

Overview of our products and services

COATINGS
BESCHICHTEN
REVETEMENTS

Buser Oberflächentechnik AG

We are the market leader in Switzerland for thermal coatings. Our know-how and high quality are based on 40 years of experience in coating technology. In our modern factory we use the latest coating technologies. Our team of specialist staff coats parts

- from a few grams up to 15 tons in weight and
- from a few millimetres up to 8 metres in length

Our services

- We provide comprehensive consulting services
- We support you in the design of parts to be coated
- We manufacture components, containers and complete assemblies
- We prepare parts for coating
- We provide coatings in accordance with your specifications
- We perform coating operations on your premises on request
- We refinish existing coatings
- We inspect the quality of coatings and document it with a report

Buser Oberflächentechnik AG
Your reliable, expert partner

Our coating processes

Your problem is our challenge. We continually follow the latest achievements in research and development and adapt our coating processes accordingly. This enables us to offer the optimum solution to any problem together with a full range of coating types.

1. Coating processes

Plastics:

- conventional powder coatings
- electrostatic powder coatings
- whirl-sintering
- flame-spraying
- conventional wet coatings
- wet coatings
- dipping

Metals:

- plasma spraying
- high-speed flame spraying with gas and kerosene
- powder flame spraying
- wire flame spraying
- wire arc spraying

2. Hard coat welding

- electrodes and filler wire
- shielding gas, TIG

3. Machining

- turning, milling, drilling
- grinding, lapping, honing

4. Sand blasting

- blasting with Al_2O_3 / inox Cr Ni pellets

5. Thermal treatment

- stripping with pyrolysis
- dehydrating
- tempering, e.g. CFRP parts

Coating materials

Overview of coating materials used by us and their main properties.

Plastic coatings	Properties	Thermal coatings	Properties
PTFE Polytetrafluorethylene	<ul style="list-style-type: none"> – non-stick – self-lubricating 	Ceramics	<ul style="list-style-type: none"> – very high resistance to abrasion – very good resistance to high temperatures – electrical insulation – resistant to electro-chemical corrosion – protection from corrosion etc.
FEP Perfluorethylenpropylene	<ul style="list-style-type: none"> – resistant to chemicals – high relative permittivity – good de-icing properties 	Carbides	<ul style="list-style-type: none"> – very high resistance to abrasion – protection from erosion – high compression strength – protection from friction etc.
PFA/MFA Perfluoralkoxy e.g. Teflon, Xylan	<ul style="list-style-type: none"> – authorised for contact with foodstuffs – good resistance to high temperatures – no cold flow etc. 	Iron alloys	<ul style="list-style-type: none"> – for filler and buffer coatings – coatings up to approx. 10 mm thick possible – can be machined down – cost-effective etc.
E-CTFE Ethylene chlortrifluor-ethylene HALAR®	<ul style="list-style-type: none"> – very high universal resistance to chemicals – smooth surface with non-stick effect 	Nickel alloys	<ul style="list-style-type: none"> – good resistance to corrosion – resistant to wear and impacts – hard coatings up to approx. 62 HRC etc.
ETFE Ethylene-tetrafluorethylene	<ul style="list-style-type: none"> – very good electrical insulation properties – non-porous – repairable 	Cobalt alloys	<ul style="list-style-type: none"> – corrosion-resistant – abrasion-resistant – tough etc.
PFA thick coating Perfluoralkoxy	<ul style="list-style-type: none"> – coating remains in thermo-plastic condition – electrically conductive coatings can be applied 	Titanium alloys	<ul style="list-style-type: none"> – very good resistance to corrosion – body-friendly – non-oxidising coatings etc.
PEEK Polyetheretherketon	<ul style="list-style-type: none"> – authorised for contact with foodstuffs etc. 	Bronze, tin, zinc and aluminium alloys	<ul style="list-style-type: none"> – protection from corrosion – improved wettability – electrical screening etc.
PA 11 + 12 Polyamide e.g. RILSAN	<ul style="list-style-type: none"> – excellent thermal insulator – resistant to chemicals – resistant to corrosion and weathering 		
PE Polyethylene	<ul style="list-style-type: none"> – good electrical insulator at low to medium frequencies 		
EP Epoxy resin	<ul style="list-style-type: none"> – authorised for contact with foodstuffs – extremely resistant to wear etc. 		
PES Polyether sulfon			
PUR Polyurethane			

Our machinery and equipment

Some of our facilities are the largest in Switzerland

Spraying units for all plastic powders and dispersions

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| – Stoving and sintering plants up to 450°C largest furnace | length | 8000 mm |
| | width | 4000 mm |
| | height | 4000 mm |
| – Whirl sintering plants largest tank | length | 8000 mm |
| | width | 2500 mm |
| | height | 1500 mm |

Spraying units for all metals, for ceramics and carbides

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|----------------------------------|----------|---------|
| – Largest coating unit for rolls | diameter | 2000 mm |
| | length | 8000 mm |
| – Circular grinding | diameter | 600 mm |
| | length | 3000 mm |

Sand blasting

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|----------------------------|----------|----------|
| – Jet blasting hall | length | 10000 mm |
| | width | 5000 mm |
| | height | 5000 mm |
| – Roll blasting unit | diameter | 800 mm |
| | length | 4300 mm |
| – Spinner blasting machine | diameter | 1400 mm |
| | length | 1000 mm |

Environmentally-friendly removal of all plastic coatings

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| – Plants with flue-gas washing (pyrolysis) | length | 3000 mm |
| | width | 2000 mm |
| | height | 2000 mm |

Areas of application

- Chemical industry
- Paper industry
- Machine construction
- Food industry
- Textiles
- Medical engineering
- Packaging
- Printing
- Plant construction
- Apparatus construction
- Power industry
- Plastic processing industry
- Building industry
- Consumer goods
- Automotive industry, aerospace
- Transport industry

Tricky coating problems are a challenge
for us – give us a call!

