

TREAT MENTS AND PROPER TIES

STRAL

TREATMENTS
product finishes

STRAL

Intro

Everything you can imagine, nature has already created, said Albert Einstein.

For years STRAL's goal has been to produce outdoor lighting fixtures using exclusively stainless steel, a material we have never strayed from because it allows us to introduce ourselves without any limitation into all natural environments that require it, even the harshest.

And it is precisely from the rhythm and rules of nature that this new catalogue takes deep inspiration.

The reliability of the brand joins and evolves with research and design to generate a renewed, unique, and precious style. Know-how and innovation together create a strong identity. The historic and timeless products are accompanied by the studied and calibrated design of the new lines. The dualist identity of the brand sees the coexistence of the indefinite given by the light, so poetic and impalpable, shaped by the definition of the case in which it is wrapped, translating this union into a collection of balanced lighting fixtures designed to be highly suitable for contexts in which they commit themselves to be. As two complementary elements, there is no predominance of one over the other, the shapes are harmonized, and the materials chosen are designed to allow the products to dress up with their surroundings.

A. Zambelli

The design genesis bears the signature of Alessandro Zambelli, who in this brand renewal journey, has chosen to focus attention on new key points.

«My design vision places the present in dialogue with the past and what it can suggest, to create the future: every new project is born from an ancestor, from a past need which gives us the feeling of responding to a new one.

Starting from this premise, we worked with the intention of reinterpreting the perception of a noble material such as

stainless steel. Giving new chromatic and tactile lymph, thinking of increasingly diverse installations for Stral products. Particular attention was paid to historical contexts and to all those places where the presence of natural materials requires stylistic consistency, guaranteeing all the benefits of resistance and durability of stainless steel.

A game of contrasts aimed at the continuous dialogue between formal rationality and expressive freedom. Stainless steel thus is dressed on a livery that has a dialogue with the surrounding environment. Each object has been designed to assimilate and take on the colors of the environment in which it will be installed, through meticulous research of surface finishes and textures.

The purity of the geometries seemed to be the most effective line to create a common thread with stainless steel's essence. Technically, the design action has focused on the production chain, seeking the maximum potential of the latest generation technologies. This is a fundamental prerequisite to guarantee a high-quality product, with a high degree of finish and detail.

The value of the lighting component is the result of Palazzoli's experience which has shown, over the years, great attention in the development of performing and innovative lighting fixtures.»

AISI 316L STAINLESS STEEL

All STRAL products, including the internal components, are made of AISI 316L stainless steel. We have adopted this particularly valuable and durable material to ensure the best durability of the lamp over time guaranteeing for 20 years resistance against pass-through perforations. The benefit of our products is distinguished by the possibility of application in situations particularly stressed by atmospheric agents.

Marine areas
salt mist that attacks every other type of materials

Boats
continuous exposure to salt and UV rays

Mountain areas
temperature excursions, UV rays, and de-icing salt spread during winter season

Lakeside and plain areas
high humidity in the air, which promotes the aging process of the materials

