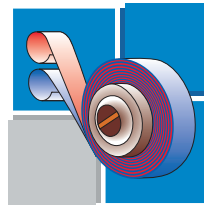
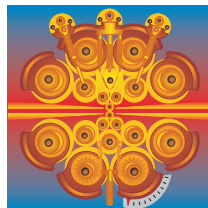


Thermostatic Bimetals

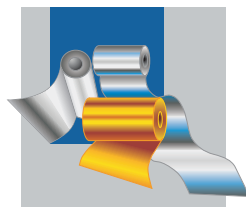


Clad Materials



**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:

# Clad materials

## 1. MATERIALS

### 1.1 LOW CARBON STEELS WITH CLADDING LAYERS OF COPPER, COPPER ALLOYS AND NICKEL

AMW-TRADE NAME	CORE MATERIAL	CLADDING MATERIAL
SE-Cu/DC 04 PL5/0	DC 04 acc. to DIN EN10139	Cu-PHC 5 % one sided
SF-Cu/DC 04 PL5/0	DC 04 acc. to DIN EN10139	Cu-DHP 5 % one sided
SE-Cu/DC 04 PL10/0	DC 04 acc. to DIN EN10139	Cu-PHC 10 % one sided
SE-Cu/DC 04 PL5/5	DC 04 acc. to DIN EN10139	Cu-PHC 5 % two sided
SE-Cu/DC 04 PL10/10	DC 04 acc. to DIN EN10139	Cu-PHC 10 % two sided
SE-Cu/DC 04 PL63/4	DC 04 acc. to DIN EN10139	Cu-PHC 63 % one side, 4 % reverse side
SE-Cu/DC 03 PL20/0	DC 03 acc. to DIN EN10139	Cu-PHC 20 % one sided
SF-Cu/DC 03 PL2.5/2.5	DC 03 acc. to DIN EN10139	Cu-DHP 2.5 % two sided
CuZn37/DC 04 PL5/10	DC 04 acc. to DIN EN10139	CuZn37 5 % one side, 10 % reverse side
CuZn25/DC 04 PL2.6/2.6	DC 04 acc. to DIN EN10139	CuZn25 2.6 % two sided
CuZn15/DC 04 PL5/5	DC 04 acc. to DIN EN10139	CuZn15 5 % two sided
CuZn10/DC 04 PL5/15	DC 04 acc. to DIN EN10139	CuZn10 5 % one side, 15 % reverse side
CuZn10/DC 04 PL5/18	DC 04 acc. to DIN EN10139	CuZn10 5 % one side, 18 % reverse side
CuSn6/DC 04 PL12/0	DC 04 acc. to DIN EN10139	CuSn6 12 % one sided
CuNi25/DC 03 PL2/2	DC 03 acc. to DIN EN10139	CuNi25 2 % two sided
CuNi20/DC 04 PL5/5	DC 04 acc. to DIN EN10139	CuNi20 5 % two sided
CuNi15/DC 04 PL7.5/7.5	DC 04 acc. to DIN EN10139	CuNi15 7.5 % two sided
Ni99.2/DC 03 PL2.7/2.7	DC 03 acc. to DIN EN10139	Ni99.2 2.7 % two sided

Percentage of cladding 2 % of the total thickness at least.  
Other material combinations available by agreement.

## 1.2 STAINLESS STEELS WITH CLADDING LAYERS OF COPPER, COPPER ALLOYS AND NICKEL

AMW-TRADE NAME	CORE MATERIAL	CLADDING MATERIAL
SE-Cu/X5CrNi18-10 PL20/0	1.4301 acc. to DIN EN10088	Cu-PHC 20 % one sided
SF-Cu/X2CrNi19-11 PL6/0	1.4306 acc. to DIN EN10088	Cu-DHP 6 % one sided
SF-Cu/X10CrNi18-8 PL10/10	1.4310 acc. to DIN EN10088	Cu-DHP 10 % two sided
SF-Cu/X6CrTi12 PL12.7/12.7	1.4512 acc. to DIN EN10088	Cu-DHP 12.7 % two sided
CuSn6/X2CrMoTi18-2 PL33/33	1.4521 acc. to DIN EN10088	CuSn6 33 % two sided
LC-Ni99,6/X6CrNiMoTi17-12-2 PL25/25	1.4571 acc. to DIN EN10088	LC-Ni99.6 25 % two sided

Percentage of cladding 2 % of the total thickness at least.  
Other material combinations available by agreement.

