

Ausgabe 41/2026


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umicore goldpost

Platinum plating as a pacemaker
for medical technology

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In **Stuttgart**, we will once again be exhibiting at Surface Technology Germany in 2026. We look forward to welcoming you to one of the most important trade fairs for surface technology.



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On our website mds.umicore.com the Goldpost is available for download as a PDF file in the download section.

Dear readers,

This year, we have once again been able to drive forward numerous technological developments and implement important projects. The new Goldpost provides you with a compact overview of the topics that have been particularly important to us.



The contents of this issue impressively demonstrate how diverse innovation can be in our field. With AURUNA® 526 & 527, we present two hard gold systems that contribute significantly to material efficiency thanks to their good layer thickness distribution. Another milestone is AURUNA® 3408, our future-oriented hard gold plating system that does not use any hazardous substances.

In addition, our platinum coating for medical technology focuses on an area that requires the highest precision and reliability.

Another special highlight this year is our cooperation with Salzgitter AG on recycling rare precious metals. This partnership demonstrates how we are working together to develop solutions that conserve resources and close cycles.

All these developments illustrate how broad and forward-looking our positioning is, with a clear focus on what our customers need.

I hope you enjoy reading and discovering the new issue of Goldpost!

Your

Michael Herkommer
Managing Director

Umicore Inside - News overview



Umicore was once again awarded a silver medal by **EcoVadis** in 2025, placing it among the top 15% of companies assessed worldwide despite stricter criteria, underscoring its consistent commitment to sustainability.



Detailed informationen at: mds.umicore.com/ecovadis-2025-en



An article on **aktiv-online profiles** our colleague **Joachim Grimm** as an expert in electroplating technology and shows how he uses his expertise to help customers worldwide select the best coating solutions.



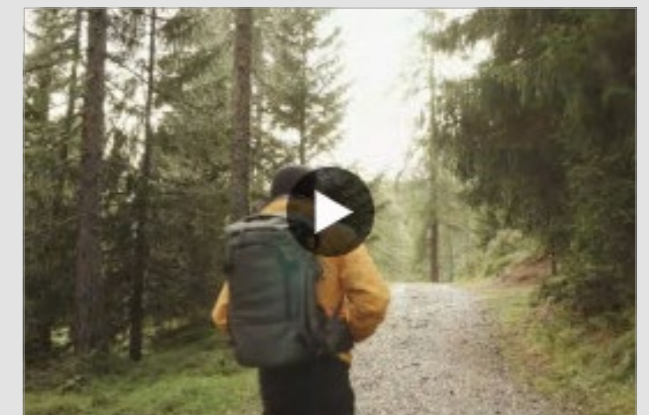
Detailed informationen at: mds.umicore.com/aktiv-online

After intensive training, six employees successfully completed their process improvement projects and were certified as **Six Sigma** Green Belts—a key step toward the sustainable and data-driven optimization of our processes.



Detailed informationen at: mds.umicore.com/six-sigma

Our technology is an important component in many everyday products, such as **zippers**. The **video** clearly shows how our reliable **MIRALLOY®** electrolytes ensure durable, visually appealing, and particularly wear-resistant coatings.



Detailed informationen at: mds.umicore.com/video-zippers



The German **Chemical Industry Employers' Association** has recognized our Schwäbisch Gmünd site as a "Training Company in the Chemical Industry" and acknowledged our above-average commitment to training with the seal of approval **"For Special Training Achievements."**



Detailed informationen at: mds.umicore.com/agv-chemie



This year, we have again decided to **donate** around **30,000€** to social projects, primarily in our region. In addition, we are giving employees time off so that they can volunteer in educational projects or social initiatives.



Detailed informationen at: mds.umicore.com/donations-2025

The plated components can also be used in demanding areas such as defense technology, as their purity and hardness, reliable functionality, and durability enable them to meet the strict ASTM standard.

