

MT-CuSi 3

2.1461

Copper silicon alloy MIG/TIG welding wire.

Standard designation

EN ISO 24373	S Cu 6560
Material No.	2.1461
AWS/ASME SFA-5.7	ER CuSi - A

Main fields of application

Copper, low-alloy copper and copper zinc alloys; build-up welds on mild and low-alloy steels and cast iron.

Physical properties (typical values)

El. conductivity at 20°C [S · m/mm ²]	Thermal conductivity at 20°C [W/(m · K)]	Lineare thermal Expansions coefficient (+20°C-+300°C) [1/K]
3 - 4	35	18 · 10 ⁻⁶

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

Welding process Gas shield Thermal treatment Test temperature		TIG I1 untreated +20°C	MIG I1 untreated +20°C
	[°C]		
0,2 %-yield strength R _{p0,2}	MPa	120	120
Tensile strength R _m	MPa	350	350
Elongation A ₅	[%]	40	40
Impact strength A _v	[J]	60	60
Brinell-hardness HB 10/1000		80	80

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

Cu	Si	Mn	Sn	Fe	Zn
Bal.	3	1	0,1	0,07	0,1

Gas types applicable TIG

I 1

Gas types applicable MIG

I 1

Diameters available, welding current, unit weights

Diameter [mm]	Length [mm]	kgs per box [kg]
1,60	1000	10,0
2,00	1000	10,0
2,40	1000	10,0
3,00	1000	10,0
4,00	1000	10,0

MIG welding wire

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

Welding positions MIG acc.to EN ISO 6947

PA, PB, PF

Welding positions TIG acc.to EN ISO 6947

PA, PB, PC, PE, PF

Current/Polarity TIG

= -

Current/Polarity MIG

= +