

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

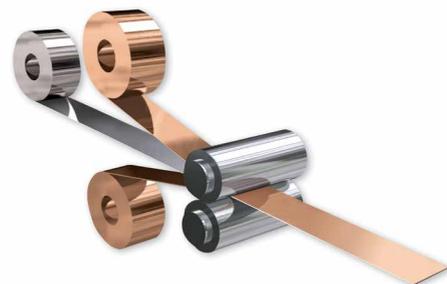
Clad materials often provide the solution whenever a single metal is unable to offer the required performance. Entirely new product capabilities can be discovered by combining the beneficial properties of different component metals.

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**

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.

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

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.

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



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

Aluminum-Copper Clad for heat exchangers

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 Copper	Tombac base metal Tombac	Brass base metal Brass	Bronze base metal Bronze	Nickel base metal Nickel	FeNi base metal FeNi
different layers	Copper base metal Nickel	Tombac base metal Brass	Brass base metal Copper	Bronze base metal Nickel	Nickel base metal 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

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

Other options upon request.

// 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



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

// Product Groups of Wickeder Group

- › Clad Material
- › Thermostatic Bimetals
- › Cold-Rolled Strip
- › Metal Strips & Metal Foils
- › Nickel Alloy Bars & Wires
- › Precision-etched Metallic Components

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