



Coated with Care

# Quality Processes for Quality Coatings

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## Coated with Care

The quality of medical instruments has a direct impact on patients and surgical staff. It's why coatings companies working with the medical instrument industry must take special consideration to ensure coatings are custom crafted, precision masked, and extensively tested—all without forgetting the health and safety of every person impacted along the way.

Poorly managed, the handling of chromium can have a negative impact on the environment and the safety of employees. It's the reason failure to meet environmental regulations can result in full factory shutdowns. And rightfully so.

At ME-92, our established processes ensure our operations will always be up and running. Knowing we'll be here for the long-haul, we're able to commit to innovation, collaboration, and the continuous development of best-in-class solutions for our partners.

# Environmental Stewardship



When not properly managed, chromium pollution can pose a significant human and environmental threat. The health and safety of our staff and the protection of our natural systems is of the utmost importance to us. It's why we take every possible precaution and meet (or exceed) every environmental standard.

## EU Standards

The EU is known for holding more stringent compliance standards across many sectors, including environmental protection. The same goes for chromium coatings. As a supplier to the EU, ME-92 follows all standards outlined by the [ECHA](#).



A stylized map of the United States in light beige and dark blue, with a circular inset showing a bird flying over water. The background is a dark blue gradient.

## The Narragansett Bay Commission

Perfect compliance for waste water discharge for **11 years in a row**. In fact, **fewer than 5%** of Narragansett Bay Commissions industrial accounts **achieve two years of consecutive perfect compliance**.

## Why Chromium?

Considering its environmental risk, and given other coating options on the market today, some have wondered why coating companies continue to rely on chromium. The reality is, like most substances used in manufacturing, chromium poses risk only when handled carelessly or incorrectly. When managed well, it continues to be the obvious choice given its unmatched ability to:

- Increase hardness, corrosion resistance, and durability of surfaces.
- Simplify the cleaning and polishing of medical instruments.
- Extend the life of underlying materials by anywhere from 2 to 10 times.
- Provide a clean aesthetic that builds trust in patients.
- *And more*

In fact, studies have shown that chromium still remains the only suitable option for key applications.

## Biocompatibility

As the first chrome coating company to perform and pass the Tripartite Guidelines testing for biocompatibility, our coatings meet [ISO 10993 industry standards](#) and are completely inert, non-magnetic, USP Class VI, Tripartite/ISO and Anti-Microbial.

In addition to easier cleaning and decontamination, our biocompatible coatings reduce bacterial adherence and maintain their surface integrity after repeated sterilization cycles.

## The Business Risk of Improper Chromium Management

From a risk-based thinking perspective, manufacturers have to consider every factor that could contribute to their medical instruments being damaged or delayed. If your coatings partner gets shut down due to a failure to meet government regulated environmental codes, it can have a huge impact on your supply chain, leaving millions of dollars in inventory sitting idle. When auditing your coatings partner, be sure to ask about their environmental safety measures in addition to quality systems questions.

At ME-92, our stringent adherence to environmental standards gives our partners the confidence of knowing we won't be paused or shut down with their product in-house.



“The analysis of alternatives shows there are no technically feasible alternatives to functional chrome plating with chromium trioxide for key applications.”

— Chromium Trioxide REACH Authorization Consortium (CTAC)

# Our Investment in The Future

It's rare you find a *single* coating that can effectively cover a range of applications. Which is why your coatings partner should be working closely with you to determine what's most important for your specific application and then creating a custom solution and process. Our investment in innovation allows us to provide this continued development of cutting edge solutions that support your specific needs.

## Commitment to Collaboration

Manufacturers, engineers, metallurgists and other key players in the coating industry have traditionally worked in silos, separated from clients and sales people. At ME-92, we believe collaboration is key to providing best-in-class solutions for your medical devices. It's why we invest in collaboration, creativity, and the work that is too often left on the fringe, but is actually required to advance the science of chromium coatings and applications.



### Innovation Center

Our Innovation Center is a coating/plating-specific metallurgical consultant service and chemical laboratory, which aids in the development of coating/plating applications and procurement solutions. To ensure consistency, repeatability, and cost-effectiveness, our Innovation Center provides training programs, chemistry analysis, site evaluations, process/chemistry troubleshooting, and tooling support.



### Process Engineering Facilities

Our Process Engineering Facilities develop processes, procedures, training programs, and design/build custom production or prototype tooling for the Electroplating processes. Their objectives are to identify and document process parameters to maintain tight quality controls and mitigate variabilities while optimizing efficiencies.

# Process Unparalleled

Through our commitment to quality, innovation, and stringent compliance, we have earned the trust of many global medical device OEMs as their supplier of choice. Our Innovation Center and Process Engineering Facilities serve as collaborative spaces for the best minds to come together, resulting in best-in-class solutions for every application that comes our way. When it comes to environmental stewardship and human safety, we take the highest level of precaution—an extra assurance to our partners our facilities will continue to remain up and running, while having the smallest amount of environmental impact possible.



ME-92 Operations is a division of the [Armoloy Corporation](#) that focuses exclusively on chromium coatings for medical instruments and devices. As an industry leader for nearly 30 years and a pioneer in the area of biocompatible chromium coatings, the company has learned that being a partner to medical device designers and manufacturers is much better for everyone involved than simply being a provider.

Learn more about ME-92 Operations and the ME-92® coating by visiting [me-92operations.com](https://me-92operations.com).