



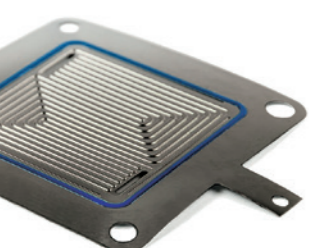
# About Ionbond

## Global provider of innovative high-performance coatings

Ionbond provides advanced coating solutions through 30+ coating centers and over 1000 employees across Europe, North America, and Asia. Our global know-how and local support enable us to serve both international OEMs and regional businesses. Ionbond's mission is to unleash potential everywhere in a suitable, ethical manner and with full compliance.

## Over 50 years of expertise as The Surface Engineers

With decades of experience, Ionbond delivers premium PVD, CVD, and PACVD including DLC coatings for tools and components. We specialize in customized solutions, developed through close collaboration and driven by precision, innovation, and reliability.



- 1972
 Start of High Temperature CVD activities for hard and wear-resistant coatings
- 1997
 Acquisition of Multi-Arc Inc. and introduction of arc PVD technology
- 1999
 Change of company name and brand from Bernex to Ionbond
- 2012
 IHI Corporation acquires Ionbond and significant investments in new machinery and R&D
- 2026
 Driving innovative technologies to accelerate progress toward a sustainable, carbon-neutral future

# We offer Coatings for excellence

Advanced surface solutions tailored for performance, durability, and design



### Cutting Tools

Advanced tool coatings enhance performance even at elevated cutting temperatures. Our state-of-the-art PVD/CVD/HFCVD solutions extend tool life across diverse cutting applications, including gear cutting and difficult-to-cut alloys, under HSC, HPC, and sustainable (dry, MQL) conditions, ensuring high productivity and cost efficiency.

### Forming & Molding Tools

Our coatings are engineered to ensure excellent product quality and extend the service life of all tooling types used in forming and plastic processing. Combined with tailored pre-/post-coat treatment, their high resistance against wear and fatigue contribute to improve productivity by reducing downtime and minimizing scrap rates for our customers.

### Food Contact Applications

Ionbond's FDA approved food contact coatings ensure safe, durable and anti stick surfaces for processing equipment. Tested for biocompatibility, migration, wear and dissolution, they deliver strong mechanical and tribological performance. Flexible deposition temperatures and adjustable thicknesses suit diverse steels and applications.

### Mobility

Ionbond coatings for mobility applications improve design freedom, create functionality, improve performance and lifetime across engines, electric powertrains, fuel cells, exhaust systems and ADAS sensors. They enhance durability and reliability in automotive, commercial, off road, marine, rail and aerospace applications, supporting sustainable mobility.

### Industrial Applications

Industrial machinery components operate under extreme loads, harsh environments, poor lubrication, and abrasive wear, while expectations for longevity and low maintenance continue to rise. Ionbond coatings deliver uncompromising reliability, enhanced efficiency, and exceptional durability in applications where uncoated components fall short.

### Decorative Applications

Our Decobond™ PVD coatings provide metallic finishes from gold to deep black with ceramic-like wear and scratch resistance. They preserve surface texture, offer optional antibacterial functionality, and adapt to diverse materials. Deposition is possible on conductive substrates from room temperature up to 250 °C.

### Medical Applications

Medthin™ coatings are engineered for patient safety, performance and compliance. Manufactured in ISO 13485-certified coating centers worldwide, these coatings combine biocompatibility with increased wear resistance and minimized ion release which makes them a trusted choice among manufactures of medical implants and surgical instruments worldwide.



### Decarbonization

Ionbond offers a range of protective and conductive coatings for components used in new energy and decarbonizing applications such as fuel cells, electrolyzers and (redox flow) batteries that enhance stability and durability. We offer the entire spectrum from sampling trajectories for customized solutions towards high volume production.

Discover more 

# Coating advantages

More than protection – coatings that deliver

Surface coatings are more than just a protective layer, they are a key factor in improving performance, extending product life, and reducing maintenance. Whether in high-precision tools or demanding industrial components, advanced coatings help optimize efficiency, reliability, and sustainability across a wide range of applications



## Coating benefits overview



### Wear protection

Coatings reduce abrasion and extend the lifespan of components.



### Increased durability

Tools and parts last longer and require fewer replacements.



### Performance boost

Optimized surfaces enhance functionality and efficiency.



### Less downtime

Thanks to lower repair and upkeep needs.



### Thermal stability

Reliable protection under high-temperature industrial conditions.



### Corrosion protection

Prevents rust and oxidation, especially on metal surfaces.

# ionbond

## Global network

### Part of the IHI Group

Founded in 1853 as Ishikawajima Shipyard, IHI Corporation has grown into a global leader in heavy industry, specializing in energy, infrastructure, machinery, and aerospace. IHI acquired Ionbond in 2012 to expand its global coating and machinery services. Together, they drive sustainable innovation and long-term value, aligned with IHI's core belief: advancing society through technology and valuing people above all.

### Our locations



Full location list



## Experts in innovative coating services

Precision coatings. Proven performance.