



ionbond

Experts in Innovative Coating Services

ionbond.com

IHI GROUP

Extensive Worldwide Network



1972

Start of High Temperature CVD activities for hard and wear-resistant coatings

1978

Industrialization of moderate Temperature CVD process

1992

First step in the development of CVD aluminization (CVA) of turbine blades

1997

Acquisition of Multi-Arc Inc. and introduction of arc PVD technology

1999

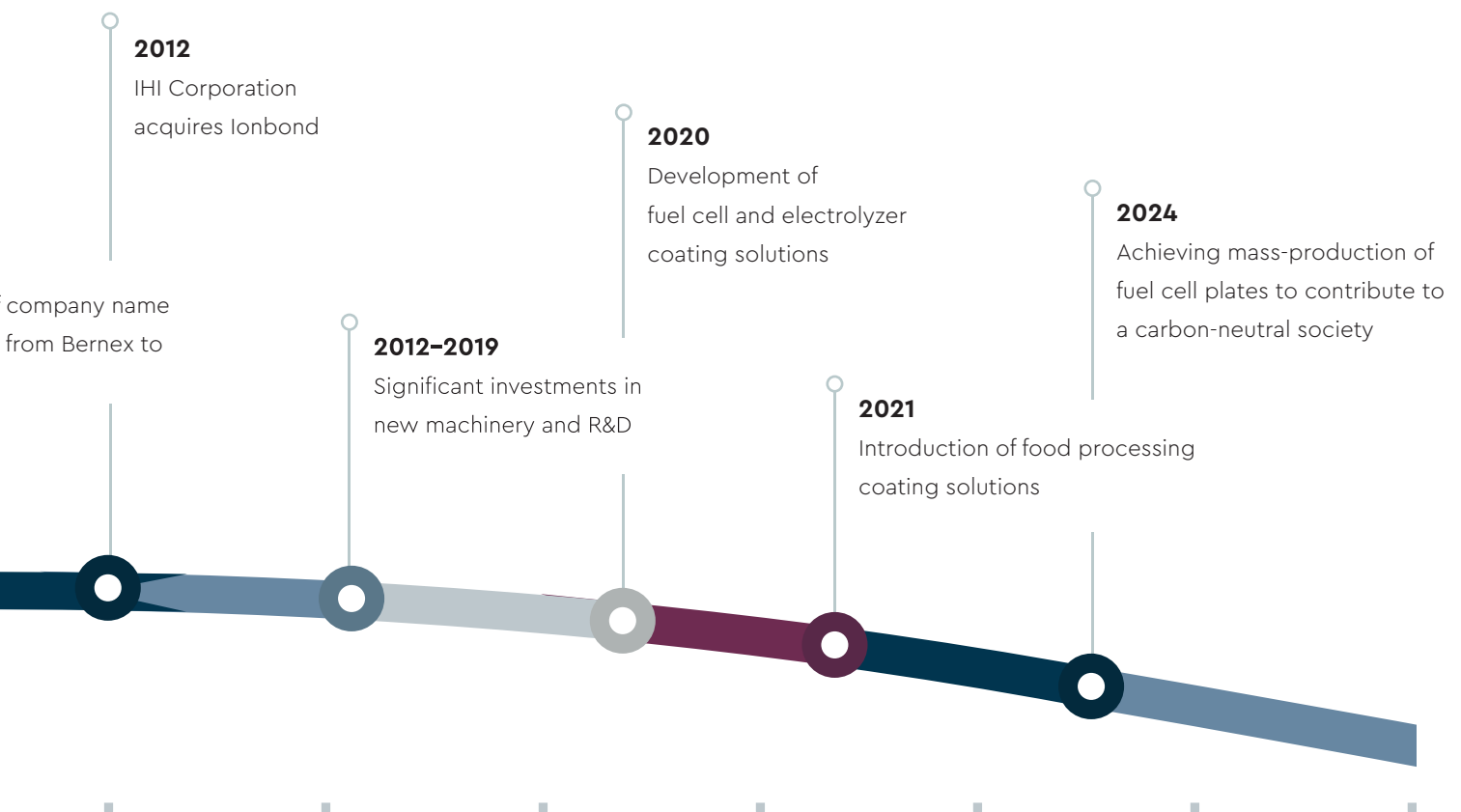
Change of and brand Ionbond

Your provider of innovative high-performance coatings

Wherever you are around the world, you have access to the IHI Ionbond coating center networks. With over 1000 employees and over 30 service centers in Europe, North America and Asia, we can always provide you with our experience in coating technology.

