



Savroc - Advanced Coating Solutions

Next-Gen Protection for Hydraulic Components - Powered by TripleHard®

Savroc develops advanced coatings with superior wear resistance, corrosion protection, and sustainability. Our patented TripleHard® coating replaces Cr(VI) hard chrome in a Cr(III) hard-chrome process, meeting industry standards.

High hardness | Low friction | Cr(III)-based | Field-proven | Corrosion resistant

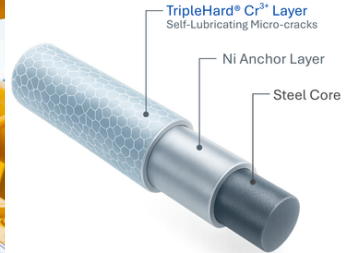
Hydraulic Cylinder Coating - TripleHard®

Hydraulic cylinders face high pressure, wear, and corrosion. TripleHard® offers:

- ✓ **High Hardness** (900–1050 HV)
- ✓ **Corrosion Protection** - Resists moisture and chemicals.
- ✓ **Low Friction** - Enhances efficiency and durability
- ✓ **Cr(III) process** - replaces hexavalent chromium chemistry

PROVEN PERFORMANCE

- ✓ **Wear & Friction Testing:** Reduces wear rate, increasing lifespan.
- ✓ **Excellent corrosion resistance:** rating 10 at 1000 h in neutral salt spray (ISO 9227), depending on the nickel underlayer.
- ✓ **Field Use:** Proven in construction, mining, and industry.



Contact us:

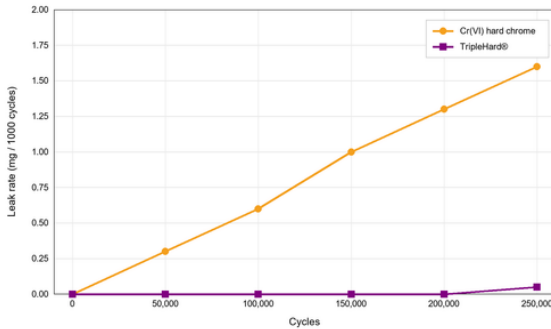
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Schedule a meeting with our experts
or download more materials.

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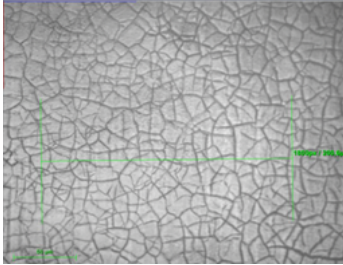
Seal leakage, 250,000-cycle test by a global OEM



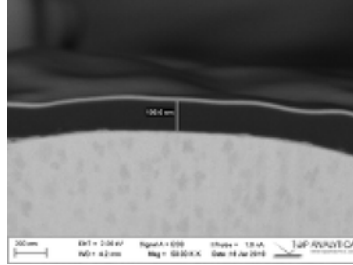
Case Study: Mining Application

In an Australian mine, TripleHard® on ordinary 20MnV6 steel showed no rust after 34 months; Cr(VI) hard chrome on the same steel was replaced after 2 months. CO₂ emissions were about 94 % lower per application per year (Metropolia UAS thesis, 2025).

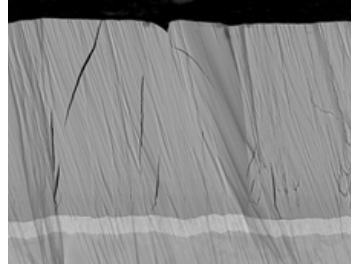
Analytical Evidence



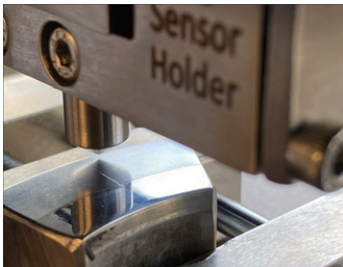
TripleHard® Coating Crack Network



TripleHard® Chromium Oxide Layer



Structure of the TripleHard® Coating



Adhesion and Scratch Test Analysis



Corrosion Resistance: Commercial Cr(VI) Coatings vs. TripleHard®



TripleHard® Hydraulic cylinder

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