



ELCu

STRENGTH MEETS CONDUCTIVITY

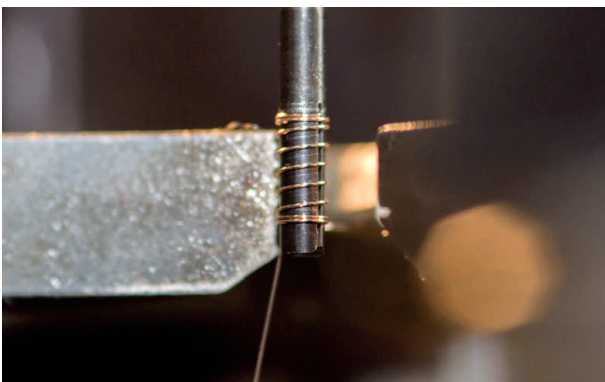
WHAT IS „ELCu“?

the **ELCu** family is comprised of various copper-based precision alloys. they combine a high tensile strength comparable to steel (of up to 1800 N/mm²) with an electrical conductivity similar to copper (up to 85 % IACS).

depending on the respective application we specifically select the suitable alloy composition.

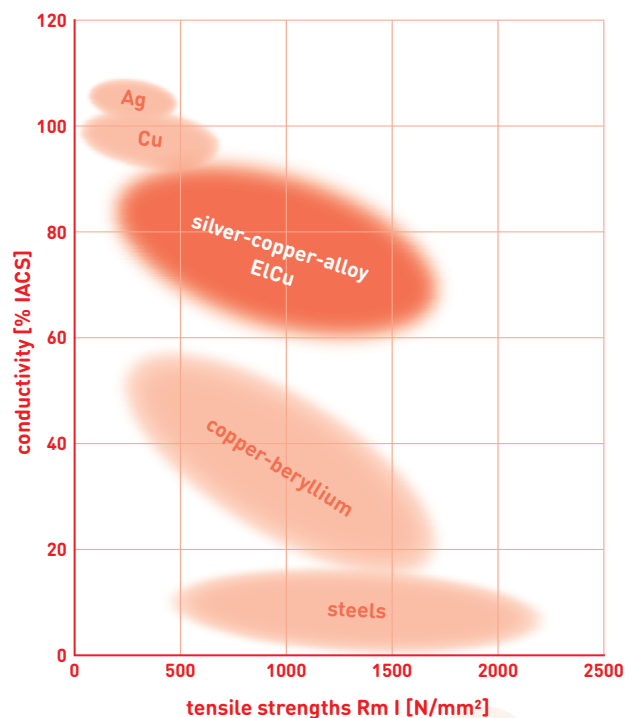
typical compositions from the **ELCu** family are, for example:

- **ELCu99** (1 % Ag, 99 % Cu)
max. content of Cu
- **ELCu90** (10 % Ag, 90 % Cu)
particularly in demand
- **ELCu50 / AgCu50** (50 % Ag, 50 % Cu)
Ag content equivalent to Cu content
- **ELCu28 / AgCu28** (72 % Ag, 28 % Cu)
eutectic alloy



picture of a microspring

due to high tensile strengths, our **ELCu** wires are highly suitable for micro-precision workpieces.



graphical representation classifying common materials according to electrical conductivity and tensile strength

as you can see in the above chart, an **ELCu** wire is the best solution to achieve high tensile strengths without having to sacrifice high conductivity.



DELIVERY TYPE.

ELCu wires are offered in the dimensional range from \varnothing 0.800 mm to \varnothing 0.015 mm, both bare and coated. furthermore, we can also provide flat wires as well as ready-made wire solutions. for more details, please refer to our information sheets „wire compositions“ and „flat and profiled wires“.

coil design

diameter in mm	recommended coil	recommended weight per coil in g
0,015 – 0,080	K50	50 – 150
0,015 – 0,100	K63	100 – 300
0,080 – 0,500	K80	350 – 800
0,250 – 0,800	K160	2000 – 6000

(**ELSCHUKOM** standard (DIN EN 60264-2-1), deviations possible on request)

HERE'S WHAT ELCu CAN DO.

ELSCHUKOM's ELCu wires are, in addition to their high strength and conductivity, characterised by good contactability through conventional technologies such as soldering or welding. furthermore, they are clearly more corrosion-resistant than pure copper. Also, they can be coated well by electroplating (with Sn, Cu, Ag, Au, AuCo) as well as insulating.

you can use **ELCu** wires in a wide variety of ways. for example for:



FUSES.



SENSORS.



HOME ELECTRONICS.

as well as for:



CUTTING WIRES.



FLAT WIRE AND STRIPS.



STRANDED WIRES.



MICRO-(PRECISION) WORKPIECES SUCH AS SPRINGS AND SCREWS.

our **ELCu** wires sound interesting to you?
ask for our data sheets or contact us directly:



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