www.weldcotemetals.com







DESCRIPTION: Weldcote Metals 312 is used to weld cast alloys of similar composition and is used to weld dissimilar metals and weld overlays. This gives very high ferrite. When welding similar cast alloys, limit welding to two or three layers only.

312

<u>APPROVALS</u>: Manufactured under Quality System approved by ASME, IS09001. Meets AWS 5.9 Class ER312. Approved by Canadian Welding Bureau.

CHEMICAL COMPOSITION

MECHANICAL PROPERTIES

0.150	Tensile Strength	
1.000-2.500	109,500 PSI	760 MPA
0.300-0.650		
28.000-32.000	Yield Strength	
8.000-10.500	78,500 PSI	540 MPA
0.300		
0.020	Elongation	25%
0.030		
0.300		
	$\begin{array}{c} 1.000-2.500\\ 0.300-0.650\\ 28.000-32.000\\ 8.000-10.500\\ 0.300\\ 0.020\\ 0.030\end{array}$	1.000-2.500 109,500 PSI 0.300-0.650 28.000-32.000 28.000-10.500 78,500 PSI 0.300 0.020 Elongation 0.030

WELDING PARAMETERS

a)	MIG WELDING:	Direct current; Electrode +Ve	
	Shielding Gas	98/99% Argon + 2/1% Oxygen	
		97% Argon +3% CO2	
	Gas Flow	30 to 50 CFH	
	Voltage	29 to 33	
	Amperage	160/180 for .035" (0.9mm)	
		180/220 for .045" (I .14mm)	
		210/250 for .062" (1.6mm)	
b)	TIG WELDING:	Direct Current; Electrode –Ve	
	Shielding Gas	100% Argon	
	Gas Flow	30 to 40 CFH	
c)	SUB-ARC WELDING:	Direct Current; Electrode + Ve	
	Voltage	29 to 32	
	Amperage	300 to 350 for 3/32" (2.5mm)	
		400 to 550 for 1/8" (3.14mm)	
		500 to 650 for 5/32" (4.0mm)	
	Speed of Welding	20 to 30 IPM (500 to 750mm)/min.	

Weldcote Metals believes this data to be accurate and to reflect qualified expert opinion regarding current research. However, Weldcote Metals can not make any expressed or implied warranty as to this information.