Our global and regional competence centers support the local coating centers and customers with state-of-the-art knowledge, so we can deliver world-class products locally. Due to our flexible, agile approach, the network can meet the needs of large OEM customers with global operations as well as small and mid-size companies that require a local touch and understanding.

Ionbond's mission is to meet our clients' demands in a sustainable and ethical manner, and all of its activities are guided by legal and environmental compliance.





Coating Service Portfolio

50 years of experience as The Surface Engineers™

IHI Ionbond has a dual focus. We provide customers in the cutting, molding and forming tool markets with coatings from our high-quality portfolio. Depending on your specific application needs, we will advise you a coating based on physical vapor deposition (PVD), chemical vapour deposition (CVD) or plasma-assisted chemical vapor deposition (PACVD) and related post- and pre treatments.

In addition, we offer customized solutions for our customers making OEM components. At IHI Ionbond, we are always eager to take on challenging, highly specialized coating applications and to put in the time and energy required to create such custom coatings. Our approach of very close cooperation ensures the coating meet all your critical requirements. Our 50 years of experience in this technology shows our track record.





Cutting
Tools



Forming and
Molding Tools



Industrial
Applications



Automotive
Components



Decorative
Applications



Fuel Cells and
Electrolyzers



Medical
Applications



Food Contact
Applications

Coatings for Cutting Tools

High-performance coatings for cutting tool applications

The performance of cutting tools during machining various materials, for wide range of cutting conditions including high speed cutting (HSC) and high performance cutting (HPC), can be improved by applying proper high-performance coating. Our Ionbond™ Plus coatings, together with the appropriate pre- and post-treatments, are tailored to enhance the cutting tool productivity for every machining application requirement.





AuroraX™ Plus, Hardcut™ Plus for machining of hard and difficult-to-cut materials

AuroraX™ Plus is our latest Plus coating. It is a TiAlSiXN multilayer coating, exhibiting high hot hardness and thermal stability up to 1100°C, outstanding oxidation resistance, and low thermal conductivity. It is optimum for dry and wet machining with broad range of cutting conditions for various applications including drilling, milling, hobbing and bevel cutting. Hardcut™ Plus is a multilayer TiSiN based coating. It has exceptional performance, made possible by a patented process that forms a optimum nanocomposite structure. Hardcut™ Plus is developed for high-speed milling and gear hobbing of the hardest and toughest materials, including nickel and titanium alloys under low-lubrication and dry conditions.

General machining with Optimizer™ Plus, Crosscut™ Plus & Maximizer™ Plus

Optimizer™ Plus is a AlCrN-based coating for dry and wet machining at high speeds, for instance for milling, hobbing and bevel cutting operations with temperatures reaching up to 1080°C. The AlCrN-based Crosscut™ Plus is the most versatile coating for wet and dry machining at medium to high speeds for low to high tensile steels, cast irons, tool steels, and stainless steels. Maximizer™ Plus is a significantly improved TiAlN coating, ideal for drilling of a broad range of low to high tensile strength steels, tool steels, cast irons and stainless steels.

Machining of non-ferrous materials: Tetrabond™ Plus

Tetrabond™ Plus is an ta-C coating with sp^3 content of 60–80%, with a hardness of over 5000 HV. The thin, smooth, extremely hard coating is designed to maintain maximum cutting edge sharpness for machining low- and high-Si-content aluminum alloys, abrasive composite materials, and glass-reinforced PCB materials. Its low friction and anti-sticking properties make Tetrabond™ Plus excellent for machining soft metals like silver and copper as well as lead-free bronzes, brass alloys and a wide range of polymers.

State-of-the-art CVD coatings for cutting inserts

Together with IHI Bernex AG, the market leader in CVD coating equipment, Ionbond has a long tradition in CVD technology for hard, wear-resistant coatings. Thick, low-stress Ionbond™ CVD coatings are excellent on carbide inserts for extreme-load machining like heavy roughing of steel and cast iron. Through the optimization of its crystal structure and related texture coefficient, the new Ionbond™ CVD 29 HSA Plus alpha aluminum oxide coating allows a extraordinary increase in performance.

ionbond.com/cutting-tools



Coated with AuroraX™ Plus





Coatings for Forming & Molding Tools

Improved productivity and quality with coated forming & molding tools

Ionbond™ coatings improve the performance and productivity of punches, dies, molds, rolls and other tooling types used for forming metal, plastic and composite materials. With the broadest portfolio in the industry, we have an engineered surface solution for pretty much every application.

At Ionbond, we create coating solutions for your objectives. Our proven portfolio and the experience and assessment of our engineers allow us to match the right coating to the mechanical demands of the application, to achieve the desired tool performance, higher yields, less change over time and better part quality.





