

# Versatility in stainless steel

The INOX-SPECTRAL<sup>®</sup>-Process



**INOX-COLOR**

INOX-COLOR colours products in Germany made of stainless steel with dimensions up to 6000 x 1200 x 2000mm (L x W x H) using the INOX-SPECTRAL<sup>®</sup>-process.

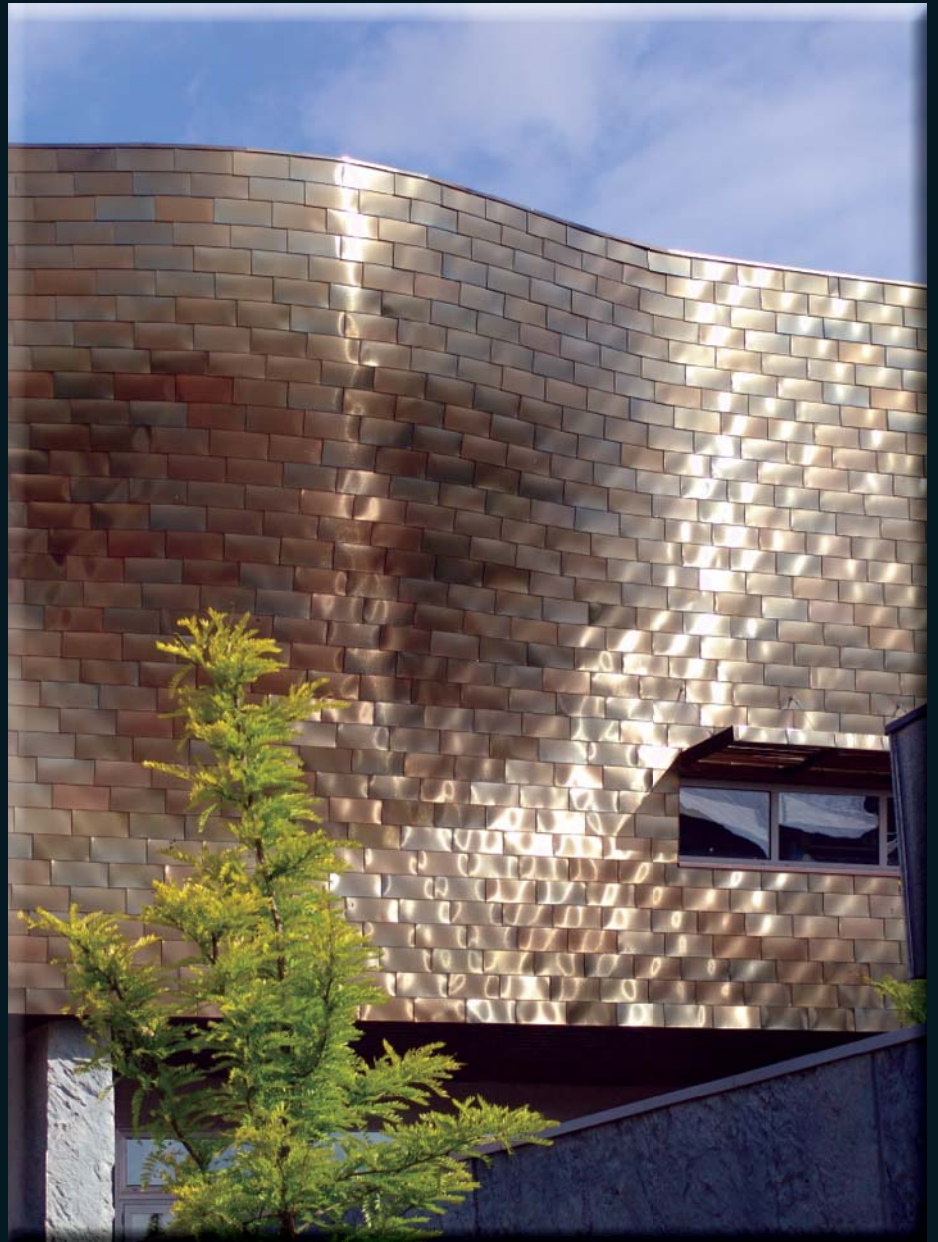
In addition to the refinement of steel sheets, the INOX-SPECTRAL<sup>®</sup>-process is also perfectly suited to the colour design of other premium steel products such as expanded metal, wire mesh, profiles, components and small parts etc.



