

buser

Oberflächentechnik AG

competence in engineered coatings

Functional hi-tech coatings for complex requirements





Plastic coatings

Parts refined

Plastics for particular applications

We differentiate basically between two application procedures. One is a wet and the other a powder coating treatment. In any case, the desired properties and functionality have to be defined. The material of the part can vary from the material of the functional coating. Once both are determined, the optimal coating system can be evaluated. Mostly, standard materials and application procedures can be used. In some cases we develop customer specific coating solutions to address unique requirements. In order to determine the appropriate approach in choosing the right process, we can rely on years of experience.

Expectations placed on surface coatings can be quite complex. Here is a sampling of properties requested today:

- Anti-adhesive / easy to clean
- Corrosion- and wear protection
- Chemical resistance
- Run-dry properties
- Anti-static, electric conductivity or isolation
- Heat-conductivity or isolation
- Hydrophilic / hydrophobic
- Electro-magnetic isolation
- Food conformity
- Temperature-resistance
- Anti-slick
- Sound-isolation
- Decorative appearance



1929 Founding of Fritz Buser AG
– 1986 Change of focus away from electroplating based on ecological considerations

Large parts as our challenge

One of our specialties is the coating of large objects. Since we run one of the largest ovens in Europe we are capable to process parts of up to 16 tons at up to 8 meters in length and 3 meters in diameter. For parts of greater measurements in size or weight, contact us with your request.

Elastomer-coatings – a unique coating system

Rubber style properties are lending that material an increased resistance against aggressive mechanical influences. Elastomer spray coatings that are based on Polyurethane are solvent free and protect surfaces from erosion, corrosion, cavitation, and wear. These coating systems can be applied on practically all solid metal and non-metal surfaces in 3 different shore hardness's. Since there is no sinter process involved, this system can be applied on site.

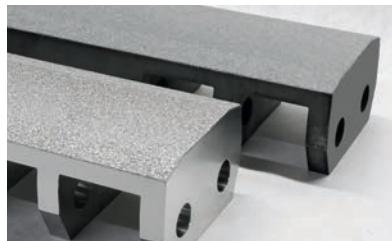
All-in-one

The diverse processes of plastic, ceramic and metal coatings are all done on one site, thus we can offer combination coating solutions. With our years of experience and know-how we can find solutions for any specific demand.



Thermal coating processes

Metal, carbide and ceramic applications



The surface makes the difference

Depending on the area of operation, there are various properties the surface of a product has to display. Often requested are wear and corrosion protection, electric isolation as well as hardness or food conformity. Decorative properties can be combined with functional ones if necessary or desired. Sometimes such a surface in a base material cannot be achieved or just at increased cost. There we can help by applying such functional coatings.

Thermal coating to exact standards

If a surface has to correspond to properties found in metals, ceramics or carbide, such materials are applied by thermal spray processes. Coatings can either be applied partially or over an entire work-piece.

In state of the art surface technology the correct process for the application of metal, carbide or ceramic coatings must be defined. We are successfully employing the following process technologies:

- Atmospheric plasma-spraying
- High-velocity-oxy-fuel-spraying HVOF
- Powder flame-spraying
- Wire flame-spraying
- Arc weld-spraying

Metal coating

To achieve dry-run, wear or erosion resistance properties we use metal alloys for optimal result. Coatings can be made of pure metals as well as combination alloys, in various coat thickness.

Ceramic and carbide coatings

A wide variety of properties can be achieved by applying ceramic or carbide coatings. Those coatings feature excellent hardness, corrosion protection, electric and heat isolation as well as outstanding chemical resistance at high temperatures.

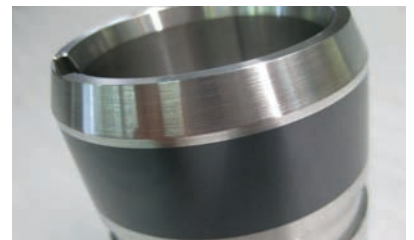
Calendar-roller – particular coatings for special applications

One of our key competences is the coating of Calendar-rollers as they are used in foil/film manufacturing. Here as an alternative to chromium we use wolfram-carbide. The roller features a significant longer life-time after grinding and polishing, plus it guarantees optimal shock resistance properties. Using our unique application procedures, we can even repair partial damage on site.