Matching the desired coating properties with the right coating technology

PVD coatings cover a wide range of coating materials and can be applied at lower deposition temperatures. PVD coatings have properties like hardness, toughness, temperature resistance, and low coefficient of friction (COF). CVD processes make it possible to coat surfaces that cannot be reached by the line-of-sight PVD processes. An ideal solution for tools with open dimensional tolerances, demanding materials and complex geometries. The PACVD technology is mostly used to apply diamond-like carbon (DLC) based coatings, with a very low COF against steel and a very low affinity to soft working materials. This reduces their propensity to stick to the die surfaces.

Pre- and post-coating treatments

The right tool preparation and post-coating efforts can maximize the benefits of engineered coatings. In any collaboration with our customers, we will review your tool material selection, carburizing or nitriding needs, and surface finishing. A lower surface roughness, for instance, prevents workpiece material build-up or galling.



Applications benefiting from Ionbond's Forming & Molding coating solutions

Cold forming

Solutions in the fields of stamping, trimming, piercing, blanking, deep drawing, cold forging and powder compaction. Duplex treatments of plasma nitriding and vacuum coating can be provided.

Hot forming

Protective coatings with hot hardness, thermal stability, and galling resistance can significantly improve the tool life and quality of the product in hot stamping, hot forging, die casting and extrusion. Here, too, duplex treatments can be provided.

Plastic molding

Plastic molding and film extrusion processes used in various industries like food packaging, automotive and cosmetics benefit from lower abrasive and corrosive wear of molds and extruders as caused by fillers and resins.

Laser hardening

Laser treatment can provide local tool preparation for a minimal overall heat input. This reduces or eliminates tool distortions.

ionbond.com/forming-molding





Coatings for Industrial Applications

Boosting the performance of industrial machinery

Ionbond PVD, CVD and PACVD coatings are used in countless industrial machinery applications to improve the performance of components under adverse operating conditions such as high loads, aggressive environments, lack of lubrication or the presence of abrasive particles. The coatings increase durability, extend maintenance intervals and often become an enabling element without which operation is not possible.

The Tribobond™ family of low-friction and wear-resistant coatings are designed to meet the challenges that modern mechanical components are exposed to. They are used in a wide range of applications like aerospace, heavy-duty machines and vehicles, power generation, transportation and general engineering.



**Why Ionbond Tribobond™ coatings?**

- Dramatically reduced wear and friction in mechanical contacts
- Allow operation in lubrication-starved conditions or without lubrication
- Avoid post-coating machining/grinding due to low coating thickness
- Environmentally safe alternative to electroplating
- Provide unique surface properties, e.g. electrical insulation, modified wettability, etc.

Green alternative to electroplating

Legislation is phasing out the electroplating processes. That means an alternative is needed that can meet environmental standards. Thin film coatings, produced by environmentally sound PVD and PACVD technologies, are such an alternative. They provide outstanding protection against fretting, galling and abrasion, clearly outperforming galvanic coatings, while being fully REACH and RoHS compliant. Moreover, unlike hard chromium plating, Tribobond™ coatings do not require post-machining, which results in lower overall component manufacturing cost.

Tribobond™ in aerospace

Ionbond PVD, CVD and PACVD coatings are routinely used on components in

the aerospace industry. We are proud of having our coatings fly in various air- and spacecraft. Dedicated Ionbond aerospace facilities hold the required accreditations, including ISO 9001, AS 9100 and NADCAP.

Tribobond™ in energy

Ionbond coatings help improve the efficiency of power generation machinery, with successful applications in wind power, steam and gas turbines, and machinery for exploration and production of fossil fuels. The coatings are also becoming an essential part of the quickly developing energy storage industry.

Tribobond™ in industrial engineering

In addition to standard wear components like valves, bearings and pump parts, there are many unique applications in industrial engineering that can benefit the right Ionbond coating. The unique properties of Tribobond™ films help them find applications in a variety of industries, including chemical, textile, semiconductor, transportation and others.

ionbond.com/industrial



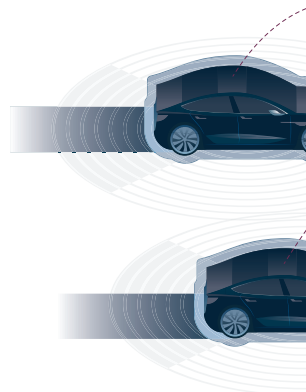
Coatings for Automotive Components



Sustainable future mobility

Sustainable future mobility comes with increasing demands on parts and materials. This matches perfectly with Ionbond's low-friction and wear-resistant coating solutions. The industry faces higher specific mechanical and thermal loads on components and the need to minimize friction losses in tribological assemblies. New materials and innovative surface treatment processes can help reduce friction and wear.