cladding: 2M/Feinkorn  
colour: bronze-SG



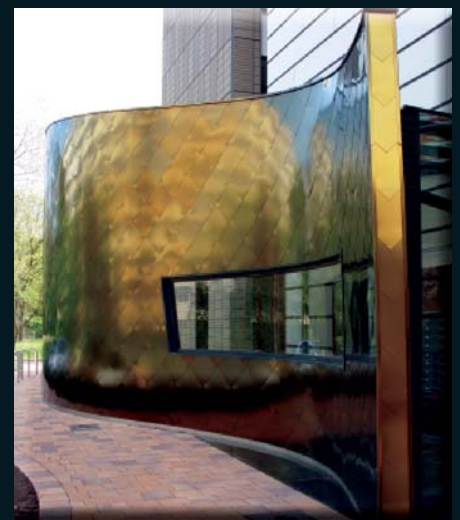
cladding: 2R/III d  
colour: red



cladding: 2G/Grit 240  
colour: bronze



cladding: 2R/III d  
colour: black



entrance area: 2J/brushed  
colour: red-gold

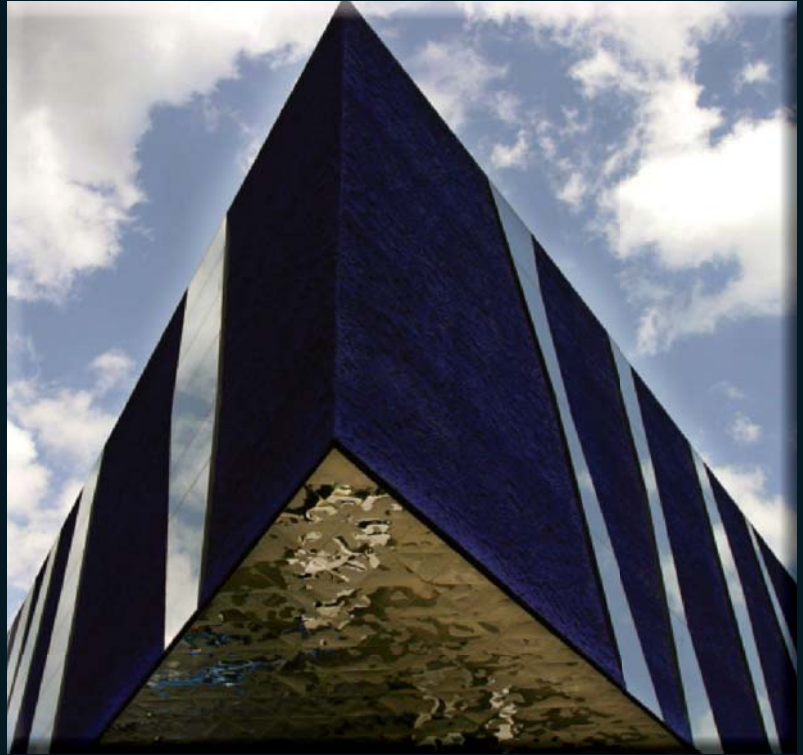
## Sophisticated architecture

can be recognised by its classic form and the use of high quality materials.

Surfaces of stainless steel which are coloured by using the INOX-SPECTRAL® process have all of the qualities which modern architecture needs: functionality, efficiency and aesthetics.

Coloured surfaces made of stainless steel make individual designs possible which enable dynamic colour scenarios and therefore create various perceptions and moods.

