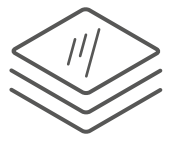


# Decorative coatings & plating on plastics



The right solution for every application

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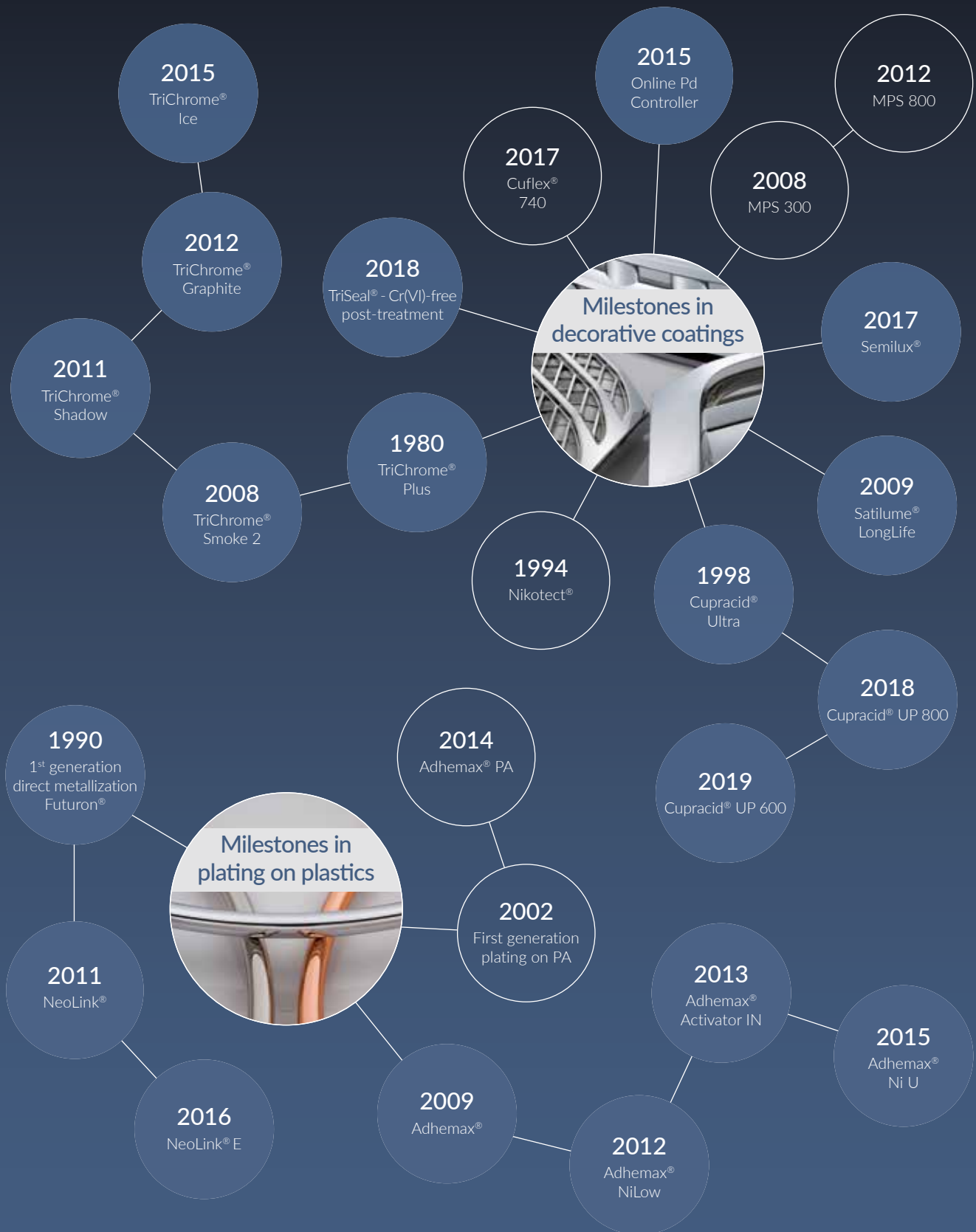
General Metal Finishing

Decorative coatings & plating on plastics

atotech.com



# Making history – Now and then





# Combining function with design

For decades, our decorative coatings and plating on plastics have been helping to create design classics while bringing new trends to life and even shaping the look of various industries. MKS' Atotech full range of decorative finishes is unrivaled, and lends itself to cost-effective and environmentally sound production processes. Around the world, customers, OEMs and Tiers rely on our technology and on us – their partner for all decorative applications.

## **A wide spectrum of solutions**

From pretreatments to copper, nickel, chrome and precious metal processes for decorative applications on metal substrates or plastic materials, our portfolio has the right solution for every application. As a complementary feature of our chemicals product portfolio, auxiliary and production equipment helps to reduce both environmental impact and production costs.

## **Innovation that pushes boundaries**

At MKS' Atotech, research and development has always been a top priority. In fact, it's the basis for innovation and a key contributor to our milestones over the last decades. We strive to continuously improve processes and provide for example a complete package of Cr(VI)-free solutions for decorative coatings and plating on plastics.