Precise application of hard gold saves material costs: AURUNA® 526 & 527

Whether applying paint to a protected wooden facade or pouring concrete for a stable foundation, even distribution is crucial for quality and function. This is usually not a problem in easily accessible areas or with simple shapes. However, as soon as the geometry becomes more complex, for example due to cavities, depth levels, or shape deviations, irregularities in layer thickness can quickly occur. These lead to weak points in areas with insufficient material and unnecessary consumption in areas with excessive material application.

This also applies to electrolytic plating: only when the layer is applied evenly and in sufficient thickness can technical requirements be reliably met while optimizing costs.

An even layer thickness distribution of gold improves competitiveness

In practice, however, overcoating often occurs in order to avoid quality losses due to partially insufficiently plated areas. This inevitably results in a monetary competitive disadvantage – especially now that the price of gold is at a record high.

Good layer thickness distribution pays off more than ever. Less overcoating means lower precious metal costs. However, electrochemical and physical laws make it difficult to achieve uniform, high-quality, and thus cost-optimized deposition.

Hard gold electrolyte with excellent throwing power even with more complex geometries

With the hard gold electrolytes AURUNA® 526 and AURUNA® 527, we have been offering solutions for over 20 years that enable uniform layer thickness distribution even with complex geometries of bulk material parts thanks to excellent depth dispersion. This allows us to combine quality with cost-effectiveness.



The high-quality coating properties enable optimal quality and reliable functionality.



Detailed informationen at:
mds.umicore.com/auruna-526-527-en



Future-oriented hard gold plating without hazardous substances

Every morning, the sun covers the world in a golden glow. What comes so easily in nature has long been associated with compromises in industrial hard gold plating, as it required the use of hazardous substances.

Sustainability can also shine in surface technology

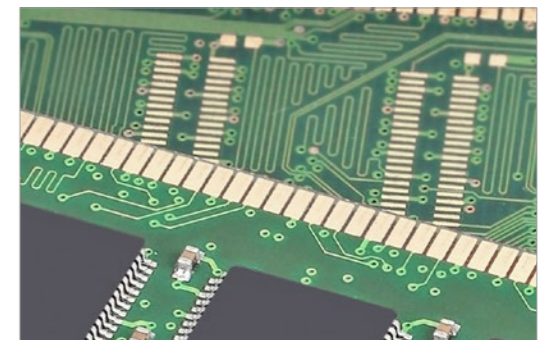
Responsible gold plating is now possible – thanks to AURUNA® 3408. The cyanide-free gold electrolyte is technically powerful, but does not contain any hazardous substances. It enables crack-free and low-stress layers of up to 200 micrometers, which, despite an exceptionally high fine gold content of 99.7 percent, exhibit impressive abrasion resistance (180 HV).

AURUNA® 3408 - eco-friendly and performant.

A cyanide-free electrolyte such as AURUNA® 3408, which also does not contain any grain refiners such as arsenic, thallium, lead, cadmium, cobalt, or tellurium, offers all the advantages of an environmentally conscious production:

- No special safety requirements
- No restrictions due to hazardous substance limits
- Simpler and more cost-optimized disposal
- Reduced risk of downtime
- Sustainability advantage for customers and stakeholders

AURUNA® 3408 is versatile and suitable for technical and decorative applications: from electronics to jewelry and watches. It even meets demanding standards such as the MIL specification.



Detailed informationen at:
mds.umicore.com/auruna-3408-hard-gold





MEDICAL TECHNOLOGY PACEMAKER PLATUNA® PT

PLATUNA® PT for the medical tech of tomorrow.

Platinum plating as a pacemaker for medical technology

Medical technology is subject to constant change. Miniaturization, biocompatibility, and durability are no longer optional requirements, but essential ones. Implantable sensors, high-precision electrodes, minimally invasive catheters, and durable contact surfaces: all these components must function reliably under extreme conditions for years on end (in some cases inside the human body).

The importance of platinum in modern medical technology

In this demanding environment, where safety, durability, and compatibility are top priorities, platinum has established itself as the material of choice. Unfortunately, these properties are often only available to a limited extent – the quality of the platinum coating is a decisive factor in the performance of the end product. This is where PLATUNA® PT sets new benchmarks and enables the next step in medical technology.