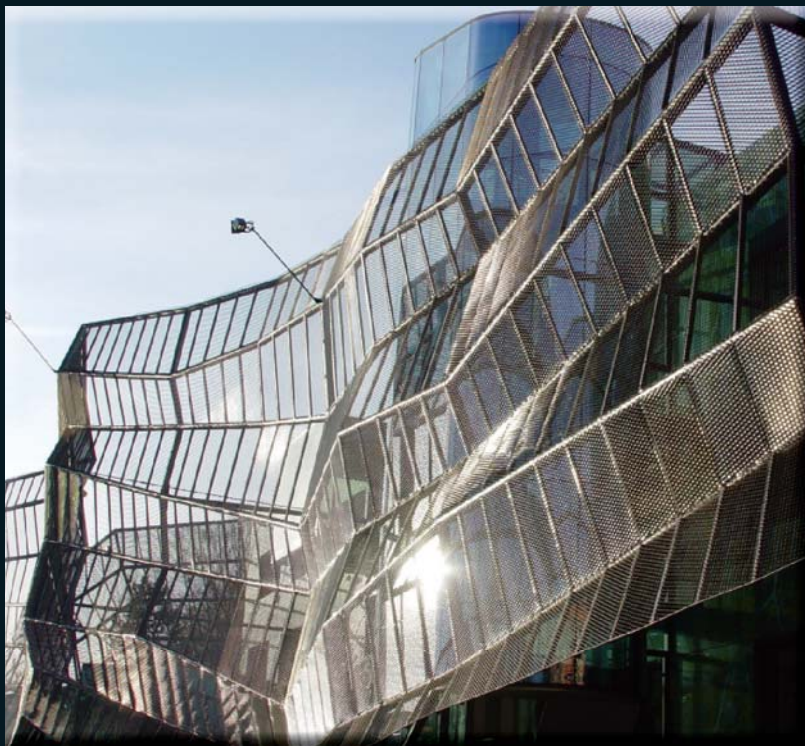
Some advantages offered by coloured stainless steel are as follows: there are hardly any subsequent costs and it maintains the original optic, form and function. The refined material is one hundred percent recyclable. It saves cleaning, replacement and restoration costs over a very long period, like no other material.



cladding: INOX-FORM B 6

# COLOUR. FORM. PERFECTION.

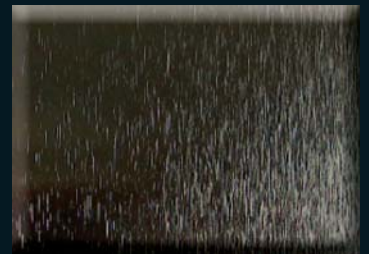
## material examples



Sunprotection front: expanded metal

colour : red-gold

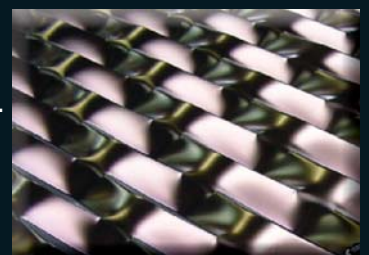
GRIT



INOX-FORM



EXPANDED-METAL



# Coloured surfaces decorative variety



Austenit - green



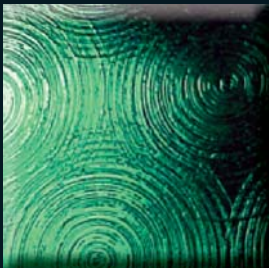
5 WL - champagne



Eisblume - cobaltblue



Feinkorn - bronze



Jahresringe - green



Ledernarbe - champagne



INOX-UT - cobaltblue



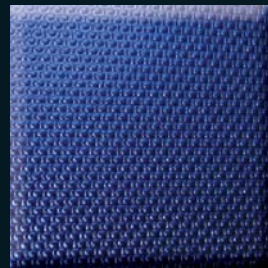
Raute - bronze



6 WL- green-SG



Jahresringe - champagne



Leinen - cobaltblue



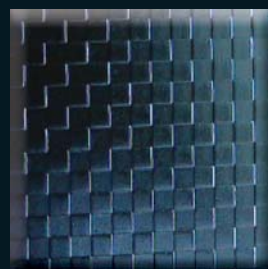
Eisblume - bronze



Perforated sheet - green



Grit - champagne



Kleinkaro - cobaltblue

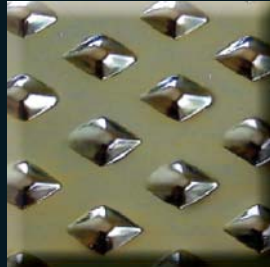


Schachbrett - bronze

Grinted, pearl finished, polished or patterned : stainless steel sheets are perfectly suited for colouring using the INOX-SPECTRAL<sup>®</sup>-process. Here is a small selection of the possibilities. All surfaces can be presented in colour.