# Our chemicals product portfolio

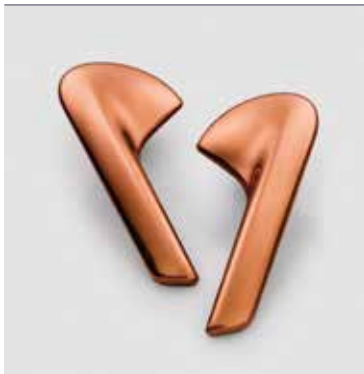


## Plating on plastics processes

In many industries, the use of plastics is continually increasing. Driven by their design, flexibility, weight and energy savings, the application of plastics was extended to a broader number of polymers and industries. MKS' Atotech processes allow customers to handle all platable plastics.

**Adhemax®:** A versatile, high-quality plating on plastics process with outstanding selective plating properties

**NeoLink® E:** The newest generation of direct metallization allowing for a significant palladium reduction in the activator solution



## Copper and alloy processes

Whether the applications are for decorative interior and exterior automotive components, grounding rods, rotogravure for printing cylinders, consumer goods or nickel-free bright white finishes for parts that will come in contact with skin – MKS' Atotech offers a complete range of dye-based and dye-free acid copper systems as well as rotogravure, pyrophosphate, immersion, non-cyanide alkaline coppers and alloys (e. g. white bronze).

**Cupracid® processes:** Dye-based copper plating solutions, including the latest generation Cupracid® UP family of high performing versatile acid copper processes

**CuFlex® processes:** Dye-free copper plating solutions



## Auxiliary equipment

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### Online Pd Controller

Analysis system for optimized palladium consumption

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### Online S.T.E.P. Tester

Online Simultaneous Thickness and Electrode Potential tester for

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### Nikotect®

Recycling technology for nickel electrolytes

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## Nickel and alloy processes

MKS' Atotech offers the widest possible range of electrolytic nickel plating processes for both rack and barrel applications, from satin, semi-bright and bright nickel to microporous, micro-cracked and high-sulfur nickel.

**Semilux® 100:** A new generation patented semi-bright nickel offering highly levelled, uniform bright layers, while keeping hardness, internal stress and ductility at optimal levels

**Satilume® Plus:** Satin nickel finishes providing fine and even surfaces with adjustable matt decorative appearances



## Chrome processes

MKS' Atotech decorative chrome plating processes improve the brightness, appearance, corrosion protection and durability of a variety of decorative articles; our trivalent chrome electrolytes are second to none. The TriChrome® finishes are a high-performance, environmentally friendly replacement for hexavalent chrome electrolytes, offering a new range of colors to meet contemporary design requirements.

**TriChrome®:** TriChrome® Ice, TriChrome® Plus, TriChrome® Smoke 2, TriChrome® Shadow and TriChrome® Graphite expand the choice of colors and designs, either as bright or satin / matt surfaces

**TriSeal®:** Cr(VI)-free post-treatment processes for TriChrome® finishes for enhanced corrosion protection

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### Satilume® LongLife

Regeneration system for satin nickel

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### HELIX®

Recovering nickel from rinse water

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### TriChrome® Ion Exchanger

Regeneration system for TriChrome®

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## A driving force within the automotive industry



We pay special attention to the needs and demands of automotive manufacturers, OEMs and their suppliers. MKS' Atotech product range offers a comprehensive palette of trend-setting design options for long-lasting decorative applications. Grills, door handles, name plates, interior or exterior decorative parts – a myriad of automotive components are treated with our decorative plating processes. Many MKS' Atotech processes fulfill the requirements of a substantial number of OEM specifications and are approved by automotive manufacturers worldwide. It is the combination of our knowledge, expertise and passion that makes us the ideal partner for the automotive industry.

### At a glance

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Efficient customer support in more than 40 countries worldwide

> 2,500

customers around the world rely on our decorative coatings and plating on plastics technologies



8 TechCenters worldwide are dedicated to decorative coatings and plating on plastics

# Setting design benchmarks in various industries



## Sanitary

Our reliable, high-quality processes for plastics and metallic substrates (such as steel, brass and zinc-based die cast) fulfill the most stringent requirements of the sanitary industry, both in terms of resistance and aesthetics.



## Consumer goods

Our processes provide a wide range of design options. For furniture, fashion, cosmetics and tools – our product portfolio ensures excellent decorative and functional results.



## Consumer electronics

For today's most common consumer electronics including computers, tablet PCs and smart-phones, we offer high-end products and services for the entire spectrum of decorative electroplating.



## White goods

White goods have become an integral part of elaborate design concepts. We offer a wide range of suitable decorative coating solutions.



Highly skilled workforce made up of R&D and decorative coatings experts supports customers worldwide



Annually, a substantial budget is invested towards research and development



More than 300 registered active patents for decorative coatings and plating on plastics

# End markets and industries MKS serves



Automotive



Sanitary



Heavy machinery



Construction



Household appliances



Energy

