

TECHNICAL ALLOYS



SAXONIA offers a wide range of semi-finished products. Our product portfolio ranges from individual melting products, tubes, rods, sheets and wires to anodes, targets, precision strips, milled and turned parts. Our high-quality semi-finished products are used as technical materials in many industrial sectors.



In particular, our customers include manufacturers of electronic components, switches and fuses for electrical engineering and electrics, as well as plant manufacturers and suppliers to the chemicals and energy technology industries. We offer precious metal targets for thin-film technology mainly used in optical data storage, electronics and glass coating.



#### PRODUCTS

Flat products	Round products	Profiles	Melting products
Sheets	/ Wires	Flat wires	Plates
🖊 Tapes	/ Bars	Profile wires	/ Anodes
Strips	Tubes		
/ Foils			
Targets and evaporation materials	Anodes, dogbones and clippings	Milled parts and turned p	parts
			Other products are available upon request.

#### MATERIALS

Materials	Precious metal content in mass %	other elements	Melting temp. / range in ° C	Density in g/cm³
Ag 9999 Ag 999	99.99 99,9	-	962	10.5
AgCu	99.0 20	Cu	779 990	10.1 9.2
AgCu 50	50.0	Cu	779 865	9.7
AgCu1,8Ni0,2	98	Cu, Ni	940	10.4
AgCu3,8Ni0,15	96.85	Cu, Ni	910 930	10.4
AgNi 0,15	99.85	Ni	960	10.5
AgNi 90/10	90	Ni	961	10.3
AgNi 85/15	85	Ni	961	10.2
AgNi 80/20	80	Ni	961	10.1

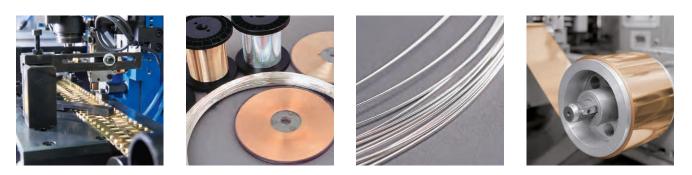
### DIMENSIONS

Flat products	Thickness mm	Width mm	Length mm
Sheets	0.2 5.0	100 500	100 1000
Tapes	0.2 5.0	10 350	100 1000
Strips	0.1 0.8	1.0 100	-
Foils	0.05 0.1	1.0 100	-

Round products	Diameter mm
Round wires	0.3 5.5
Bars	5.0 20.0

### CONDUCTOR AND CONTACT MATERIALS

SAXONIA manufactures conductor and contact materials for a variety of electrical and electrotechnical components. The material chosen is crucial for its reliability and lifespan. Therefore, for every application there is a variety of available materials that guarantee the required electrical and thermal conductivity values, strength properties and technological properties for processing.



### **PRODUCT TYPES**

<b>Manufacturing process</b> Materials	<b>Flat proc</b> Sheets	<b>lucts</b> Tapes	Strips	Foils	Round products Wires	<b>Profiles</b> Flat wires	Profile wires
<b>Metallurgical materials</b> Ag 9999 Ag 999 AgNi 0,15 AgCu (1 bis 20% Cu) AgCu 50	:	:	:	:		:	:
Sintered materials AgNi 90/10 AgNi 85/15 AgNi 80/20					:	:	:

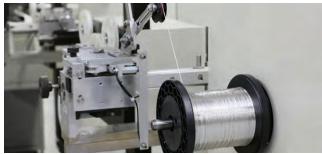
Other materials, combinations and dimensions are available upon request.

# **/** FUSE ELEMENTS

SAXONIA supplies fuse elements for fuses in low- and high-current applications. As a long-standing partner of the electrotechnological



industry and renowned fuse manufacturers, our high-tech products meet all the required standards.



#### **PRODUCT TYPES**

Materials	<b>Flat products</b> Wide strips	Narrow strips	Foils	Round products Round wires	<b>Profiles</b> Flat wires
Ag 9999 Ag 999	•	•	•		
AgCu 50					
E-/0F-Cu					
Ag/Cu/Ag (electroplated)	•	•	•		

### DIMENSIONS

Flat products	Thickness in mm		Width in mm
Wide strips	0.1 0.8		20 110
Narrow strips	0.1 0.8		1.0 20
Foils	0.02 0.1		1.0 110
Round products		Diameter in mm	
Round wires		0.3 5.5	
Profiles			
Flat wires		Dimensions and toler	rance by arrangement.

### PRECIOUS METAL MANAGEMENT / SERVICES

- Fixing of precious metal
- Holding and administration of metal accounts
- Procurement of precious metals
- Price information

- Refining of wastes containing precious metal
- Insured transport and collection of customer material
- Cleaning of shields and masks
- Chemical laboratory and materials testing laboratory

## **/** TARGETS AND EVAPORATION MATERIALS

SAXONIA produces targets and vacuum evaporation materials from precious metals in thin-film technology for various cleanroom and vacuum applications: these include optical data storage, electronics, glass coating (low-E), photovoltaics, foil coating and mirror production.

Our targets can also be used as consumable material for sputtering in magnetrons. Here the coated object is given special wave-dependent (for example, heat-reflective or translucent) properties.





Ag / Pd / Au / AgPd / Pt / AgAu (Melted metallurgical, high-purity)
As per drawing
<ul> <li>Segmented large targets up to 4m: thickness up to 35 mm panel length to 1.5 m</li> <li>round targets</li> </ul>
Various grades according to customer specifications
Surface milled, tolerances according to drawing

### SERVICE

- Refining of used targets and sputtering waste
- ✓ Joint target development and optimisation

- Just-in-time delivery
- Direct transportation and insurance





## ADDITIONAL BUSINESS FIELDS



## FOUR COMPANIES - ONE STRONG PARTNER.





SAXONIA Edelmetalle GmbH / Erzstraße 9 / 09633 Halsbrücke / Germany Phone +49 3731 2089-0 / Fax +49 3731 2089-100 / info@saxonia.de / www.saxonia.de