



S Al 5183 (AlMg4,5Mn0,7(A)) ER 5183

ALLUMINIO DA SALDATURA

NORME DI RIFERIMENTO:

Werkstoff NR. -3.3548

EN ISO 18273:15

AWS A5.10:12

CERTIFICATIONS:

ABS - TÜV - LR - DNV - BV - RINA

+ + WIP WIP WIP +

APPLICATIONS: MARINE FABRICATION AND REPAIR, TRAILER INDUSTRY AND OFFSHORE MILITARY INDUSTRY, RAILWAY & AUTOMOTIVE INDUSTRY, CRYOGENIC TANKS, SHIPBUILDING AND OTHER HIGH STRENGTH STRUCTURAL ALLUMINIUM APPLICATIONS

CHEMICAL COMPOSITION OF THE WIRE (wt.-%):

Elements	ALLUMINIUM		EN ISO		AWS	
	Min	Max	Min	Max	Min	Max
Si	-	0,10	-	0,40	-	0,40
Fe	-	0,15	-	0,40	-	0,40
Cu	-	0,05	-	0,10	-	0,10
Mn	0,05	1,00	0,50	1,00	0,50	1,00
Mg	4,30	5,20	4,30	5,20	4,30	5,20
Cr	0,05	0,25	0,05	0,25	0,05	0,25
Zn	-	0,05	-	0,25	-	0,25
Ti	-	0,15	-	0,15	-	0,15
Be	-	0,0003	-	0,0003	-	0,0003
Other each	-	0,05	-	0,05	-	0,05
Other total	-	0,15	-	0,15	-	0,15
Al	rem.		rem.		rem.	

MECHANICAL PROPERTIES OF ALL-WELD METAL:

		AN ISO	AWS
	typical values (*)	minimum values	minimum values
Tensile strength (Rm)	300 [MPa]	mechanical properties of the weld metal are not part of the classification	mechanical properties of the weld metal are not part of the classification
Yield strength (Rp0,2)	125 [MPa]		
Elongation (A%)	217 (L ₀ =5d ₀)		

(*) Typical values are referred to EN ISO 14175 I1 (100% Ar); base material 5083 O; preheating T -; Interpass T 85°C; as-welded condition. Tensile test acc. to EN ISO 4136; Charpy impact test acc. to EN ISO 9016.

PACKAGING AND AVAILABLE SIZES:

mm.	D-100 (0.45 kg.)	D-200 (2.0 kg.)	D-300 (7.0 kg.)	KS-300 (7.0 kg.)	D-355 (18kg.)	ALU DRUM (50 kg.)	ALU DRUM (173 kg.)	ALU DRUM (400 kg.)
0.80	X	X	X (6.0 kg.)					
1.00	X	X	X			X	X	
1.20	X	X	X	X		X	X	X
1.60		X	X	X	X	X	X	X
2.00			X	X	X	X	X	X
2.40			X	X	X	X	X	X
3.17			X	X				X