

DECO AND SPORT

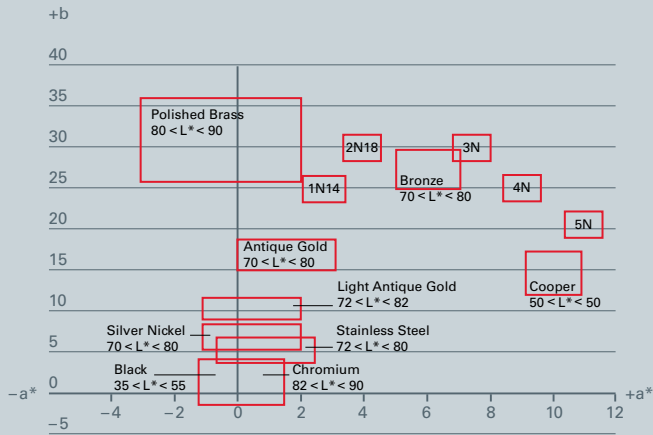


IHI GROUP

THE SURFACE ENGINEERS™

ionbond

Decobond™ Coatings for a Clean and Lasting Finish



Physical vapor deposition technology (PVD) has been used extensively for decorative purposes in numerous applications where superior adhesion, wear and scratch resistance are important to ensure a perfect look for an extended period of time and intense use.

Ionbond has developed the Decobond™ family of coatings with metallic appearance and properties that match these needs.

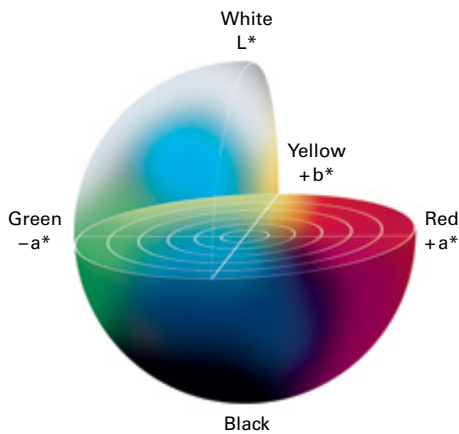
- ▶ High hardness
- ▶ Scratch and scuff resistance
- ▶ Wear resistance
- ▶ Chemically inert/non-tarnish
- ▶ Odorless
- ▶ Hypoallergenic

Color matching

Ionbond has an extensive range of standard colors across the spectrum of metallic finishes. However, corporate designs or designers taste may ask for special tones.

Whether it be a color seen from another technology such as electroplating/powder coating/anodizing or a slight shade or tone change from an existing PVD coating, Ionbond's engineers are available to design a process to deliver the client a true bespoke finish.

- ▶ Custom colors
- ▶ Replicated colors
- ▶ Color uniformity



Unlimited Applications

Decobond™ PVD coatings have countless applications. Their unique hardness, wear resistance and metallic appearance make them the ideal treatment for heavily used surfaces, indoor and outdoor.

Architectural

Decobond™ PVD coatings offer a finish second to none on all manner of interior and exterior infrastructure fittings and design elements. The long lasting finishes withstand frequent tough use and keep a clean look. The color pallet compliments the most imaginative designer and architect.

- ▶ Kitchen and bathroom appliances
- ▶ Store interiors
- ▶ Signage
- ▶ Indoor and outdoor trim

Interior

Decobond™ coatings offer a bespoke look tailored to the needs of the designer. The coatings facilitate a long lasting, low maintenance, and easy-to-clean surface.

- ▶ Airplanes
- ▶ Yachts
- ▶ Retail stores

Automotive

The need to reduce the weight and cost of vehicles forces engineers to use plastic materials or light-metal alloys for interior and exterior trim. Decobond™ PVD coatings turn these light-weight parts into wear-resistant and genuinely metallic-looking design components that outlast a car's life.

- ▶ Interior and exterior trim



Wear protection Built in

Sport and leisure

Ionbond's Decobond™ serie of PVD coatings withstand the most challenging environmental conditions from the wet and salt at sea, mud and dirt in outdoor activities to the extreme hot and dry in the desert. Often they serve a double function and act as friction reduction or wear-protecting finishes to extend the lifetime of the gear.

