

ALLOY 5183 | AlMg4.5Mn0.7(A)

KEY FEATURES

- Designed to meet the tensile strength requirements of high magnesium alloys
- Commonly used with 5083 and 5654 base materials
- Used for welding 6XXX series alloys or joining 6XXX to 5XXX

ADVANTAGES

- All-position aluminum MIG wire
- Superior wire surface finish for the best feedability and arc performance
- Optimal manufacturing process to precisely control chemical composition
- State-of-the-art testing equipment to ensure trouble-free performance of the weld wire
- Manufactured under a quality system certified to ISO 9001 standard

TYPICAL APPLICATIONS

- Cryogenic tanks
- Shipbuilding and other high strength structural aluminum applications
- Railway Industry
- Offshore Industry

CONFORMS TO

- AWS/ASTM A5.10/A5.10M:2012
- EN ISO 18273:2004

SHIELDING GAS

- 100% Argon
- Argon/Helium Mixtures
- Flow Rate: 30 - 50 CFH (14.2 - 23.6 L/min)

CHEMICAL COMPOSITION

ALUMINUM ASSOCIATION	5183
AWS/ASTM A5.10 /A5.10M: 2012	ER5183 R5183
ISO 18273:2004 Numeral	S Al 5183
ISO 18273:2004 Chemical	AlMg4.5Mn0.7(A)
EN 573-3	EN AW-AlMg4.5Mn0.7(A)

CHEMICAL COMPOSITION (%)		TYPICAL RESULTS
Al	Remainder	Remainder
Si	≤0.40	0.05
Fe	≤0.40	0.12
Cu	≤0.10	0.005
Mn	0.50-1.0	0.66
Mg	4.3-5.2	4.8
Cr	0.05-0.25	0.08
Zn	≤0.25	0.005
V	-	-
Ti	≤0.15	0.08
Be	≤0.0003	0.0000
Zr	-	-

APPROVALS

DB	DEUTSCHE BAHN	61.191.02	GL	GERMANISHER LLOYD	R Al Mg 4
CWB	CANADIAN WELDING BUREAU	per AWS A5.10:2012	DNV	DET NORSKE VERITAS	5183
ABS	AMERICAN BUREAU OF SHIPPING	WC	BV	BUREAU VERITAS	WC
TÜV	TECHNISCHER UBERWACHUNGS-VEREIN		LR	LLOYD'S REGISTER	WC/I-1

PACKAGING

See Product Approval Chart Pg.21

WIRE DIAMETER inches (mm)	PLASTIC SPOOL				BASKET SPOOL	ACCUPAK	ROD DIAMETER inches (mm)	TIG BOX	
	1 LB (0.45 KG)	5 LB (2.26 KG)	16 LB (7.26 KG)	20 LB (9 KG)	15.43 LB (7 KG)	300 LB (136KG)		10 LB (4.54 KG)	22.05 LB (10 KG)
0.030" (0.8 mm)	✓	✓	✓	✓	✓	✓	1/16" (1.6 mm)	✓	✓
0.035" (0.9 mm)	✓	✓	✓	✓	✓	✓	5/64" (2.0 mm)	✓	✓
0.040" (1.0 mm)	✓	✓	✓	✓	✓	✓	3/32" (2.4 mm)	✓	✓
3/64" (1.2 mm)	✓	✓	✓	✓	✓	✓	1/8" (3.2 mm)	✓	✓
1/16" (1.6 mm)	✓	✓	✓	✓	✓	✓	5/32" (4.0 mm)	✓	✓
							3/16" (4.8mm)	✓	✓

See AccuPak Payoff Accessories Pg.25