



## PLATINODE® MMO Anodes

# Optimal results with perfect price/performance ratio

Mixed metal oxide anodes (MMO) are dimensionally stable and suitable for a wide range of applications. The electrolytes can be alkaline-cyanide to strongly acidic.

MMO anodes persuade with a perfect price/performance ratio. They have a low oxygen overvoltage compared to other electrocatalytical surfaces. This results in less energy and minimized organic additive consumption. Customers benefit from significantly prolonged lifespans of the electrolyte.

A wide range of anode shapes is possible. Therefore, they can be optimally adapted to the design of the components, which shall be plated.

Due to their electrochemical characteristics the anodes are well suited in electroplating for metal deposition out of sensitive electrolytes and for water treatment.

#### Advantages

- Reduced consumption of organic additives
- High current densities possible
- Improved performance, prolonged lifetime of electrolytes
- Uniform layer thickness distribution
- No anode sludge, no anode maintenance

#### Applications

- Metal deposition out of sensitive electrolytes
- Water treatment



### Fields of Application of Different MMO Anodes

Ruthenium electrolytes, strongly acid	177
Platinum electrolytes, strongly acid	177
Rhodium electrolytes, strongly acid	177
Gold electrolytes, strongly acid	177
Gold electrolytes, weakly acid	147
Gold electrolytes, alkaline	147
Bronze electrolytes, cyanide-al- kaline	167
Siver electrolytes, cyanide-alkaline	167
Acid copper	187 SO, 177
Halogen-containing electrolytes	177
Decorative CR3+ electrolytes	187 LOC
Zinc/Zinc alloy electrolytes, alkaline	177, 187 LOC
Pd electrolytes, Pd/Ni alloy elect- rolytes, ammoniacal	187 SO
Pd/Ni alloy electrolytes ammoni- um-free, chloride-free	187 SO
Nickel/nickel alloy electrolytes	177, 187 LOC
Drinking water conditioning	197
Treatment of swimming pool water	197

#### Your contact person



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