

#### leads to new ideas.

# WIRE COMPOSITIONS

### WHEN DIFFERENT METALS GO TOGETHER FOR YOUR PRODUCT

**ELSCHUKOM** wire compositions offer the possibility of combining diverse properties of a wide range of metallic materials in many different ways. in the process, the metallic materials are bundled together to form an inseparable compact new wire.

#### SHEATHED WIRE.

we offer the majority of the **ELSCHUKOM** material range with different metallic coatings.

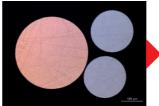
the desired sheathed wire is built up from the selected base metal and one or more metallic layers – usually via an electroplating process.

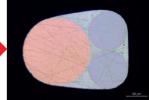
with our innovative continuous process we specialise in fine and extra-fine wires down to  $\emptyset$  0.006 mm. it offers the highest precision in terms of the individual coating layers, the wire diameter, the electrical resistance and the surface quality.



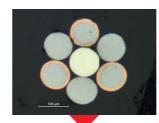
in addition to sheathed wires we also offer special solutions to achieve the desired wire properties. first, we assemble the various individual wires from the **ELSCHUKOM** range of materials. then the individual wires are joined to form the specified wire composition in a continuous process using various production methods.

 by dip soldering or hot tinning with standard solders or various special solders

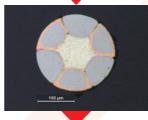


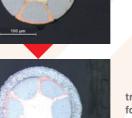


transverse section for schematic representation of a process for the production of multiple wires

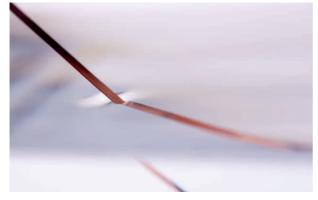


 by joining in the drawing process with subsequent possibility of sheathing as well as final drawing to a defined target diameter





transverse section for schematic representation of a process for the production of multiple wire



preparing a flat wire for the coating process

#### leads to new ideas.



#### **DELIVERY TYPE.**

composition wires are usually available as round wire in the dimensional range from Ø 0.800 mm to Ø 0.010 mm.

#### coil design

diameter in mm	recommended coil	recommended weight per coil in g
0.010 - 0.025	K50	10 - 20
0.015 - 0.080	K50	50 - 150
0.015 - 0.160	K63	200 - 300
0.080 - 0.400	K80	800 - 820
0.250 - 0.800	K160	5000 - 6000

(ELSCHUKOM standard, deviations possible on request)

furthermore, customer-specific flat and profiled wires as well as customised and surface-treated wire solutions can also be provided.

our information sheet "flat and profiled wires" provides inspiration for this.

#### **TYPICAL METAL COMPONENTS.**

coating material	standard coatings
Sn (matt or shiny)	flash-plated with tin, 5 – 50 %*
Ni	flash-plated with nickel, 5 – 10 %*
Cu	flash-plated with copper, 5 – 25 %*
Ag	flash-plated with silver, 1 – 50 %**
Au / AuCo	0.1 – 0.3 µm

the above values are **ELSCHUKOM** standard values, customer requests will be reviewed individually.

\* related to the core wire diameter

\*\* coating in weight per cent

## PREVIOUS APPLICATIONS OF OUR WIRE COMPOSITIONS.

FUSES.





HOME ELECTRONICS.

as well as for:



would you like to learn more about our wire compositions? ask for our data sheets or contact us directly:



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