

AX-CuSi3

Classification

Material-No.: 2.1461

EN 14640	S-Cu 6560 (CuSi3Mn1)
Material-No.	2.1461
AWS A.5-7	ER CuSi-A

Standard designations:

Copper-Silicon alloyed welding and brazing wire MIG and TIG

Special instructions:

TIG – generally preheating of base material is not necessary. Avoid wide soldering bathes. For resurfacing of steel based materials, increase the quantity of filler metal in the arc.

MIG – thick base materials have to be preheated at 250 °C. Avoid wide soldering bathes. For the first layer when resurfacing iron base materials, it is recommended to weld with pulsed arc.

Chemical composition in %:

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

Main applications:

Copper. Medium alloyed Coppers and Copper-Zinc alloys as well as surfacing of unalloyed or medium alloyed steels or Cast irons.

Mechanical properties:

Shielding gas Hot treatment Temperature controlled at	TIGG	Welding argon without 20 °C
Yield strength Rp 0,2%	[N/mm ²]	120
Yield strength Rm	[N/mm ²]	350
Elongation A5	[%]	40
Brinell-Hardness	[HB]	80
Impact values A _v	[J]	60
Electrical conductivity	[S*m/mm ²]	3-4
Heat conductivity	[W/(m*K)]	35
Coefficient of linear Heat expansion	(at 20-300 °C) [1/K]	17*10 ⁻⁶

Diameter tolerances

Diameter (mm)	Tolerances (mm)
0,60	+0,01 / -0,02
0,80	+0,01 / -0,03
0,90	+0,01 / -0,03
1,00	+0,01 / -0,03
1,20	+0,01 / -0,03
1,40	+0,01 / -0,03
1,60	+0,01 / -0,04

Shielding gas to be used

Welding-Argon

Approvals

(Present level ask on demand)

Delivery form:

Coil/drum	Ø mm	0,8	1,0	1,2	1,6	
rods	Ø mm x 1000mm	1,6	2,0	2,4	3,2	4,0