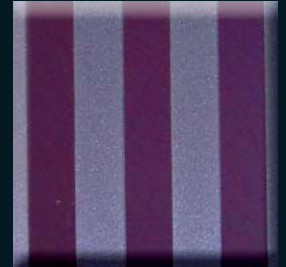
Kleinkaro - black



Waffelblech - gold



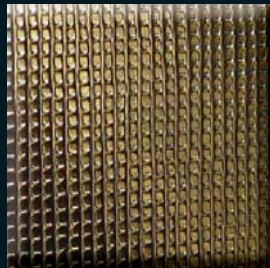
Jahresringe - steelblue



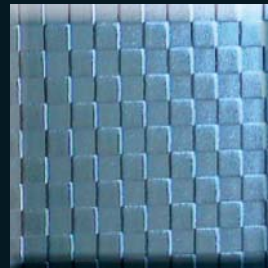
Streifen I - red



Grosskaro negative - black



Pikee - gold



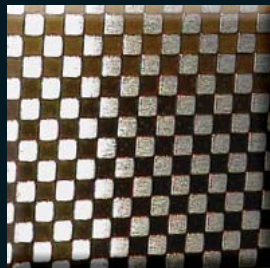
Kleinkaro - steelblue



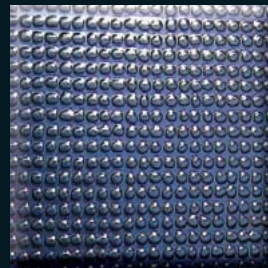
6 WL - red



INOX-UT - black



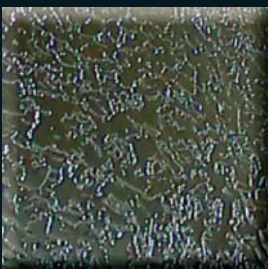
Kleinkaro - gold-SG



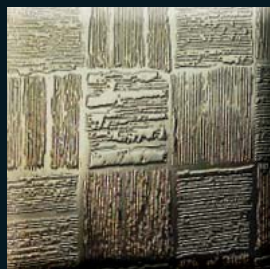
Feinkorn - steelblue



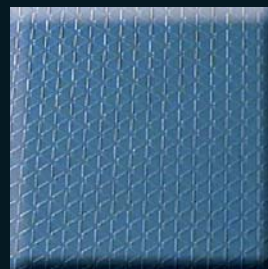
INOX-UT - red



Eisblume - black



Schachbrett - gold



Triangel - steelblue



Pikee - red-SG

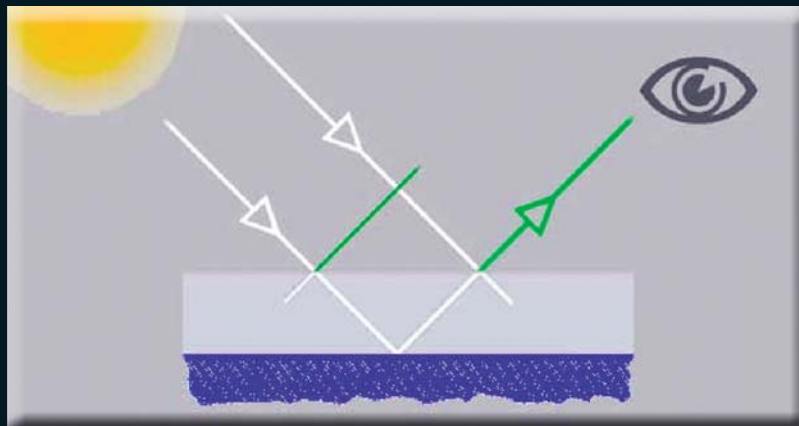
# The INOX-SPECTRAL<sup>®</sup>-process

## The process

**Electrochemical process:** the INOX-SPECTRAL<sup>®</sup>-process is a computer-controlled electro-chemical process; the colour or pigment is not applied, the transparent chromium oxide film is built up.

