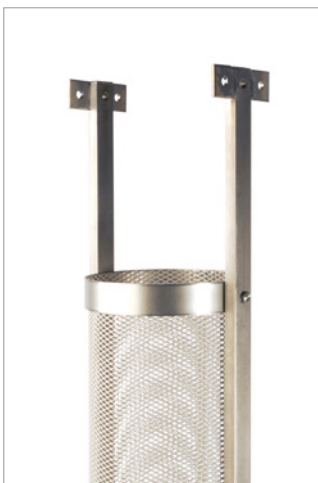




Version: 23. May 2018

PLATINODE®

HARD CHROME PLATING



The most efficient and eco-friendliest solution for hard chrome plating

Up to now, the standard in hard chrome plating has been lead anodes. They deliver sufficient, if not overly impressive, results and are comparatively cheap to procure.

However, the market's requirements for anodes have changed, and decision makers in electroplating have adopted a more long-term approach: quality must be exceptional in a hotly contested mass market, while costs shouldn't get out of hand over the years, and constantly increasing environmental regulations have to be fulfilled.

That's why PLATINODE® (refractory metals such as titanium and niobium coated with pure platinum in molten salt) isn't just an alternative to previously standard lead anodes, rather the most efficient solution. And not just in terms of quality and environmental aspects - but also economy. A significantly longer lifespan and the possibility of re-plating are just two reasons why lead anodes lose their last advantage of lower procurement costs after around three years. A personal, no-obligation comparison calculation will win you over.



Quality Benefits

- Best possible coating quality
- Possible to create complex shapes
- Durable and dimensionally stable

Cost Benefits

- Long lifespan (procurement price pays off)
- Cheap re-plating (can be re-used several times)
- No production downtime due to maintenance
- Energy saving (better conductivity)

Environmental Benefits

- No toxic lead chromate sludge as a byproduct
- Increased safety thanks to lighter weight

Applications of Hard Chrome Plating

- Shock absorbers
- Compression rolls
- Piston rings/rods
- Hydraulic cylinders
- Rod material



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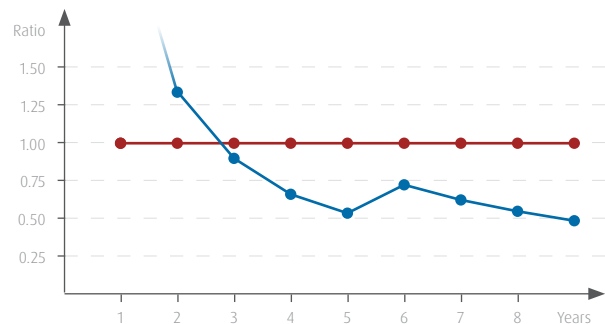
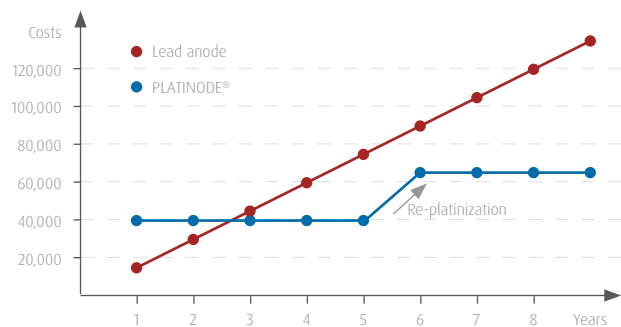
PROFITABILITY*

Lead Anode PLATINODE®		
Anode Investment	10,000 €	40,000 €
∅ Anode Lifespan	12 months	60 months

Additional Costs		
+ PbCrO4 disposal	1,500 €	0 €
+ Additional energy costs	1,500 €	0 €
+ Maintenance costs	2,000 €	0 €

Total Costs		
Year 1	15,000 €	40,000 €
Year 2	30,000 €	40,000 €
Year 3	45,000 €	40,000 €
Year 4	60,000 €	40,000 €
Year 5	75,000 €	40,000 €
Year 6	90,000 €	65,000 €
Year 7	105,000 €	65,000 €
Year 8	120,000 €	65,000 €
Year 9	135,000 €	65,000 €

Comparison		
Year 1	1	2.667
Year 2	1	1.333
Year 3	1	0.889
Year 4	1	0.667
Year 5	1	0.533
Year 6	1	0.722
Year 7	1	0.619
Year 8	1	0.542
Year 9	1	0.481



* Simplified example calculation based on real ratios
Price and lifespan dependent on construction and application
Possible production downtime with lead anodes not taken into account

YOUR CONTACT

Do you have a specific question or would you like a no-obligation quote calculation?
Our specialist will be happy to help you with any technical questions you might have.



Frank Friebe
Sales Manager Electrocatalytic Electrodes

Mail: frank.friebe@eu.umicore.com
Phone: +49 (0) 7171 607 - 292