PVD and PACVD coatings are key contributors in adjusting to these demands. Ionbond's Tribobond™ coatings increase the wear resistance and efficiency of power trains by reducing friction. It is the enabling technology for higher load conditions and increases the lifetime of the component.





High loaded engine and transmission components

Hard and wear-resistant coatings, in particular diamond-like Tribobond™ 40 series coatings, reduce friction, increase load-bearing capabilities and extend component lifetimes. Applied on components in state-of-the-art and future combustion engines and fuel injection systems, they protect high-load components in low-viscosity oils and future decarbonized e-fuels. The outstanding properties of Ionbond's DLC coatings will protect and extend the lifetime of coated components and will help to reduce the global greenhouse gas problem.

E-mobility and hydrogen applications

Minimizing friction losses in electric drive trains and extending the driving range of battery electric vehicles (BEVs) is where Ionbond's Tribobond™ 40 coating excels. Coating solutions for differentials, e-compressors, water pumps, sealing, steering and braking units also increases the robustness and lowers the energy consumption of non-drive train systems. Hydrogen powered internal combustion engines (H₂ICE) are an alternative technology for zero emission vehicles.

Newly developed Ionbond coatings are able to keep low friction properties also under dry and high pressure hydrogen atmospheres and can have as well hydrogen barrier properties to eliminate the risk for hydrogen embrittlement of the coated component. In fuel cell electric vehicles (FCEV) or electrolyzers for the production of "green" hydrogen, DLC coatings are applied on bipolar plates to enhance the electrical conductivity and to increase the life time of the fuel cell stack.

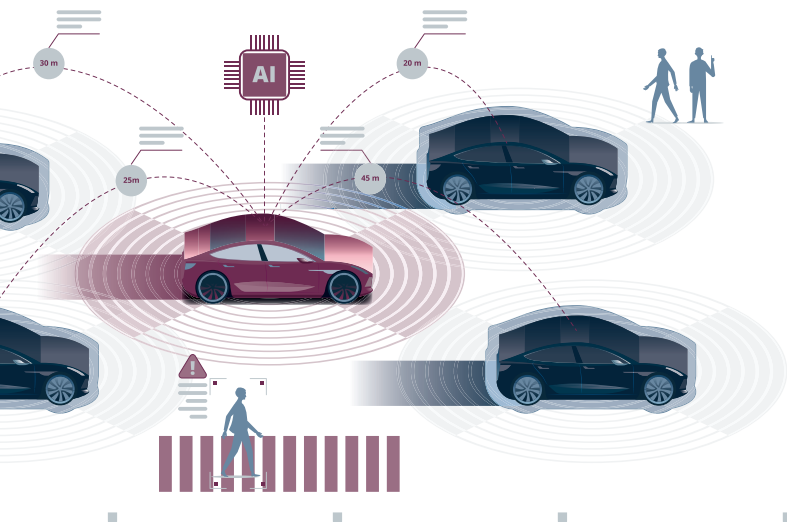
Solutions for sensor technologies used in autonomous driving

Ionbond has developed electrical conductive, semi-conductive and insulating coating solutions beyond the standard Tribobond™ coating portfolio, related to the increasing demand of automotive hightec sensors to enable autonomous driving up to level 5. These sustainable produced thin film coatings can be applied on ultra sonic, radar and lidar sensors.

IATF 16949-certified quality in volume production

With more than 25 years' experience in vacuum-based coating technology, Ionbond has established a reputation as a dependable and innovative partner to the automotive industry and its suppliers. All Ionbond centers for automotive component coatings in Europe, Asia and North America are certified according to IATF 16949 and ISO 14001 and follow their customers' quality standards.

ionbond.com/automotive

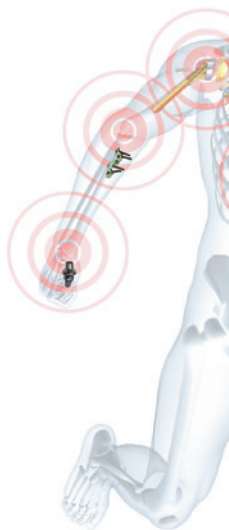


Coatings for Medical Applications

Medthin™: Engineered for life

For medical applications, coatings provide valuable surface characteristics such as low wear, low ion release, textured surfaces, low light reflection or even simple color coding. The wide range of Medthin™ coatings was developed with medical applications in mind. These high-quality coatings have excellent adhesion, fracture toughness, high hardness, and low friction and shine. Generation II Medthin™ coatings are smooth and dense and usually require post-polishing treatment. Generation III Medthin™ coatings are our highly smooth, premium coatings that require little to no polishing.

