

Nano Color Coatings: “Aradierung”[®]

Technical description



Product Description

Thin film systems for refinement of product surfaces by combination of brilliant colors with functionality

Flat and rotational symmetric surfaces can be coated with this sputtering technology

Applications

In the decorative area:

- Pretty, watches, gifts, writing utensil, ...

Sanitary facilities:

- Fittings, mirrors, ceramics, ...

... and much more besides

Production / Certification

PVD-Technology: „Aradierung”[®]

Three to five thin layers were sputtered on products

⇒ Subsequently, documentation of the original “Aradierung”[®]

Unique Selling Points

- unique colors worldwide
- strong brilliance of each color
- weather proof
- long time stable
- customer specific adaption

Layer Properties

- very hard (topcoat approx. 2000 HV)
- small roughness (< 10 nm)
- no change of the existing surface structure
- additional treatment possible

Homogeneity

± 4 % Layer Thickness Variance

Products to be coated

Surface finish Dimensions

Non elastic, vacuum resistant
Depending on coating chamber

Materials

Metals, glasses, ceramics, stones, some plastics

Specification

Used Materials	Only TiAlOxNy or SiOxNy
Layer thicknesses	Complete color system: < 700 nm Single films: 2 – 300 nm
Topcoat	Ceramic hardcoat with HV ≈ 2.000
Thermal stability*	Up to approx. 400 °C
Chemical stability*	Resistant against <ul style="list-style-type: none">- dest. H2O- Ethanol, Aceton,- most detergents, cleaning agents- HCL (1M)- NaCl (1M)- HCL (25%)
Other	<ul style="list-style-type: none">- The coatings are non toxic- During the production no pollutants result

Examples

Razor-blades



Cabinet grasps



Watches / Pretty



Writing utensil



*: Appropriate tests were accomplished with glass slides. Depending upon product properties the data can deviate.