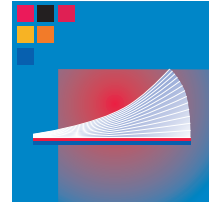
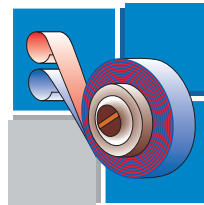




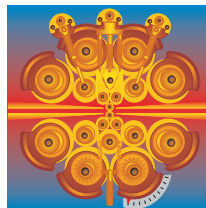
**AUERHAMMER**  
METALLWERK GMBH



Thermostatic Bimetals

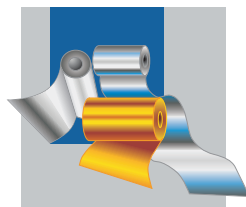


Clad Materials



**Metal Strips**

Soft-magnetic Iron-Nickel-Alloys  
Sealing and Expansion Alloys  
Nickel  
Nickel-Chromium-Alloys  
**Nickel-Copper-Alloys**  
Copper-Nickel-Alloys  
Nickel-Manganese-Alloys



Metallic Foils

Product group:

# Nickel-Copper-Alloys

## 1. ALLOY

AMW-TRADE NAME	ALLOY	STANDARD	MATERIAL-NO. DIN/UNS
Silverin 400	NiCu30Fe	DIN 17743/ASTM B127	2.4360/N04400
Silverin 500	NiCu30Al	DIN 17743	2.4375/N05500
Silverin 404	NiCu45		

## 2. AVERAGE CHEMICAL COMPOSITION

(mass - %)

AMW-TRADE NAME	Ni (+Co)	Al	C	Cu	Fe	Mn	Si	Ti
Silverin 400	min.	63		28	1.0			
	max.		0.5	0.15	34	2.5	2.0	0.5
Silverin 500	min.	63	2.2	27	0.5			0.3
	max.		3.5	0.2	34	2.0	1.5	0.5
Silverin 404	min.	54.5						
	max.	55.5	0.1	0.1	bal.	0.3	0.1	0.1

### 3. PHYSICAL PROPERTIES

AMW-TRADE NAME	DENSITY	THERMAL EXPANSION COEFFICIENT 20 °C - 100 °C	CURIE-TEMPERATURE	THERMAL CONDUCTIVITY AT 20 °C
	g/cm <sup>3</sup>	10 <sup>-6</sup> /K	°C	W/m•K
Silverin 400	8.8	14	50	26
Silverin 500	8.5	13.7	135	19
Silverin 404	8.9	13		21

### 4. MECHANICAL PROPERTIES

AMW-TRADE NAME	TEMPER	YIELD STRENGTH Rp 0.2	TENSILE STRENGTH Rm	ELONGATION	HARDNESS
		MPa	MPa	%	
Silverin 400	annealed	250	550	40	120 HB
	hard		860	5	200 HB
Silverin 500	annealed	275 - 415	620 - 760	25 - 50	85 HRB
	hard	750 - 1100	850 - 1250	1 - 8	25 - 35 HRC
Silverin 404	annealed	160	450	45	55 HRB

## 5. DIMENSIONS AND TOLERANCES

(mm)

### THICKNESS TOLERANCES

THICKNESS	WIDTH 10 - 100	WIDTH > 100 - 200	WIDTH > 200 - 300
0.10 - 0.20	± 0.010	± 0.015	± 0.015
> 0.20 - 0.30	± 0.015	± 0.015	± 0.020
> 0.30 - 0.50	± 0.020	± 0.020	± 0.025
> 0.50 - 1.00	± 0.025	± 0.025	± 0.030
> 1.00 - 1.50	± 0.030	± 0.040	± 0.040
> 1.50 - 2.00	± 0.040	± 0.040	± 0.050
> 2.00	± 0.050	± 0.050	± 0.060

Other thickness and tolerances on request.

### WIDTH TOLERANCES

WIDTH	THICKNESS 0.10 - 1.00	THICKNESS > 1.00 - 1.80	THICKNESS > 1.80 - 2.50
≤ 100	+ 0,2	+ 0,3	+ 0,5
> 100 - 200	+ 0,3	+ 0,5	+ 0,7
> 200 - 300	+ 0,6	+ 1,0	+ 1,2

Other width and tolerances on request.

### LENGTH TOLERANCES (CUT LENGTH)

THICKNESS	LENGTH 500 - 3000
0.40 - 2.00	+ 10

Other tolerances on request.

## 6. PRODUCT FORM

(mm)

FORM	THICKNESS	WIDTH	LENGTH	COIL-ID	COIL-OD
Strip	0.10 - 2.50	10 - 300		300/400/500	max. 1050
Cut length	0.40 - 2.00	50 - 300	500 - 3000		

Other form on request.

All data contained in this document are for information purposes only.  
Other properties can be engineered according to customer specifications.

Guarantees of specific characteristics or applications require special written agreement.

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