Ionbond medical coatings are biocompatible and available in attractive colors. At Ionbond, we have more than 25 years of experience on coating implants in ISO 13485 qualified coating centers.





Medthin™ 01 TiN

This coating is used on orthopedic implants such as knee, hip, shoulder, ankle and foot, and suitable for materials such as TiAlV, CoCrMo and stainless steels. TiN has shown low wear and low ion release in knee simulator tests as well as in hip simulator tests against ultra-high molecular weight polyethylene (UHMWPE). Ionbond's TiN coatings also perform well for taper applications under micromotion as well as for trauma applications to avoid cold welding. Are you in the USA? Then you can use our updated device master file (MAF) to qualify your medical device with Ionbond's Medthin™ coating.

Medthin™ 04 TiON

Medthin™ 04 is a bacterial colonization and growth inhibitor. The antibacterial qualities of the Medthin™ 04 coating are combined with strong wear resistance and chemical stability. As a result, Medthin™ 04 is an excellent coating for preventing the spread of microorganisms on medical devices and for other hospital-related applications.

Medthin™ 40 DLC

This smooth PVD-DLC is a gradient-like structure that remains stable after many cleaning and sterilization cycles. For applications where a darker black DLC is needed, with L values lower than 38, Medthin™ 40 DLC can be applied in its black grade called Medthin™ 40 black.

Medthin™ 42 DLC

This multilayer coating has a strong PACVD-DLC top layer. Medthin™ 42 DLC is applied on surgical instruments due to its low reflectivity, increased cleaning and sterilization resistance and stable appearance throughout the instrument's lifetime. Recently, Medthin™ 42 DLC was FDA approved in an implant spine device. Its smoothness and high adhesion to the substrate suggest excellent suitability for articulating surfaces of orthopedic implants. Medthin™ 42 is widely available in our global coating service network.

Medthin™ 43 ADLC

This carbon/diamond-based coating is extremely smooth, with a surface roughness lower than 20nm. It is deposited by PACVD, making it the coating of choice for applications where there are concerns about final smoothness. Medthin™ 43 has been successfully applied on spine implants sold in over 25 different countries. Commercialized since 2006, this ADLC is currently under an IDE in USA, seeking complete approval for the same spine application.

Beyond the coatings mentioned above, other Medthin™ coatings are available for different functionalities and specifications, such as electrical resistance, scratch and wear resistance or antibacterial activity.

ionbond.com/medical



Coatings for Food Contact Applications

Safe, high-performance coatings for food contact

For the extensive food processing and packaging industry, increasing wear resistance and component longevity is an important way to stay competitive and drive down costs. Ionbond offers a variety of high-performance coatings, which have proven themselves in the tool, industrial components and automotive industries, for the food processing industry. The coatings have US FDA Food Contact (TOR) approvals, which was established after strict tests of biocompatibility, migration, wear and dissolution in various environment.





Technological flexibility for the highest performance

Ionbond™ offers food contact coatings for diverse substrates, applicable at temperatures ranging from 100°C to 950°C. The thickness ranges from 1 to 10 micrometers, with a variety of color options. The coatings are used in food processing due to their outstanding properties:

- Reduced migration of metal into food, for safety and longevity
- Abrasion resistance for reduced wear on machines and components
- Anti-sticking properties to prevent food from sticking to the tools and machine components during processing (e.g. pasta, dough, candy)
- Performance under dry, low-lubrication conditions, excellent to increase part lifetime in direct contact with food, when lubricant is not allowed

Industries

Ionbond™ food processing coatings are used in the meat, fish, fruit and vegetable, grain, bread, biscuit, sugar and oil processing industries, as well as in pasta manufacture, chocolate making, brewing and cooking.

Ionbond™ food processing coatings

The following coatings stand-out in performance and safety for your food processing application:

Ionbond™ 01 TiN

Highly renowned golden PVD/CVD coating, exceptionally hard and abrasion-resistant, perfect for food cutting tools.

Ionbond™ 30 CrN

Durable silver/metallic coating, resistant to deformation, suitable for food contact components and flexible cutting blades.

Ionbond™ 36 CrWCC

Deep black coating, perfect for both decorative and functional purposes.

Ionbond™ 40 MeDLC (WCC)

Grey or black color gradient coating with highest capacity for plastic deformation.

Ionbond™ 41 DLC

Black color multilayer coating, which combines high deformability with high wear resistance.

Ionbond™ 42 DLC

Black DLC coating: low friction, high scratch resistance, ideal for food contact applications under pressure without lubrication to prevent sticking.

Ionbond™ 43 ADLC

Smooth, black coating with high hardness, deformation capacity, and anti-sticking properties. Ideal for flexible cutting blades and food contact without lubrication.

