

Exclusively from US Chrome

BREAKTHROUGH!

TriCom™-H (Hard TriCom™) Coating

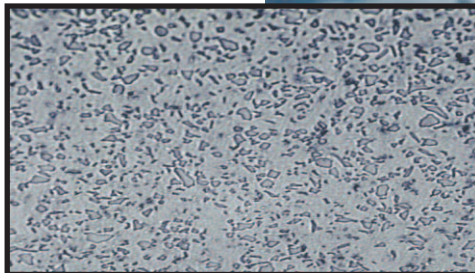
The Environmentally-Friendly, Top-Performing, Cost-Saving Alternative to Hard Chrome, Electroless Nickel, and Thermal Spray Coating

Commercial production is ramping up for the most dynamic development in electroplating since the 1990s, especially for non line of sight (NLOS) small inside diameter bores and complex part geometries — Hard TriCom or TriCom-H.

This nanocrystalline Co-P-SiC or Co-P-Cr₃C₂ electrocomposite coating is a direct replacement for hard chrome, electroless nickel, and for most thermal spray coatings.

Materially Better Benefits:

- **An Environmentally-Friendly Process and Product:** Does not generate hex chrome; does not contain nickel.
- **Extremely High Hardness and Low Wear Resistance:** Metallurgically sound and similar to hard chrome.
- **Superior Corrosion Resistance:** None of the micro cracks associated with hard chrome.
- **Lower Costs via Processing Efficiencies:** High plating rate (2 to 3 times faster) and lower energy usage result in a better bottom line; compatible with uncoated surfaces, so no added step of plating mated parts.
- **Excellent Grindability:** Superior surface finish with an $R_a < 5$ minch could be easily achieved.
- **Thick Protective Coating:** Provides outstanding build-up (up to 0.02 thick) on many metal substrates, including steel, super alloys, aluminum, and titanium alloys.
- **Wide Applicability:** Virtually all hard plating applications are candidates.
- **Customizable by Application:** Heat treat after plating for added performance.



Photomicrograph of TriCom-H



Call US today!

Hard TriCom is a U.S. Chrome developed plating solution that is commercially available and in growing demand. We are eager to qualify it for your most demanding applications.

U.S. Chrome is a Nadcap accredited facility and an FAA Repair Station specializing in Hard Chrome and Electroless Nickel.

Difficult-to-plate applications are eagerly accepted.

Already Excelling:

- Replacing hard chrome, electroless nickel, and thermal sprayed coatings for a major US aerospace company.
- Qualified and in production for hydraulic actuating cylinders of the Lockheed Martin F-35 Lightning II Joint Strike Fighter.
- Under evaluation by US Air Force as a repair coating.
- Oil and gas applications.



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Additional Plating Facilities:

Batavia, NY • Dayton, OH • Fond du Lac, WI • Kingston, IL