



## FLAT AND PROFILED WIRES

### EVEN WITH EDGES A PERFECT CONCEPT

in various technical applications, flat or profiled wires can offer significant advantages compared to the corresponding round wire.

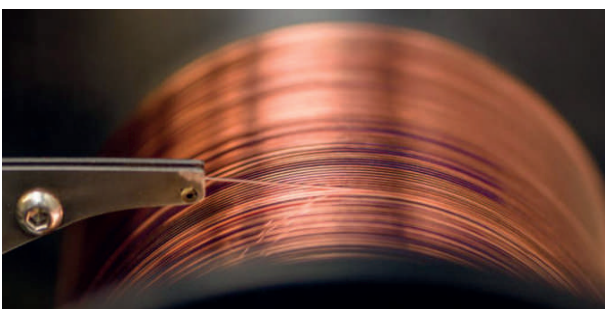
since the possible manufacturing processes can lead to quite different products, we subdivide this wire family according to the respective manufacturing process. comparing them shows the special potential resulting from the respective process.

#### FLAT WIRE.

through rolling, **ELSCHUKOM** manufactures a flat wire from a round wire in one or several steps.

our determining specification parameters are, next to the base material, the wire thickness and the electrical resistance.

the decisive wire properties are monitored and controlled during the rolling process using the latest laser and measuring technology. this ensures the highest precision.



the precise spooling of a flat wire is one of the strengths of **ELSCHUKOMs**

#### PRECISION FLAT STRIPS AND FOILS.

precision flat strips and foils expand the range in the area of flat and profiled wires, preferably for silver and silver-plated copper. during production, a greater width/thickness ratio can be achieved compared to flat wires.

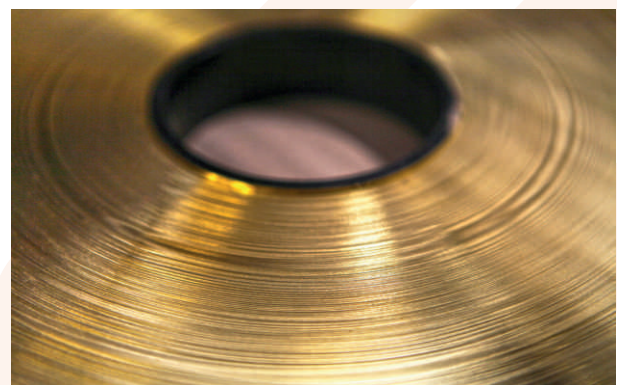
the desired thickness and width are typically defined for the base material. if desired, the electrical resistance is also precisely specified.

depending on the dimensional range, a distinction is made between flat strips and foils as follows:

table of sizes

	width (mm)	thickness (mm)
foil	1 – 90	0.04 – 0.09
flat strip	1 – 90	0.10 – 0.35
	9 – 90	0.35 – 0.50

the availability of any other dimensions is to be checked individually.





## DELIVERY TYPE.

our flat and profiled wires can be manufactured in bare, coated and partially coated versions. the **ELSCHUKOM** information sheet „coated wire compositions“ provides an overview of our standard material selection for core and layering materials.

**ELSCHUKOM** offers flat and profiled wires preferably in an annealed condition. do you need a comparatively higher level of strength? do not hesitate to contact us with your request.

as base material we can use the entire **ELSCHUKOM** range. for more details, please refer to our information sheets „**ELCON**“ or „**ELCu**“.

for optimised positioning, biconical coils are used as standard.

## PROFILES/SPECIAL GEOMETRIES.

building on our experience in flat wire production we at **ELSCHUKOM** have developed expertise in rolling profiled wires of various shapes.

examples of geometries:



trapezoidal wire



hexagonal wire



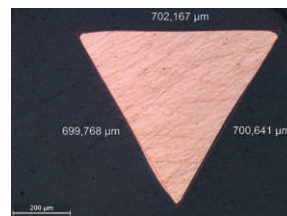
square cross section

the following dimensions are possible for rolled profiles in **ELSCHUKOM** standard:

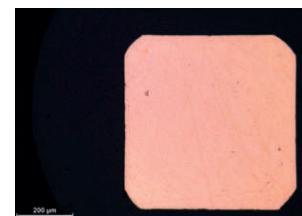
cross-sectional area	up to 0.2 mm <sup>2</sup>
width	up to 1.2 mm
thickness	up to 0.5 mm

beyond the possibilities of rolling technology, the most unusual wire cross-section shapes can be achieved by drawing technology and the use of special profile drawing dies.

please contact us if you are interested in our special geometries.



transverse section of a triangular wire



transverse section of a square wire

if you would like to learn more about our flat and profiled wires, please do not hesitate to contact us:



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