Ionbond™ 60 ZrN

Light gold colored coating for food cutting tools, offering high resistance to cleaning chemicals.

Ionbond™ 61 ZrCN

Copper-colored coating tailored for cosmetic applications.

ionbond.com/food-contact



Coatings for Decorative Applications

Decobond™ coatings for a clean and lasting finish

PVD coatings are attractive and give coated parts a high-quality, genuine feel through their appearance and touch. Decobond™ PVD coatings enhance the image and performance of parts, adding an element of emotion and status.



Coatings for
luxury goods

Olympic Torch
coated by Ionbond





Architectural & interior

Decobond™ PVD coatings are hypoallergenic and offer a finish that is second to none on all manner of interior and exterior infrastructure fittings and design elements. The long-lasting finishes keep a clean look even under frequent tough use. Decobond™ coatings offer a bespoke look, while the color palette offers design freedom for imaginative architects and designers. The resulting surfaces are long-lasting, low-maintenance, and easy to clean.

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.

Sport and leisure

Ionbond's Decobond™ range of PVD coatings hold up in even the most challenging environmental conditions – from humid, salty seaside air, mud and dirt in outdoor activities, to the extremely hot and dry air of the desert. Often, they can

serve a double function, acting as friction reduction or wear-protecting finishes to extend the lifetime of the coated items.

Substrate materials

All electrically conductive materials are suitable for coating with Ionbond Decobond™. Stainless steel and titanium can be coated without any pretreatments. Softer, 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.

Barrion™ Beach, our new bacterial growth-inhibiting decorative coating

To curb the potential spread of bacteria and viruses in the future, Ionbond has developed a coating that reduces the growth of bacterial colonies.

