

ERCuSi-A

ERCuSi-A is copper based type material designed for welding of copper, low-alloyed copper and copper-zinc alloys. Also suitable for many brasses and nickel-silvers where silicon reduces zinc fuming. ERCuSi-A can be used for overlaying steels and cast irons for corrosion protection, for joining copper, dissimilar metals and for iron base alloys.








Characterized by high temperature and corrosion resistance.

Typical applications: zinc-coated car body sheets in the automotive industry, overlay welding on low-alloyed steels, solenoid valves, control cabinets, heat exchangers, mixers, marine shafts and other industrial equipment, etc.

1. Shielding gases (acc. EN ISO 14175)

GMAW/GTAW	I1	Inert gas Ar (100%)
	I2	Inert gas He (100%)
	I3	Inert gas Ar + 0÷95% He

2. Welding positions

						
PA	PB	PC	PD	PE	PF	PG

3. Chemical composition %

Cu	Si	Fe	P	Mn	Sn	Pb	Al	Zn	Other
rest	2.80-4.00	≤0.50	≤0.02	0.50-1.50	≤1.00	≤0.02	≤0.01	≤1.00	≤0.50

4. Mechanical properties, all weld metal

Heat treatment	Yield Strength, R _{p0.2} (MPa)	Tensile Strength, R _m (MPa)	Elongation, A (%)	Impact Energy ISO-V(J)	
				+20°C	-196°C
AW	≥100	≥345	≥20	≥50	-

5. Available size and packaging

Process	Diameter, mm	Box 5-10 kg	D100 1 kg	D200 5 kg	D300 15 kg	BS300 15 kg	K300 15 kg	Coil 25-40 kg	Drum 100-300 kg
GTAW	1.00 - 5.00	x	-	-	-	-	-	-	-
GMAW	0.60 - 2.00	-	-	-	-	x	-	-	-

* Customer packing on request.

Note: All information enclosed in this datasheet is based on our best knowledge and is given as indicative. Other special requirements are subject to prior discussion and approval of Vojay. Please contact us for any additional information or request.