## 1.3 SPECIAL CLADDINGS

AMW-TRADE NAME	CORE MATERIAL	CLADDING MATERIAL
Ni99.6/SE-Cu PL7/0	Cu-PHC acc. to DIN EN 13599	Ni99.6 7 % one sided
SE-Cu/FeNi36 PL22.5/22.5	Ni36 acc. to SEW 385	Cu-PHC 22.5 % two sided
CuZn20Ni5/Ni99.2 PL44/44	Ni99.2 acc. to DIN 17740	CuZn20Ni5 44 % two sided
CuNi25/Ni99.2 PL46.5/46.5	Ni99.2 acc. to DIN 17740	CuNi25 46.5 % two sided

Percentage of cladding 2 % of the total thickness at least.  
Other material combinations available by agreement.

## 2. PROPERTIES

The properties of the clad strips are the combined properties of the single components of which the clad strips are made. Depending on the application, the material will be delivered in the following conditions: annealed, deep drawable or hard. Standard testing criteria are: tensile strength, yield strength, elongation, hardness, Erichsen value, grain size.

In addition, the determination of the specific electric resistivity and the earing is possible.

Other properties available by agreement.

### 3. DIMENSIONS AND TOLERANCES

(mm)

#### THICKNESS TOLERANCES

THICKNESS	WIDTH ≤ 250		WIDTH > 250 - 300	
	standard	fine	standard	fine
≤ 0.20	± 0.015	± 0.013	± 0.020	± 0.015
> 0.20 - 0.30	± 0.020	± 0.015	± 0.030	± 0.020
> 0.30 - 0.50	± 0.025	± 0.020	± 0.040	± 0.030
> 0.50 - 0.80	± 0.030	± 0.025	± 0.050	± 0.035
> 0.80 - 1.00	± 0.035	± 0.030	± 0.050	± 0.035
> 1.00 - 1.50	± 0.040	± 0.030	± 0.060	± 0.040
> 1.50 - 1.80	± 0.045	± 0.035	± 0.070	± 0.050
> 1.80 - 2.50	± 0.050	± 0.040	± 0.080	± 0.060
> 2.50 - 3.00	± 0.060	± 0.050	± 0.090	± 0.070

Other thickness and tolerances on request.

#### WIDTH TOLERANCES

WIDTH	THICKNESS ≤ 0.40	THICKNESS > 0.40 - 1.50	THICKNESS > 1.50 - 2.00	THICKNESS > 2.00 - 3.00
≤ 125	+ 0.3	+ 0.4	+ 0.6	+ 0.8
> 125 - 250	+ 0.4	+ 0.6	+ 0.8	+ 1.0
> 250 - 300	+ 0.6	+ 0.8	+ 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.

## 4. SURFACE QUALITY

The strips have a cold rolling or a brushed surface; both can be oiled optionally.

Other surface qualities are available by agreement.

## 5. PRODUCT FORM

(mm)

FORM	THICKNESS	WIDTH	LENGTH	COIL-ID	COIL-OD
Strip	0.10 - 3.00	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.

Auerhammer Metallwerk GmbH  
Hammerplatz 1  
08280 Aue/Sachsen  
Germany



Tel.: +49 3771 272-0  
Fax: +49 3771 272-201  
E-Mail: [postmaster\\_amw@auerhammer-metallwerk.de](mailto:postmaster_amw@auerhammer-metallwerk.de)  
Internet: [www.auerhammer.com](http://www.auerhammer.com)