- ▶ Golfing gear
- ▶ Boat fittings
- ▶ Knives
- ▶ Sunglass frames
- ▶ Bike components
- ▶ Music instruments
- ▶ Firearms

Substrate materials

All electrically conductive materials are suitable for coating with Decobond™. Stainless steel and Titanium are coated without any pretreatments. Softer and oxidation-prone metals and plastics require an electroplating pretreatment with Ni and Cr to increase the surface hardness, act as a filler to aid surface finish and avoid corrosion.

- ▶ Stainless steel
- ▶ Titanium
- ▶ Aluminium
- ▶ Brass
- ▶ Zinc die cast
- ▶ ABS

Quality assured

Most Ionbond facilities offering Decobond™ are ISO 9001 certified. Some are serving the automotive or aerospace industries and hold TS16949/AS 9100 certification. This guarantees our customers receive a product of consistent quality across the Ionbond network of manufacturing sites.

- ▶ ISO 9001
- ▶ TS 16949
- ▶ AS 9100
- ▶ ISO 14000



Decobond™ PVD Coatings

Standard colors

Grey	Black	Gold	Red	Others
Stainless Steel	Anthracite	Gold 24K	Copper Rose	Flat Dark Earth
Nickel	Black	Gold 18K	Bronze	Sand
Smoked Grey	Black	French Gold	Brass	Rainbow

General performance specifications

Hardness	1500–2800 HV
Coating thickness	0.2–0.5µ (thicker coatings on request)
Appearance	Metallic colors, odorless
Adhesion strength	Good adhesion on stainless steel and on electroplated chrome surfaces
Wear resistance	Improved wear resistance as a result of the high hardness
Coating temperature	20–200°C, depending on substrate
Dimensions	max. 1500 mm length (exception 1850 mm) max. 900 mm diameter (exception 1600 mm)

For a complete coating listing please see www.ionbond.com



Competence and Innovation – Worldwide

Ionbond is a leader in surface enhancement technology and provides advanced coating solutions featuring a broad range of hard, low friction, wear resistant coatings based on PVD, PACVD and CVD technologies for a wide range of applications. It has a global presence with coating centers in strategic locations across Europe, Asia, and North America and has one of the largest coating networks in the world.

Ionbond is part of the IHI Group, a Japanese industrial group with significant R&D resources that operates through multiple business fields including: Energy and Resources, Social Infrastructure, Industrial Machinery and Aero Engines.



Global and regional headquarters

IHI Ionbond

Group Headquarters
Uetlibergstrasse 132
CH-8045 Zürich
Phone: +41 44 298 50 70
Fax: +41 44 298 50 99
info@ionbond.com

Ionbond France – Lyon

Services Headquarters
Europe Zone 1
25, rue des Frères-Lumière
FR-69680 Chassieu
Phone: +33 4 72 79 46 60
Fax: +33 4 72 79 46 61
infofr@ionbond.com

Ionbond Switzerland – Olten

Equipment Headquarters
Industriestrasse 211
CH-4600 Olten
Phone: +41 62 287 86 86
Fax: +41 62 287 85 93
equipment@ionbond.com
infoch@ionbond.com

Ionbond China – Wuxi

Services Headquarters
Asia
Building 17-B
No. 15 Hanjiang Road
Wuxi New District
Wuxi City, Jiangsu Province
China (Postcode: 214028)
Phone: +86 510 8815 2528
Fax: +86 510 8181 6819
infoch@ionbond.com

Ionbond Netherlands – Venlo

Services Headquarters
Europe Zone 2
van Heemskerckweg 30
NL-5928 LL Venlo
Phone: +31 77 465 65 65
Fax: +31 77 351 34 99
infofl@ionbond.com

Ionbond US – Michigan

Services Headquarters
NAFTA
1823 East Whitcomb
Madison Heights
USA MI 48071
Phone: +1 248 398 9100
Fax: +1 248 398 2110
infous@ionbond.com

See our website for a full list of all coating centers and local equipment sales offices. www.ionbond.com

