AlSi5

CLASSIFICATION

AWS A5.3	E4043	**F-Nr**	23
ISO 18273	Al 4043A* (AlSi5(A))	**Mat-Nr**	3.2245

*:Deviation,see remarks

GENERAL DESCRIPTION

Especially for welding forged and cast aluminium alloys containing less than 5% Si as main alloying element
Good weldability, no porosity

WELDING POSITIONS (ISO/ASME)

PA/1G PB/2F PF/3Gu

CURRENT TYPE

DC +

CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

Al	Si
bal.	5.0

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Condition	0.2% Proof strength (N/mm²)	Tensile strength (N/mm²)	Elongation (%)
Typical values	AW	90	160	15

PACKAGING AND AVAILABLE SIZES

	Diameter (mm)	2.5	3.2	4.0
	Length (mm)	350	350	350
Metal can	**Pieces / unit**	-	-	-
	Net weight/unit (kg)	2.0	2.0	2.0

AlSi5: rev. C-EN23-01/02/16

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EXAMPLES OF MATERIALS TO BE WELDED

Aluminium-silicon alloys and dissimilar of several aluminium alloys. With restriction : precipitation hardening alloys such as :	Mat. Nr
AlCuMg1	3.1325
AlMgSi1	3.2315
AlZn4.5Mg1	3.4335

CALCULATION DATA

Sizes Diam. x length (mm)	Current range (A)	Current type	Weight/ 1000 pcs (kg)
2.5 x 350	40-70	DC+	9.2
3.2 x 350	60-90	DC+	14.0
4.0 x 350	80-120	DC+	20.4

*Stub end 35mm

WELDING PARAMETERS, OPTIMUM FILL PASSES

Diameter (mm)	Welding positions		
	PA/1G	PB/2F	PF/3Gup
2.5	60A	60A	55A
3.2	80A	80A	75A
4.0	110A	110A	105A

REMARKS / APPLICATION ADVICE

If the thickness is more than 10 mm, it is advisable to preheat at 150 - 250°C
Welding with short arc preferable
Electrode with 90°angle on material