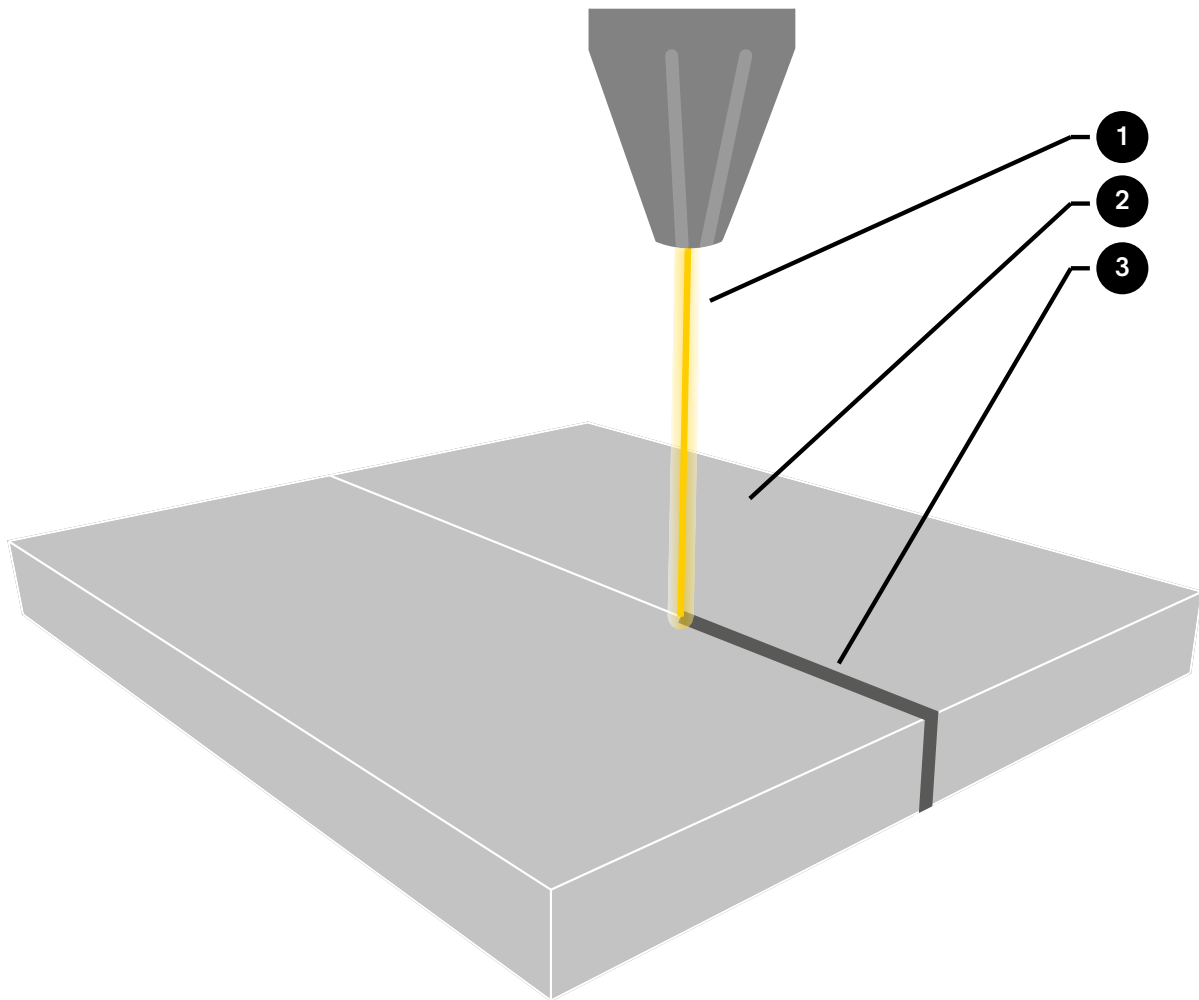


LASER WELDING

The composition of the bodies is done by transformation from sheet, with welds of centesimal precision thanks to the use of cutting-edge 3D laser technologies.

With laser welding, energy is applied under the surface of the workpiece.

It is used when a high depth of welding or when layers of different materials need to be welded simultaneously. This process is characterized by high efficiency and high welding speed, thanks to which the area affected by heat remains small and the deformation is very slight. During this process, the laser beam melts the material, forming a weld that is small and deep.

