3 9388 0588 Fax: +61 3 9388 0710
W: www.talarc.com E: sales@talarc.com