

## MT-AISI 5

## 3.2245

Aluminium-silicon-alloyed MIG/TIG wire welding AISi-Alloys.

### Standard designation

DIN 1732	SG - AISi 5
Material No.	3.2245
AWS/ASME SFA-5.10	ER 4043
B.S.2901, part 4	4043 A
EN ISO 18273	S Al 4043A (AISi 5)

### Main base metals

Aluminium-silicon alloys as well as joining dissimilar aluminium alloys to each other. Conditionally suitable for age-hardenable alloys like AlCuMg 1 (3.1325), AlMgSi 1 (3.2315), AlZn 4,5 Mg 1 (3.4335)

### Physical properties

El. conductivity at 20°C [S · m/mm <sup>2</sup> ]	Thermal conductivity at 20°C [W/(m · K)]	Linear thermal expansion coefficient (20 - 100°C) [1/K]
24 - 32	170	22,1 · 10 <sup>-6</sup>

### Mechanical properties of all-weld-metal (typical values)

Welding process Base metal Material thickness Gas shield Thermal treatment Test temperature	(mm)	TIG	MIG
		AISI 5 6 welding-argon untreated +20°C	AlMgSi1 6 welding-argon untreated +20°C
0,2%-yield strength R <sub>p0,2</sub>	[N/mm <sup>2</sup> ]	100	100
Tensile strength R <sub>m</sub>	[N/mm <sup>2</sup> ]	160	160
Elongation g A <sub>5</sub>	[%]	15	15

### Average chemical composition of all-weld-metal (%)

Al	Si
Basis	5

### Application notes

Preheat to 150 – 200°C any work piece thicker than 15 mm. Seams on age-hardenable alloys should not be located in areas subject to high mechanical stress.

### Gas types applicable (TIG/MIG)

Welding-argon

### Approvals

TÜV, DB, UDT

### TIG rod diameters available, unit weights

Diameter [mm]	Length [mm]	kgs per box
1,6	1000	10
2,0	1000	10
2,4	1000	10
3,2	1000	10
4,0	1000	10
5,0	1000	10

### MIG welding wire

Diameter 0,8mm 1,0mm 1,2mm 1,6mm 2,4 mm

**TIG ~**

**MIG = +**