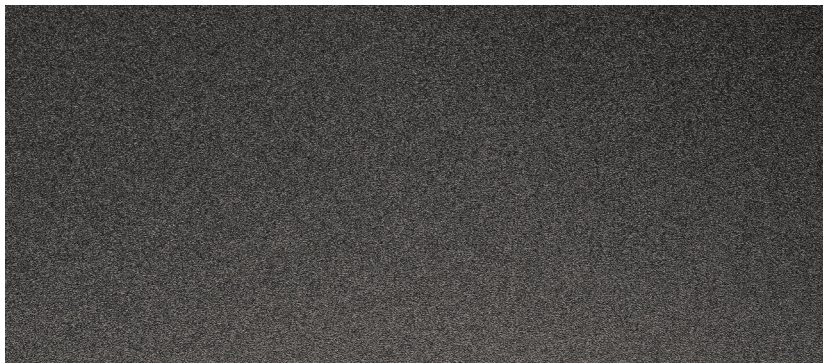
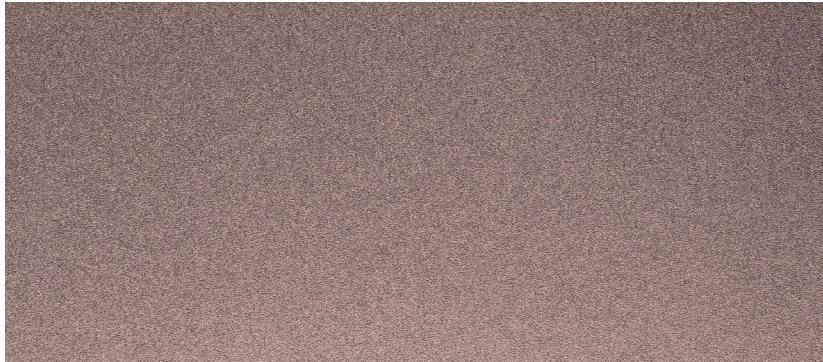
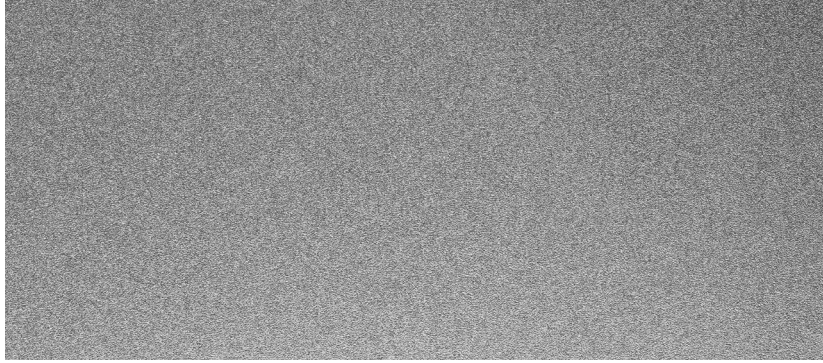


- 1 laser beam
- 2 object to be processed
- 3 welding

FINISHES

The expertise and continuous research of STRAL in the development of cutting-edge technical/aesthetics solutions guarantee products of high level with unique features on the lighting market aimed exclusively at outdoor situations.

The uniqueness of the surface finish contributes to an even more coriaceous surface of the body and gives additional resistance to weathering.



HCT FINISH

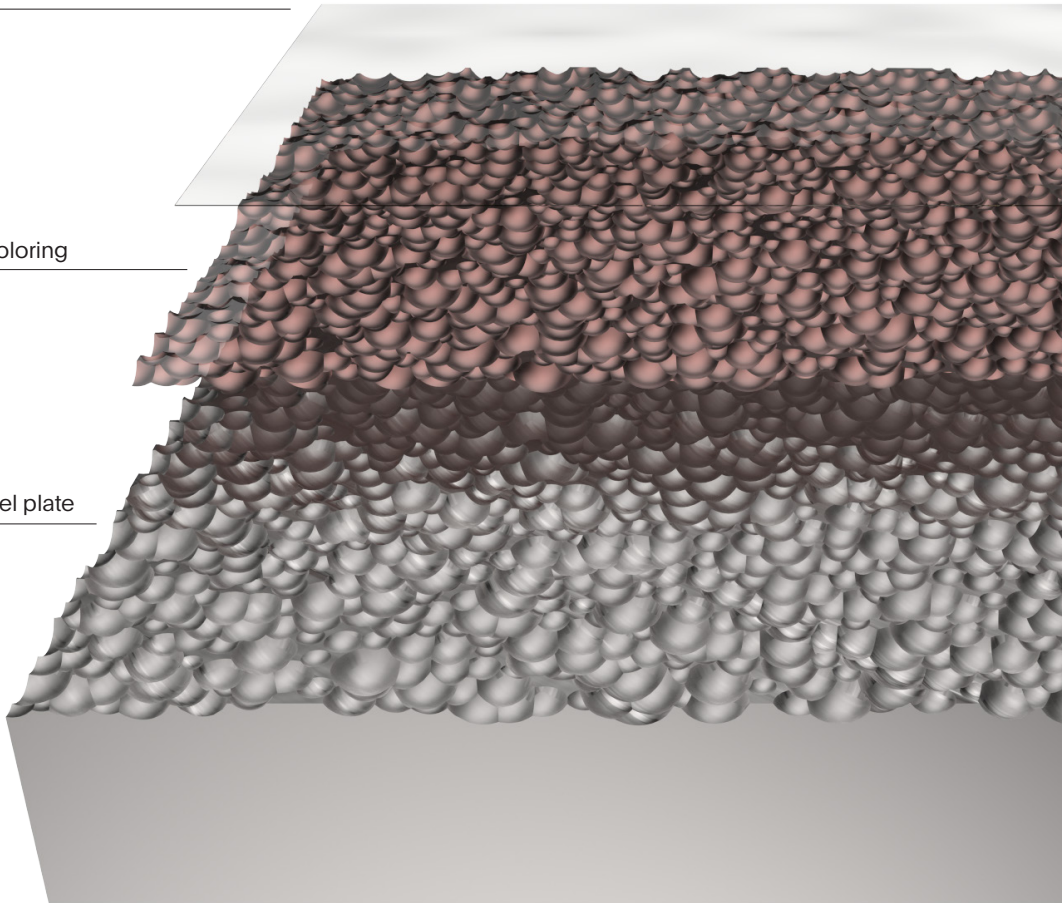
The HCT (Hard Coating Treatment) finish provides a unique texture and high surface resistance to corrosion and weathering and makes the product anti-fingerprint and stain-resistant. On the technical side, the main innovation lies in the design approach that aims to enhance the purity of the geometries.

