

# Clad Materials



**Auerhammer  
Metallwerk**

Wickeder Group

## Your expert for special alloys

For more than 500 years, Auerhammer Metallwerk has specialised in the industrial processing of metals. The company is situated in the small town of Aue in the Erzgebirge region of Germany and is therefore located in the heart of Europe.

With experience dating back to the world's first large-scale production of nickel more than 200 years ago, Auerhammer Metallwerk today manufactures a wide range of cold-rolled metal strips in a variety of special alloys within the thickness range of 0.002 mm to 2.5 mm.

Furthermore, Auerhammer Metallwerk is a renowned manufacturer of cold-clad strip in various combinations of special alloys.

# The art of combining layers

## The benefits of bonding

Clad materials often provide the solution whenever a single metal is unable to offer the required performance. Entirely new product capabilities can be discovered by combining the beneficial properties of different component metals.

The cladding process combines at least two different metals to form a single solid piece of strip. The individually prepared component strips are fed in parallel to the rollers of the cladding mill where they are bonded together under enormous cold-rolling pressure. A heat treatment process then ensures that the components do not subsequently delaminate.

The clad strip can then be further processed to the customer's requirements by means of cold-rolling, annealing and slitting to finished size. This means that we can supply clad strip in a range of tempers from fully annealed to hard, as rolled.

### // Benefits

- › Improved or entirely new properties depending on the components selected
- › Bespoke cladding options
- › Properties in accordance with customer requirements





# As versatile as a set of building blocks

New solutions -  
for the demands of tomorrow



Electrical

Copper and Brass clad components for electrical contacts



Automotive

Clad Bronze for bearing shells



Coins

Strips for Coins for 1 € and 2 €



Heating & Energy

Copper Clad for heat exchangers

For many applications clad strip represents an excellent cost-effective alternative to a single metal strip, particularly if a material with entirely new properties is required.

Different markets require different solutions. Whether that be in the Automotive industry, the Electrical industry or in Coinage production. Component metals are selected to produce clad strip with the necessary properties for that particular application.

unrivalled technical know-how of our engineering staff, the creativity of our highly-motivated workforce, the enthusiasm and loyalty of our customers, as well as the high quality of our products.

Just like a set of building blocks, various metals can be combined in such a way that a product with entirely new properties can be created. All in accordance with your own requirements. The corner stones of Auerhammer Metallwerk's long-held success are the

We would welcome the opportunity to help progress any future projects by way of trial production in Aue or discussions within Wicked Group as a whole. Together we will create the most suitable material for your application.



# Multiple combinations

## Summary of regular products

cladding options						
one side	Copper base metal	Tombac base metal	Brass base metal	Bronze base metal	Nickel base metal	FeNi base metal
two sides (similar or different layer thicknesses)	Copper base metal	Tombac base metal	Brass base metal	Bronze base metal	Nickel base metal	FeNi base metal
different layers	Copper base metal	Tombac base metal	Brass base metal	Bronze base metal	Nickel base metal	FeNi base metal
	Nickel	Brass	Copper	Nickel	Tombac	

The base or core metal can be carbon steel, stainless steel, or Nickel, Copper and FeNi alloys.

Layer metals		
Steel	DC04	
Copper	Cu-PHC	Cu-DHP
CuZn alloys	CuZn10	CuZn37
CuSn alloys	CuSn6	
Nickel	Ni99.2	LC-Ni99.6
CuNi alloys	CuNi15	CuNi20/CuNi25
FeNi alloys	FeNi36	FeNi29Co18Mn

### // Examples of combined properties

- > Tensile strength and corrosion resistance
- > Tensile strength and friction characteristics
- > Tensile strength and electrical conductivity
- > Tensile strength and solderability
- > Spring properties with electrical conductivity and/or corrosion resistance

### Available dimensions

Thickness: 0.1 - 3.2 mm  
Width: 3.0 - 300 mm

Other options upon request.

# Best of metal.

The metal specialists of the Wickeder Group have combined their strengths to offer you the best of metal. On three continents, Europe, North America and Asia, there is a wide range of standard and bespoke solutions available. Through our product and service-oriented business model, it is possible to provide the highest quality standards, flexibility and fast reaction times. Ultra-modern production lines, professional knowledge and innovative solutions have all helped to ensure the success of the Wickeder Group.



### // Auerhammer Portfolio

- > Clad Strip
- > Thermostatic Bimetals
- > Sealing and Expansion Alloys
- > Soft-Magnetic Alloys
- > Coinage Strip
- > Temperature and Corrosion Resistant Alloys
- > Welding Alloys
- > Metal Foils

### // Portfolio of Wickeder Group :

- > Clad Materials
- > Thermostatic Bimetals
- > Metal Strips & Metallic Foils
- > Bars & Wires
- > Precision-etched Micro Components
- > Toll Working
- > Waterjet Cutting / Centrifuges and Screens
- > Punching, Bending, Welding

[www.auerhammer.com](http://www.auerhammer.com)



Auerhammer Metallwerk GmbH  
Hammerplatz 1  
08280 Aue (Sachsen), Germany  
Phone +49 3771 272-0  
[info@auerhammer-metallwerk.de](mailto:info@auerhammer-metallwerk.de)