**Interference effect:** the interference effect is used; different colour effects unfold depending upon the thickness of the applied chromium oxide film, the composition of the light spectrum and the perspective.

**Stainless steel character:** due to the low degree of thickness of the chromium oxide film, the structure of the coloured surface is not hidden; not only the functional material characteristics are maintained but also the unique visual quality of stainless steel.



## Durability of coloured stainless steel surfaces

**Resistance against corrosion:** the corrosion resistance of the base material is decisive. The chromium oxide film which is built up during the colouring process is generally an improvement from a corrosion point of view, but the material quality should be selected to suit the expected level of wear and tear.

**Light, weather and age resistance:** coloured stainless steel surfaces do not age, split or flake off and are not bleached out by the sun.

**Temperature resistance:** the coloured surface is consistently resistant against temperatures up to 200° Celsius. Short-term temperature excesses of around 100° Celsius can generally be endured but permanent discolouration can occur if excess temperatures persist.

**Mechanical durability:** the chromium oxide film which is built up during the colouring process is physically attached to the base material and is elastic. Deformations (warping, edges, indents and presses) which do not impair the actual base material do not damage the surface. Resistance against abrasive wear is limited due to the low degree of coating thickness of the interference film.

# Eight standard colours at a glance

This is the standard selection of all of the colours which can be produced with the INOX-SPECTRAL® - process:

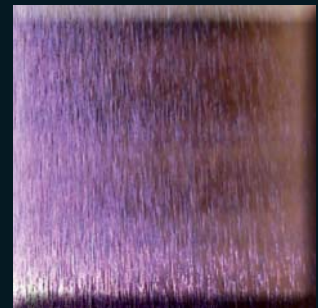
- champagne
- gold
- bronze
- steelblue
- cobaltblue
- green
- red
- and the special colour: black

Other shades are possible. Minimum quantities have to be ordered due to production reasons.

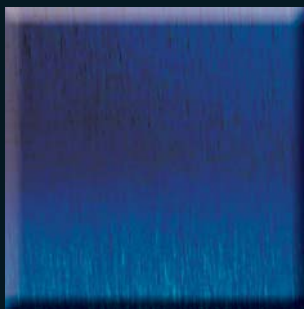
In spite of sophisticated reproduction technology, the colours shown may not be exact. Sample cards with original samples are available.



2 G/grit  
colour: champagne



2 G/grit  
colour: red



2 G/grit  
colour: cobaltblue



2 G/grit  
colour: green



2 G/grit  
colour: black



2 G/grit  
colour: gold



2 G/grit  
colour: bronze



2 G/grit  
colour: steelblue

# Cleaning and maintenance of coloured stainless steel

Just like all high quality objects, parts made of stainless steel should also be regularly cleaned. How regular it is cleaned depends on the level of dirt and your own personal requirements.

The relation between the maintenance and cleaning efforts and the roughness of the surface is straightforward: the rougher the surface, the easier it is for deposits (from normal dirt to bacteria) to find places to settle, making cleaning more difficult and more complex.

The INOX-SPECTRAL® -process produces a transparent interference film on the surface which, in connection with an electrical polish as a pre-treatment, has a “sealing” effect:

- Grinding and brushing grooves are removed
- The surface gets enclosed.

Maintenance begins with processing the coloured steel sheets: the protective film which covers all coloured sheets is durable but not indestructible. Each processing “accident” which damages a blank, non-coloured surface or causes scratches also damages the colour film. Local repairs are not possible.

## Cleaning

Stainless steel surfaces which are coloured by using the INOX-SPECTRAL®-process are water and dirt repellent. They can be easily cleaned with all non-abrasive cleaning agents.

Usually the wiping with clean and soft towel is sufficient. Water with usual dishwashing-detergent, or first with pure detergent and with richly water, removes all contaminations.

## The following cleaning agents are not suitable:

- All types of abrasive cleaners (they scratch the surface)
- Chrome, silver and brass cleaning products (they dissolve oxide)
- Furniture polish and other “polishers” (a waxy film can change the colour)

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