The oleophobic treatment is a protective stain-resistant layer that simplifies the cleaning of the product, making the surface of the steel more slick and preventing dirt from sticking to it. In addition, this process improves further the performance of resistance to weathering.

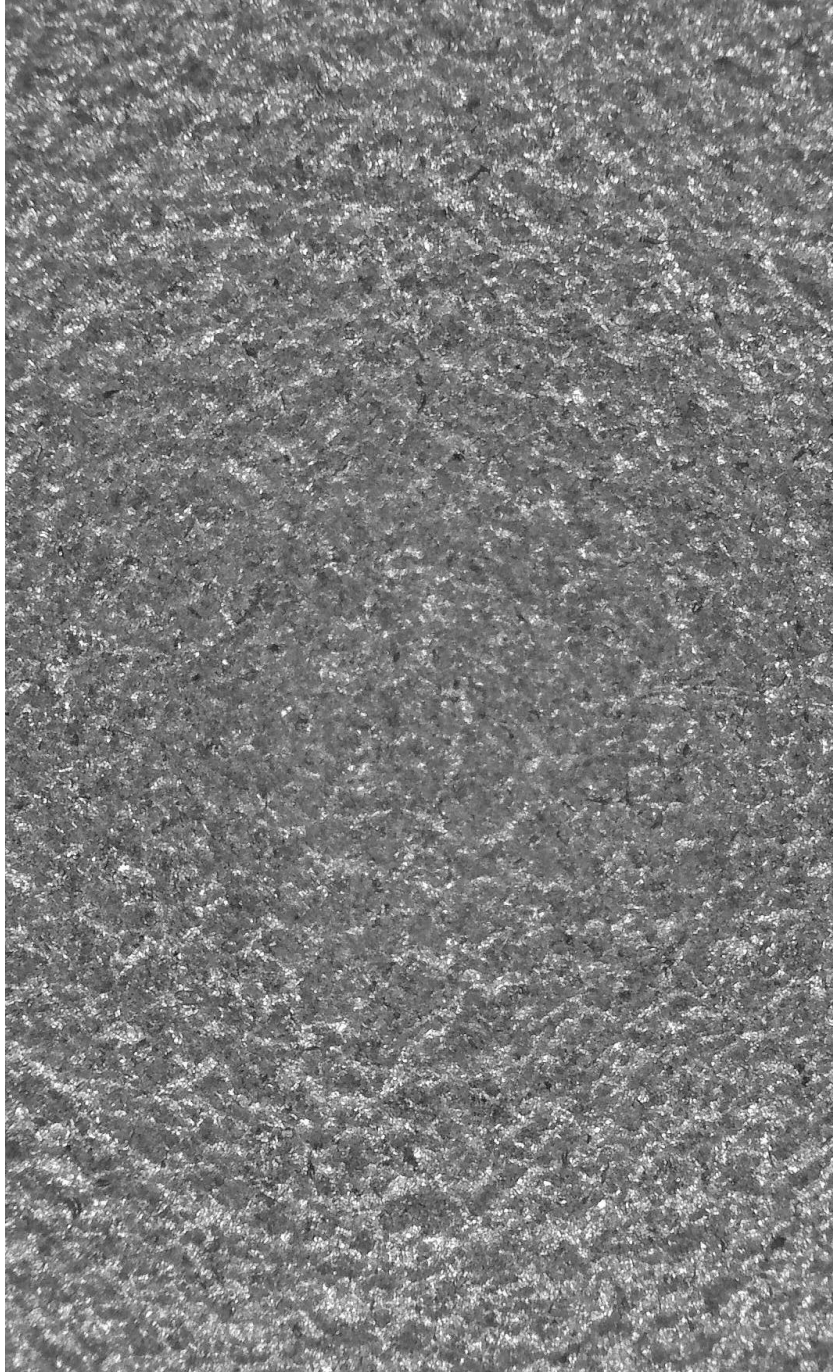
oleophobic treatment

molecular coloring

stainless steel plate



SHOT PEENING



Shot peening is a mechanical cold process that is used in a variety of different industries. The idea behind shot peening is similar to the centuries-old process of blacksmiths who hammered metal over and over again to gradually improve its strength.

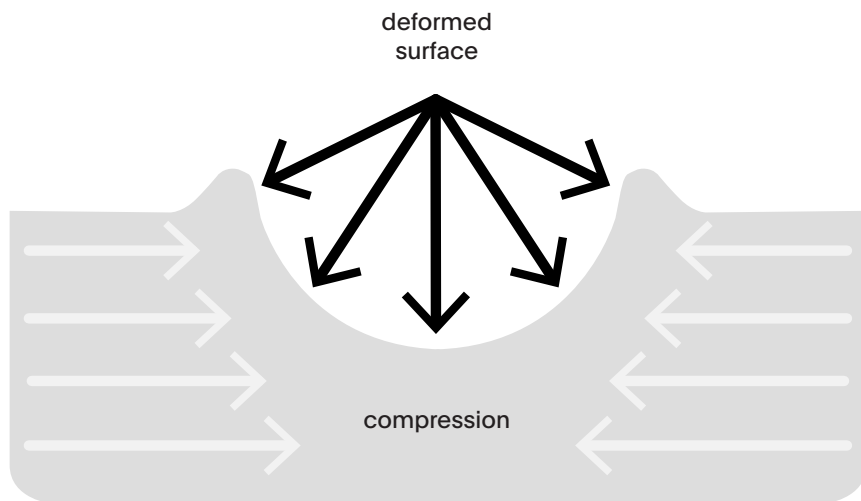
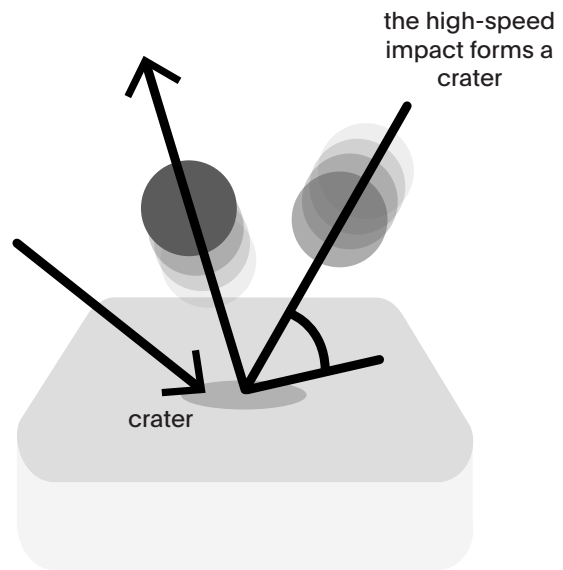
This treatment improves the fatigue of metal parts and is the most effective way to achieve this result; it uses essentially small blows to cause slight plastic deformations on the surface metal.

It has been demonstrated by academic research and by practical use that shot peening is unmatched when it concerns tempering metal surfaces. This process will finally increase the life of the metal and is essential when making important machinery parts such as aircraft and automobiles.

With shot peening, a variety of nozzles shoot by compressed air small spherical elements onto the metal surface.

When they encounter the surface, they create a tiny crater in the part of the material that is under stress.

Shot peening is also used to improve and extend the life of objects. No process can equal the power and strength of this treatment when it comes to metal.



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GROUP

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STRAL garantisce fino a 5 anni gli apparecchi sulla parte elettrica ed elettronica e 10 anni sul materiale contro la corrosione passante.

STRAL guarantees its items up to 5 years on the electrical and electronic parts and 10 years on the material against corrosion-through.

STRAL - Palazzoli S.p.a
Via F. Palazzoli, 31
25128 Brescia (BS), Italia

T +39 03020151
F +39 032015258
vendite@stral.it
marketing@stral.it
stral.it