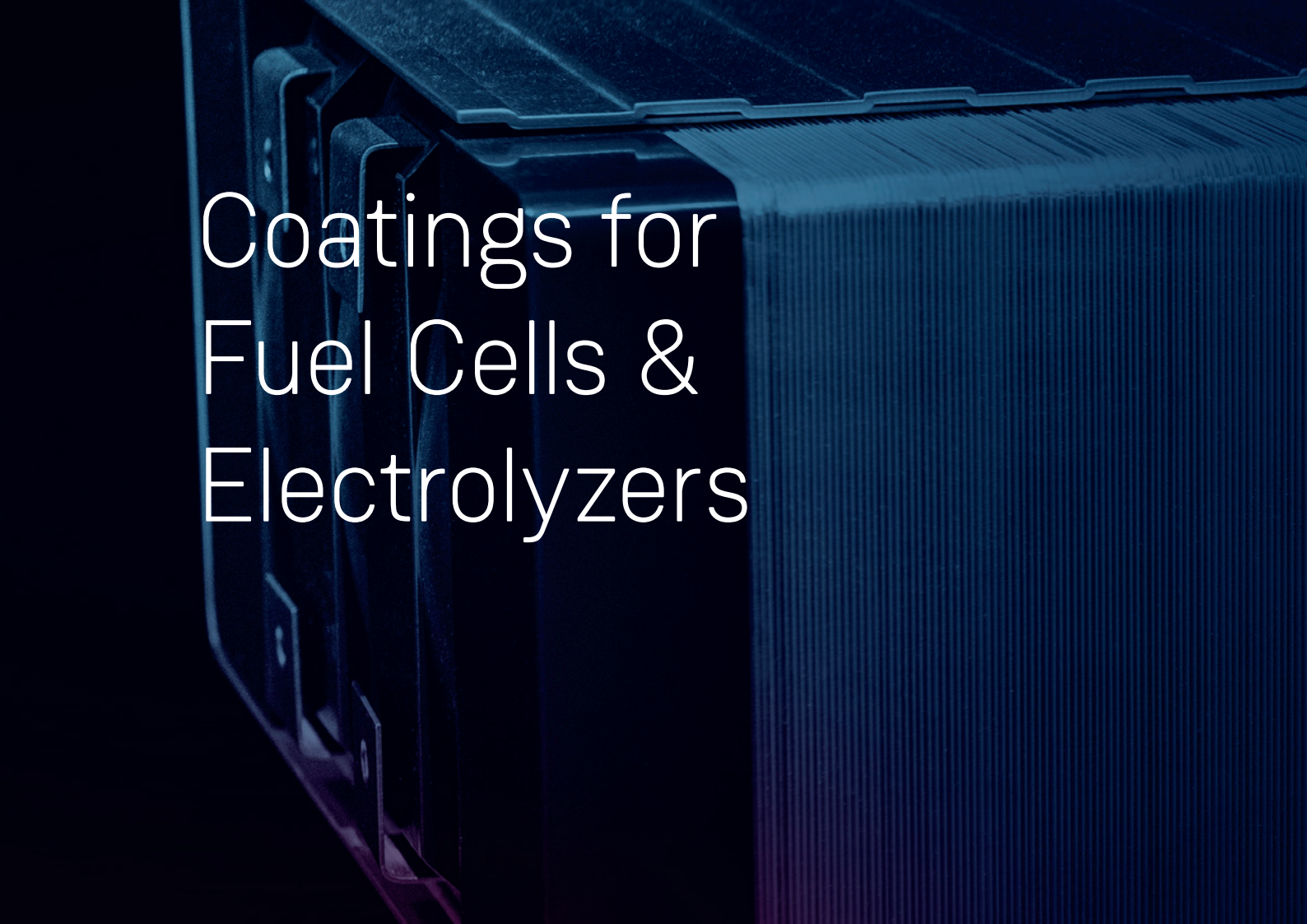
ionbond.com/decorative



Coated with
Barrion™ Beach

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





Coatings for Fuel Cells & Electrolyzers

Superior, low-cost coatings for metallic bipolar plates

The global hydrogen economy is developing rapidly. To support this expansion, the demand for fuel cells and electrolyzers is expanding as well. To gain further acceptance, these stacks need to meet very stringent requirements and demonstrate stable, reliable performance over long time periods. In addition, the price needs to be right.

For a large number of applications, polymer electrolyte membrane (PEM) stacks are moving from graphite bipolar plates toward lighter and less brittle titanium and stainless steel bipolar plates. Metallic bipolar plates require excellent corrosion resistance to function under the tough electrochemical conditions in the fuel cell, while maintaining a high electrical conductivity. Stainless steel bipolar plates, especially, need to be protected against leaching metal ions into the cell. This would poison and deteriorate the function of the membrane, leading to reduced performance of the stack over time. Ionbond has several coatings in our portfolio to perform exactly this task.



**Fuel cell DOT™ technology**

The DOT™ technology is a duplex treatment to ensure conductivity and corrosion protection. The initial layer is based on a PVD titanium coating, deposited by sputter technology. The second step is based on thermal spraying of small dots of a noble metal. The freely exposed titanium will form a corrosion-resistant titanium oxide, while the noble metal dots fuse to the metallic surface, providing excellent adhesion and electrical conductivity.

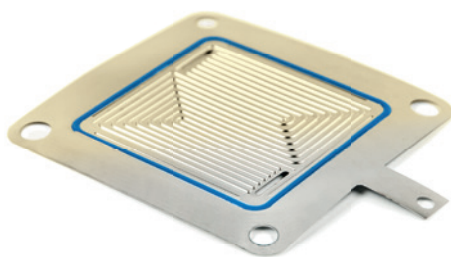
The DOT™ technology can also be applied on titanium bipolar plates, as a single-step process. Because the plates are already made of titanium, no titanium coating is needed. Only the thermal spray process is needed. The DOT™ coating technology is especially suitable for electrolyzer bipolar plates and the porous transfer layer (PTL) of fuel cells.

Fuel cell Carbon technology

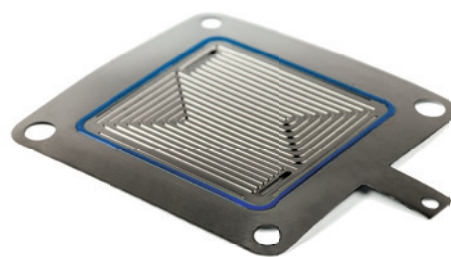
Carbon PVD coatings also ensure good electrical conductivity while providing corrosion and leaching protection. Carbon-based coatings do not contain expensive precious metals, making them very cost effective.

A plasma surface cleaning step and a special metal-based adhesion layer are part of the total coating solution to ensure good coating adhesion, conductivity and corrosion resistance properties. The carbon coating process is optimized for durability in automotive operating conditions, with the resulting carbon-based coating able to withstand the high peak voltages that occur during startup of fuel cells.

ionbond.com/fuel-cell



DOT™ technology



Carbon technology



A photograph of a male worker in a dark shirt and safety glasses operating a large industrial machine in a factory. The machine has a rotating platform and various mechanical components. The background is dark and industrial, with some structural elements visible. The overall lighting is dim, with a blueish tint.

Business Unit Partners

The IHI Corporation, Ionbond's Parent Company

The IHI Corporation (IHI) was established as Ishikawajima Shipyard in 1853. Since then, IHI have evolved into a comprehensive heavy-industry manufacturer, with the aim to contribute to social progress by relentlessly pursuing technological excellence and cultivating advanced engineering capabilities. IHI specializes in four main areas: resource, energy & environment; social infrastructure & offshore facilities; industrial systems & general-purpose machinery; and aero engine, space & defense.

