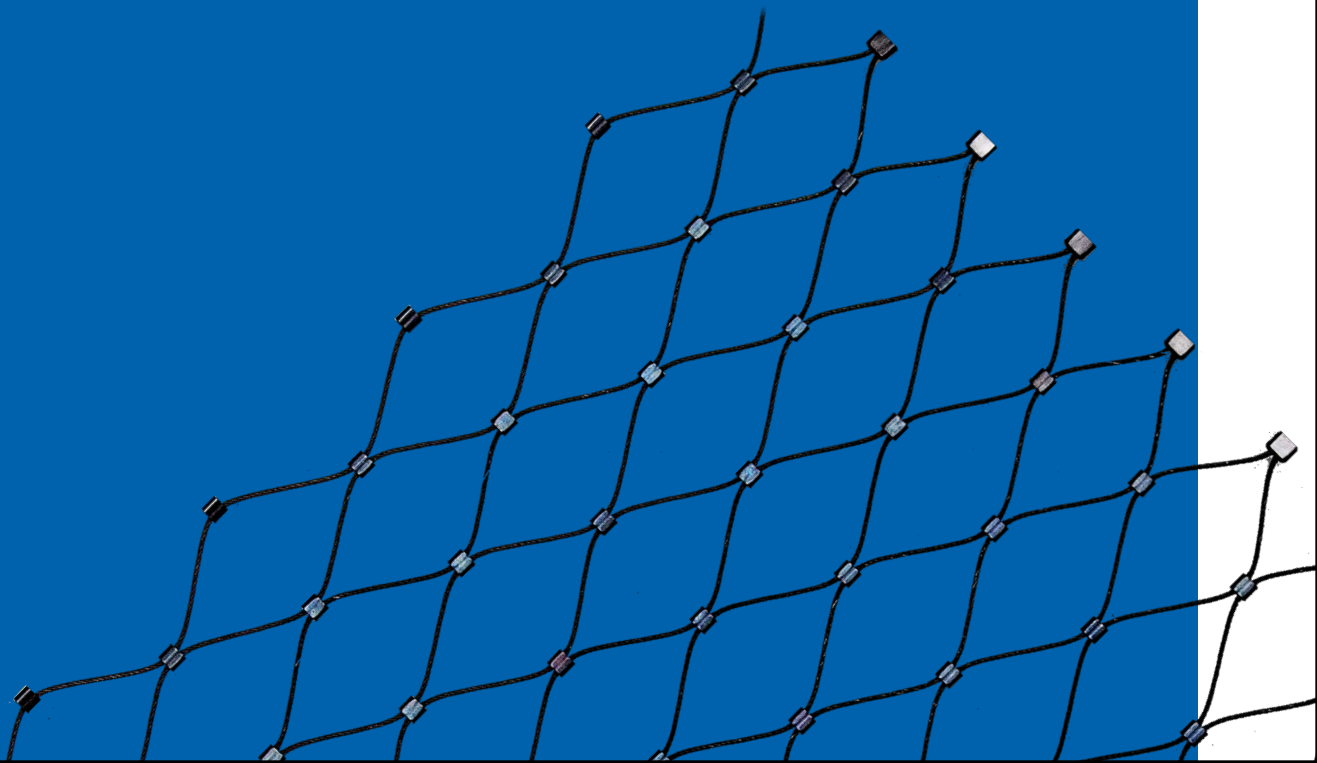


Technical information sheet

# **Black oxidizing of stainless steel rope nets and fittings**

Black finishing – chemical blackening



## Black oxidizing of stainless steel rope nets and fittings

### Black finishing – chemical blackening

Black oxidizing is an efficient process to permanently and evenly color stainless steel components black, and is also known as black finishing or chemical blackening. The process is described in more detail below.

#### Process description

Ropes, fitting and accessory parts in group AISI 316 stainless steel can be finished in matte black by black oxidizing, independent of the material batch. This coating does not involve applying additional material. Instead, a passive layer of the stainless steel is modified in such a way in a salt immersion bath at approx. 400°C that the surface looks black afterwards.

A very thin black oxide layer is produced, which is extremely fade-resistant and has a high degree of resistance to weathering and aging. Black oxidized components can be formed to a certain extent without damaging the colored surface, and the surface is also wear-resistant. This allows pre-coloring of sleeves, eyelets, and other fittings which are then only finally crimped during installation.

#### Components and dimensions

Up to a certain size or length, fully and evenly black nets, edge ropes and accessories can be offered without there being a risk of significant color differences or possible damage during assembly. As a guideline, nets up to a sectional weight of approx. 30 kg can be black oxidized. Depending on the diameter, ropes can only be processed up

to a certain length. Pre-manufactured frames from the Frames product range are usually powder-coated in black, as long as the number of frames is sufficient for the process. The nets and accessories to be mounted within the frames can be black oxidized to match.

We would ask you to inquire for the exact options on a project-specific basis.

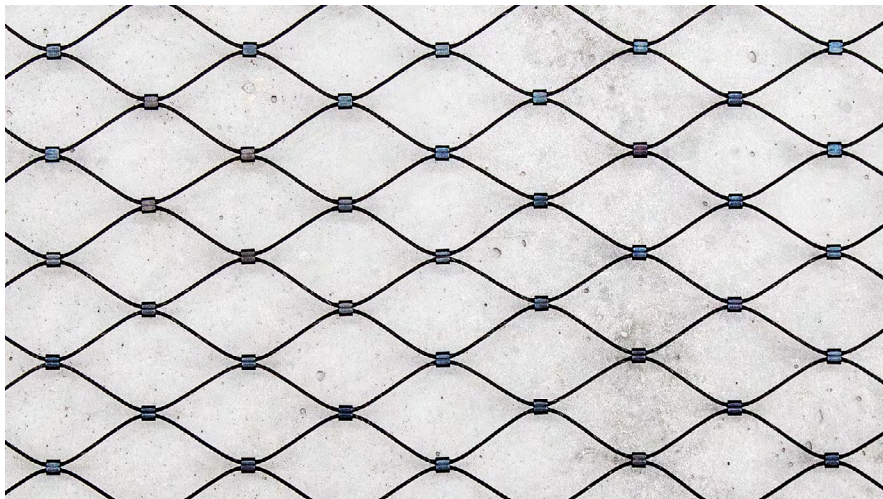
#### Information regarding the surface

The process media are cleaned from the products following the oxidation process. Due to the complex surface geometries of ropes and nets small quantities of media may still be released after this in the form of dust. For this reason, indoor applications should be checked to see if this could be an issue. The final surface is fundamentally "inert" in behavior i.e. there is no problem touching it. In other sectors, black oxidizing is used for example for furniture handles, kitchen utensils or automobile parts such as windshield wiper arms.

In terms of color and durability, black oxidizing is the premium process for producing black stainless steel products. If you are interested, we will be happy to advise and support you in the planning of your construction project.

You can find more information about us and our products at: [www.jakob.com](http://www.jakob.com)

Source: Kosmač, Alenka, Farbiger nichtrostender Stahl, Hrsg. von Euro-Inox & Informationsstelle Edelstahl Rostfrei, Merkblatt Nr. 976, Brüssel / Düsseldorf 2011



Stainless steel rope net surface-finished with black oxidizing.

