

TREATMENTS



VERSATILE USE OF SURFACE TREATMENT PROCESSES

- barrel, rack and reel to reel plating
- strips, stamping grids, wires, single parts
- coating all over or selective
- galvanic or electroless surface processes
- chemical pickling as a precleaning process
- special treatments e.g. electropolishing of Nitinol
- extra methods for high particle requirements
- application in the medical, electrical and automotive industry



FUTURE INVESTMENT IN SURFACE TECHNOLOGY

With the expansion of our chemical nickel facility and the installation of two further strip electroplating machines, we have notably expanded our portfolio in the metalworking sector and can process strips and single parts with all the coating metals required on the market.

G.RAU is concentrating significantly in its surface technology and all electrolytic and electroless galvanic processes at one location in Pforzheim.

We can offer strips made from special alloys and lead frames with subsequent galvanic coating from a single source and manufacture with short delivery times. The existing single parts electroplating also offers the possibility to coat stamped parts, turned parts, deep-drawn parts and extruded parts galvanically or chemically for small series or mass production on fully automated production lines.

Furthermore, all known slide grinding processes, PER degreasing and electropolishing in the drum or on the rack are possible.

For all questions related to surfaces Mr. Ralf Rechberger will be happy to assist you.

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SURFACE TECHNOLOGY



SURFACE-TECHNOLOGIES

WE RELY ON

G.RAU relies on the use of functional surfaces that are applied galvanically or electroless. Strips, stamping grids, wires and single parts are hereby coated with all common metals to meet the increasingly complex requirements.

EXTRA PROCEDURES

Additional processes, such as electropolishing or the coating of all known metals and special alloys that are used in the automotive industry and medical technology.

SPECIAL PROCEDURES

We also use special processes to fully meet the highest particle requirements from the automotive industry and electrical engineering.

CHEMICAL NICKEL-PHOSPHOR COATINGS

In particular, we would like to draw attention to our electrolessly deposited nickel-phosphor coatings (4-8% phosphorus). We produce surfaces which are wear-resistant and against corrosion. These surfaces combined with our precious metals offer a cost saving finishing of the contacts.

COATING METAL / METHODS

PROCESS	METALS	LAYER THICKNESS RANGE
barrel	Cu Ni chemical Ni Sn100% Zn Ag Au passivation	0,1 - 20,0 µm 0,1 - 20,0 µm 0,1 - 50,0 µm 0,1 - 20,0 µm 1,0 - 20,0 µm 0,1 - 20,0 µm 0,05 - 5,0 µm n. d.
rack	Cu Ni chemical Ni Sn100% Zn Ag Au passivation	0,1 - 20,0 µm 0,1 - 20,0 µm 0,1 - 50,0 µm 0,1 - 20,0 µm 1,0 - 20,0 µm 0,1 - 20,0 µm 0,05 - 5,0 µm n. d.
overall and selectively immersed	Cu Ni Sn100% Ag Au passivation	0,1 - 10,0 µm 0,1 - 10,0 µm 0,1 - 10,0 µm 0,1 - 10,0 µm 0,05 - 3,0 µm n. d.
wheel technology / strips coating (from 2025)	Ag stripes Au stripes	0,1 - 10,0 µm 0,05 - 3,0 µm
brush	Au	0,05 - 3,0 µm

ALL COMMON BASE MATERIALS

non-ferrous metals, ferrous metals and stainless steels etc.

MATERIAL DIMENSIONS / REEL TO REEL

thickness 0,10 - 1,00 mm
(all other thicknesses on request)
Breite 3,00 - 100,00 mm
(all other widths on request)

INQUIRY

Please also contact us about dimensions or coatings outside of our listed portfolio.

MANUFACTURING PROCESSES

PROCESS	PRODUCT	DESCRIPTION
chemical pickling	single parts	pre-cleaning process
PER-degreasing (cleaning)	single parts	
slide grinding	single parts	all common slide grinding method
electroplating	single parts + strips	
1) single parts rack processing	single parts	Cu/Ni/Sn/Zn/ chem. Ni/Ag/Au
2) single parts barrel processing	single parts	Cu/Ni/Sn/Zn/ chem. Ni/Ag/Au
3) strips	strips/coil	
all over	strips/coil	Cu/Ni/Sn/Ag/Au
selectively	strips/coil	Cu/Ni/Sn/Ag/Au
wheel	strips/coil	Ag und Au (from 2025)
4) stamping grid (reel to reel)	strips	
all over	strips	Cu/Ni/Sn/Ag/Au
selectively	strips	Cu/Ni/Sn/Ag/Au
brush	strips	Au
wheel	strips	Ag und Au (from 2025)
electropolishing	single parts, wires and strips	