Cost benefits through repair

By applying a new coating and subsequent processes, the cost of entirely new parts purchases can be avoided. Depending on the case, we can also perform repairs on site.

1992 Start of production of the largest oven in Europe – 1994 Certification according to ISO 9001:2008



Dust-free coatings in a clean-room



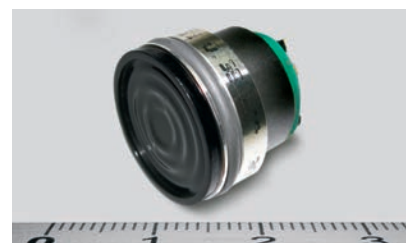
Where dust and dirty is not permitted

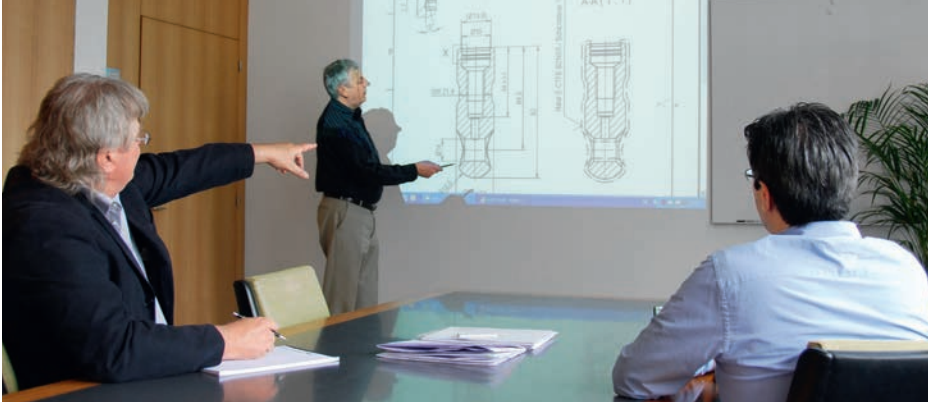
Under clean-room conditions, we apply organic and non-organic wet-coatings. On a floor-space of 225 m² the production is separated in three specific zones. Cleaning, masking and coating sections are all separated by airlocks.

With this investment into new infrastructure, we address the specific demands of medical-, high-precision and luxury industries. The state-of-the-art facilities feature clean-room conditions according to ISO 14611 Class 7. This means we can apply coatings reducing the chance of impurities and foreign matter. We are employing modern cleaning technologies such as ultrasound washing stations in order to further guarantee perfection

in your product and even quality inspection procedures are performed within the clean-room environment.

Beside the actual focus on coating, we can also provide assembly facilities under clean-room conditions.





Consulting and sampling lead to the right decision

Questions over questions

What is the purpose of the work-piece? What properties does its surface need? Those are the questions that need to be addressed first. Our specialists can provide extensive experience and knowledge in order to find solutions. In a joint effort with our customers we can provide technical and cost effective consultation in order to assist solving problems. In general we provide sampling capabilities to better evaluate the right coating materials as well as coating processes. After a thorough analysis of the work-piece in question or the demand for repairs on site, we can provide the necessary services.

We move ahead

It is our goal to always be at the cutting edge of technology. Thus we are employing state-of-the-art processes and are continuously investing into research and development.

**1998 Founding of Buser Oberflächen-
technik AG as a spin-off from Fritz
Buser AG – 2012 Start of production
in clean-room for wet plastic
coatings**



Your partner for complete solutions

All processes for functional coating from one supplier.

After an initial consultation in coating conform construction guidelines and an eventual sampling run, the task of coating is split into three almost equally labor-intensive fields.

Pre-process	<ul style="list-style-type: none">• Eventual manufacturing of parts• Initial inspection• Cleaning• Sand-blasting /grinding• Masking• Welding
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Coating	<ul style="list-style-type: none">• Coating with metal, carbide and ceramic• Coating with plastic• Dust-free coating in the clean-room
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Finish	<ul style="list-style-type: none">• Chip-removal• Sand- or glass-pearl blasting• Assembly• Inspection• Cleaning• Packaging
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Lean Management to your advantage

It is our goal to provide our customers with the best possible delivery time. Thus it is our mission to constantly improve our throughput times and production-streamline.



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