

## AISI 12

**CATEGORIE** GMAW-GTAW massieve draad

**TYPE** Aluminium silicon alloy for welding cast aluminum parts, also suitable as brazing alloy with suitable flux.

**APPLICATIONS** Aluminium alloy for welding and brazing. This material is generally used for brazing aluminium sheets, for extrusions and castings. (After anodizing the welding will be of a different colour)

**PROPERTIES** AISi12 was originally developed as a brazing alloy to take advantage of its low melting point and narrow freezing range. In addition, it has a higher silicon content than AISi5, which provides increased fluidity and reduced shrinkage. Hot cracking is significantly reduced when using AISi12 as a filler alloy. The alloy may be used in applications at sustained elevated temperatures. Non-heat treatable. Thicker sections should be preheated (150°C) prior to welding.

**CLASSIFICATION**

AWS	A 5.10: ER 4047
EN ISO	18273: S Al4047A (AISI12(A))
DIN: W.Nr.	3.2585
DIN	1732: SG AISi12

**SUITABLE FOR** G-AISI10Mg, G-AISI11 G-AISI12 (Cu), G-AISI7Mg, G-AISI6Cu4, G-AISI9Mg, G-AISI9Cu3, AlMgSi0.8, AlMgSi1, 4145, 3.2581, 3.2583, 3.2381, 3.2383, 3.2373, 3.2163, 3.2371, 3.2151, B 413.0, 361.0, 359.0, 356.0, 319.0

**APPROVALS** CE approved

**WELDING POSITIONS:**



**WELD DEPOSIT WEIGHT (TYPICAL) %**

Al	Mn	Si	Cu	Zn	Fe	Mg	Ti	Be	others
rem	<0.15	11-13	<0.30	<0.20	<0.6	<0.1	<0.15	<0.0006	<0.15

**TYPICAL MECHANICAL PROPERTIES**

Heat Treatment	R <sub>p0.2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	Impact Energy (J) ISO-V			T (°C)
				-20°C	-40°C	-60°C	
as welded	>75	>170	>6				573-585

**WELDING PARAMETERS / PACKING**

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A) DC+	spooling type	weight kg	pallet
0.8	13-22	50-160	D-100 / D-200	0.5 / 2.0	
1.0	13-26	70-180	D-100 / D-200 / K-300 / Drum	0.5 / 2.0 / 7.0 / 80	
1.2	20-29	140-260	D-100 / D-200 / K-300 / Drum	0.5 / 2.0 / 7.0 / 80	
1.6	25-30	190-350	K-300 / Drum	7.0 / 80	

**REDRYING TEMPERATURE** not required

**GAS ACC. EN ISO 14175:** I1, I3