IHI acquired Ionbond in 2012, as part of the next step in building IHI's worldwide framework of machinery and job-coating products and services for their global customer base. Together with Ionbond, IHI aims to contribute to social sustainability and produce new value from long-term perspectives by tackling social and customer issues. This is entirely in line with IHI Group management principles: we value contributing to the development of society through technology and believe that human resources are our single most valuable asset.



Ionbond is part of the Heat Treatment and Surface Engineering business unit of the IHI Group. The business unit provides services and equipment.

HAUZER

Ionbond's sister company IHI Hauzer Techno Coating, located in Venlo, the Netherlands, has served the market with specialized PVD and PACVD coating equipment since 1983. As a leader in arc evaporation, magnetron sputtering and PACVD technologies, Hauzer Techno Coating is the partner of choice for industry-proven PVD and PACVD coating equipment.

www.hauzer.nl



VTN is a heat treatment specialist operating five heat treatment centers in Germany. VTN has been hardening materials since 1950, working all this time to ensure that components and machines are able to withstand the heaviest loads and greatest resistances. As a NADCAP-certified heat treatment center, VTN also enjoys the trust of the aerospace industry. www.ihv-vtn.com

BERNEX

IHI Bernex, a Hauzer daughter company within the IHI Group, offers systems for a wide range of CVD technologies, including chemical vapor aluminizing (CVA), chemical vapor infiltration (CVI) and CVD with solid metalorganic precursors (MOCVD). Bernex CVD systems set the worldwide industry standard in CVD enhancement of wear, friction and temperature protection of tools and components. Bernex is renowned worldwide for their expertise in developing proprietary coatings and the reliability of their machines, with more than 45 years of experience. www.ihv-bernex.com



IHI IMS is a top-tier supplier of vacuum furnaces and vacuum degreasing equipment, with more than 2000 installations worldwide. They are leaders in vacuum carburizing, based on patented technology utilizing acetylene gas. www.ihv.co.jp/ims/en

Our locations

Europe

Ionbond Austria – Kapfenberg

AT-8605 Kapfenberg

Ionbond Czech Republic – Humpolec

CZ-39601 Humpolec

Ionbond Czech Republic – Dolni Becva

CZ-75655 Dolni Becva

Ionbond France – Lyon

FR-69680 Chassieu

Ionbond France – Paris

FR-77350 Le Mée-sur-Seine

Ionbond France – Toulouse

FR-82170 Grisolles

Ionbond France – Beauvais

FR-60370 Berthecourt

Ionbond Germany – Nürnberg

DE-90461 Nürnberg

Ionbond Germany – Sachsen

D-09356 St. Egidien

Ionbond UK – Consett

Consett, County Durham, GB DH8 6TS

Ionbond UK – Mansfield

Mansfield, Nottinghamshire, GB NG19 0FN

Ionbond Italia – Milano

IT-20040 Cambiago (Milano)

Ionbond Netherlands – Venlo

NL-5928 LL Venlo

Ionbond Sweden – Linköping

SE-58273 Linköping

Ionbond Switzerland – Dulliken

CH-4657 Dulliken

Ionbond Turkey – Istanbul

TR-34776 Y Dudullu-Istanbul

Ionbond Turkey – Bursa

TR-16140 Nilüfer/Bursa

Asia

Ionbond China – Guangzhou

GuangZhou City (Postcode: 510663)

Ionbond China – Kunshan

Kunshan City (Postcode: 215300)

Ionbond China – Wuxi

Wuxi City (Postcode: 214101)

Ionbond China – Chengdu

Chengdu City (Postcode: 611100)

Ionbond India – Chennai

Chennai – 631604

Ionbond India – Pune

Pune – 411018

Ionbond Korea – Daegu

Daegu Metropolitan City (42724)

North America

Ionbond US – Chicago

West Chicago, USA IL 60185

Ionbond US – Madison Heights

Madison Heights, USA MI 48071

Ionbond US – Saint Paul

Vadnais Heights, USA MN 55110

Ionbond US – Rockaway

Rockaway, USA NJ 07866

Ionbond US – Greensboro

Greensboro, USA NC 27409

Ionbond US – Cleveland

Beachwood, USA OH 44122

Ionbond US – Duncan

Duncan, USA SC 29334

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Ionbond Mexico – Tecate

Tecate, Baja California 21505

Ionbond Mexico – Silao

Silao, Guanajuato, CP 36275

For complete contact information, please visit our website at www.ionbond.com/contacts-locations