Platinum electrolyte for technical applications

Compared to classic platinum electrolytes, PLATUNA® PT is very easy to handle. This makes it the preferred choice for manufacturers who want to achieve the highest quality standards without complicated processes.

- **Versatile substrate materials**
Direct deposition on almost all metal substrates possible (including niobium)
- **Current density-independent deposition**
Uniform layer distribution even with complex geometries
- **No yellowing**
Visually neutral, high-quality surfaces
- **No precipitation**
Long service life and easy handling
- **Process-reliable handling**
Ideal for series production and demanding special solutions

PLATUNA® PT enables extremely uniform, dense, and biocompatible platinum plating on almost all metals. With layer thicknesses of up to 50 µm, it increases stability and service life—ideal for the highest quality requirements in medical technology applications.



Detailed informationen at:
mds.umicore.com/platuna-pt-medicine



AURUNA® 5750: Perfect gold coating at a fraction of the cost



In addition to its exceptional cost efficiency, our 12-karat hard gold impresses with its very hard layers and other outstanding properties.

In recent months, the price of gold has skyrocketed for everyone. This drastic price increase also has far-reaching consequences for products with high-quality and functional gold coatings. Such products are becoming more expensive to manufacture and are therefore increasingly unattractive to many buyers.

AURUNA® 5750 offers potential savings of at least 60% compared to fine gold

With AURUNA® 5750, we have now created a gold-silver electrolyte that enables 12-carat intermediate and final layers, each containing half of both precious metals. Compared to pure gold layers, this can save 60% of precious metal costs, which more than balances out the price pressure on producers caused by the price of gold.

But allow yourself to be convinced by the extraordinary abrasion resistance, ductility, and other advantages of the AURUNA® 5750 alloy.

High silver content reduces costs

The slight increase in the price of silver, which in absolute terms remains two orders of magnitude below that of gold, makes silver, as a 50% alloy partner, a strong cost-reducing factor for AURUNA® 5750 in the long term.

Hard, harder, AURUNA® 5750

With a Vickers hardness (HV) of 220, this gold-silver alloy truly deserves the name "hard gold." Compared to conventional gold alloys, the Bosch-Weinmann test shows very low abrasion and layer removal values due to the high hardness and lubricating properties of silver.

Outstanding alloy characteristics

- **ROHS compliant:** Does not contain any toxic heavy metals.
- **Corrosion resistance:** Reliable protection against corrosion and extends the service life.
- **Layer properties:** Even layer without cracks up to a thickness of 10 µm.
- **Ductility:** The coatings are particularly flexible and resistant.
- **Versatile:** Final and intermediate layer on technical and decorative applications.
- **Brightness:** Even with thicker layers, the brightness is fully retained.
- **Electrolyte handling:** Easy to handle and insensitive to metallic impurities.
- **Electroplating process:** Electrolyte can be used very flexibly for rack and barrel goods.
- **Variants:** An even more cost-effective variant with low gold content is available for thin layers.



AURUNA® 5750 is ideal for a cost-optimized, pastel gold finish. However, it can also be used as a protective intermediate layer—perfect for jewelry and plug-in connectors.



Detailed information at:
mds.umicore.com/auruna-5750





New flyer provides an overview of all electrolytes for decorative applications.

Discover our electrolytes for decorative applications

Our new flyer provides a comprehensive overview of our electrolytes for decorative applications. It makes it easier for you to select the right electrolyte for your specific needs and applications and contains:

- **Color** overview with Lab values for precise color selection – from white to gold to dark layers.
- **Technical data** and information about our electrolytes for perfect surfaces.
- **Delivery components** for easy and efficient ordering.



Detailed informationen at:
mds.umicore.com/decorative-flyer



Matt grey cadmium substitute for the highest technical demands

DIALLOY® 822 is an innovative tin-zinc electrolyte for demanding industrial applications where corrosion protection, solderability, and environmental friendliness are crucial. The matt gray, non-reflective surface is particularly suitable for aerospace, automotive, and electrical engineering applications and offers a fully-fledged, environmentally friendly alternative to cadmium for demanding conditions.

