

# **TIG ALS5**

Old reference: TIG AISi5

# Classification

AWS A5.10 : ER4043 | ISO 18273 : S AI 4043 (AISi5)

AMS : 4190

# **Description & Applications**

Solid rod for GTAW of Aluminium-Silicium alloys with Silicium content up to 7%. Applicable for a wide variety of Aluminium alloys like: 6060, 6061, 6063, 6070, 6071, and 6351. Mainely used in foundry reparations.

Main applications: Space industries, nuclear plant and armament.

#### **Base materials:**

DIN	Alloy	Material N°
AIMgSi0,5	3004	3.3206
AlMgSi1	3005	3.3210
AlSi7Mg	3303	3.2371
AlSi5Mg	5005	3.2341
	6060	
	6061	
	6063	
	6070	
	6071	
	6351	

# Typical Chemical Composition (%)

	Si	Fe	Cu	Mn	Mg	Zn	Ti	Be	O/E	O/T	Al
Min	4.5										
Max	6.0	0.8	0.30	0.05	0.05	0.10	0.20	0.0003	0.05	0.15	Rem.
Type	5.0	0.15	0.001	0.03	0.02	0.003	0.006	0.0001	< 0.05	<0.15	Rem.

# **All Weld Metal Mechanical Properties**

	R <sub>p0.2</sub> ( MPa )	R <sub>m</sub> (MPa)	A <sub>5</sub> ( % )
Min	-	-	-
Max			
Type	80	120	20

# **Welding Current & Instructions**

Welding mode	Shielding Gas
GTAW AC (~)	ISO 14175: I1 (100% Ar) / I3 (Ar+ 5-30%He) 5-10 L/min

### FT En-TL10-170206

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