

PRODUCT DATA SHEET

Afrox Filmax 4043 Afrox TIG 4043

Afrox Filmax 4043 and Afrox TIG 4043 are 95% aluminium, 5% silicon welding wires suitable for the welding of heat treatable base alloys, and more specifically, the 6XXX series. It has a lower melting point and more fluidity than the 5XXX series filler alloys and is preferred by welders because of its favorable operating characteristics. The ER4043 wires are also less sensitive to weld cracking with the 6XXX series base alloys. Afrox MIG 4043 is suitable for spray arc and pulsed arc transfer using high purity argon on thin sections or an argon/helium mixture (Alushield®) as a shielding gas on thicker sections. Flow rates of 15-20 l/min should be used. Afrox TIG 4043 should be used with a zirconiated tungsten electrode with pure argon or an argon/helium mixture (Alushield®) for thick sections, at flow rates of 10-15 l/min. For oxy-acetylene gas welding, a neutral flame should be used with aluminium welding flux (Item Number W001777).

Applications

Applications in the construction and automotive industry.

Materials to be Welded

Afrox Filmax 4043 and TIG 4043 wire is used to weld most aluminium alloys containing up to 7% silicon and can be used for welding wrought to cast aluminium materials, such as: BS 1470-1475 HE19, HE15, HE20 and HE30 material BS 1490 LM2 and LM6 castings Aluminium alloys (AAA).6061, 6062, 5052, 5154, 3003, 2024, 1050 and 1100 (After anodizing, welding will be of a dark grey colour).

Classifications

AWS	A5.10	ER4043
EN	18273	Al4043 (AlSi5)

Typical Chemical Analysis (Wire analysis)

% Silicon	4,5 - 5,5	% Zinc	0,1 max
% Iron	0,4 max	% Titanium	0,15 max
% Copper	0,05 max	% Beryllium	0,0008 max
% Manganese	0,05 max	% Aluminium	Bal.
% Magnesium	0,05 max		

Typical Mechanical Properties (All weld metal in the as welded condition)

0,2% Proof Stress	40 MPa
Tensile Strength	120 MPa
% Elongation on 5d	8

Packing Data

MIG			TIG			
Diameter (mm)	Pack Mass (kg)	Item Number	Diameter (mm)	Pack Mass (kg)	Consumable Length (mm)	Item Number
1,0	7,0	W077517	1,6	2,0	1 000	W030511
1,2	7,0	W033183	2,4	2,0	1 000	W077513
1,6	7,0	W033184	3,2	2,0	1 000	W030513
-	-	-	5,0	2,0	1 000	W030514

Recommended shielding gases: Argon or Alushield®

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