High reliability in demanding environments

The process offers outstanding properties such as excellent solderability and weldability, high conductivity (< 5 mOhm), low porosity, and reliable protection on iron, iron alloys, and light metals such as aluminum. It can be used flexibly in rack and barrel operations, offers excellent corrosion resistance (500 hours salt spray test), and meets the highest environmental standards: chromium VI-free, RoHS and REACH compliant.

The applications of DIALLOY® 822 range from aerospace and automotive engineering to electrical engineering.



Detailed informationen at:
mds.umicore.com/dialloy-822-en





Im Herzen der Bandgalvanik: Ein Stahlband durchläuft eine Verzinkungszelle.

Salzgitter AG and Umicore cooperating in the recycling of rare precious metals

Together with Salzgitter AG, we have established a process that enables the recovery of the rare precious metal iridium from anodes used in the continuous electro-galvanizing process. In this way, we are contributing to resource conservation and the circular economy.

In electro-galvanizing, so-called MMO anodes are used to apply a thin layer of zinc to steel strips as corrosion protection. Galvanized steel strips find use, for example, in the automotive and the household appliance industry.



Iridium ranks as one of the rarest non-radioactive metals and is considered a strategically crucial raw material for transformation processes, for example as an electrode material for hydrogen electrolyzers. Its annual production volume worldwide only amounts up to 10,000 kg. This combination recently led to a massive upsurge in the price of the precious metal on the global market.

Our anodes, which are coated and customized in a special process, feature a precious metal coating containing iridium as the most important component. These coatings must be renewed regularly. So far, existing coating residues could not be recycled cost efficiently before re-coating.

In a joint project processes and interfaces were created that allow iridium to be returned to the material cycle in a cost-efficient manner.

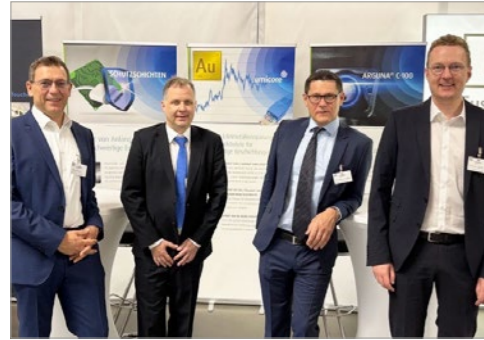
„Recycling iridium is very demanding and difficult. At present, there are only a few providers on the market who specialize in this complex process. Thanks to our many years of expertise in the field of precious metal recycling, we were able to act as an intermediary. By conducting joint trials and developing internal processes, we ultimately succeeded in integrating the process into everyday operations at Salzgitter Flachstahl GmbH,“ explains Frank Friebe, Head of Electrocatalytic Electrodes .



Detailed information at:
mds.umicore.com/cooperation-salzgitter



Events 2026



We look forward to seeing you again at trade fairs and conferences around the world in 2026.



2026 has many exciting encounters in store: We will be attending trade fairs, congresses, and specialist events around the world—and look forward to meeting you in person.

Would you like to know where you can find us?

All dates can be found on our events page at any time. And for those who like things to be particularly convenient: subscribe to our newsletter and receive the latest information directly in your inbox.



Events: mds.umicore.com/events



Newsletter: mds.umicore.com/newsletter



Press releases and more at a glance

New press portal as a cornerstone for media professionals

Are you a media representative, or perhaps a customer or private individual interested in our external communications? If so, please visit or follow our newly established press portal.

Our separate press portal allows you to access current and past press releases from our press archive.

You can also download accompanying media (images, videos, documents). Articles from recent years that have already been published in various media are available for you to view on this page. The press portal is rounded off by an events calendar and our press contacts.



Detailed information at: mds.umicore.com/press-portal



Passion for
perfect surfaces

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