

PLATINODE® 177

Titanium Anodes Coated with Mixed Metal Oxide

Operating Instructions

Edition: 1 May 2007

Layer Characteristics

Coating:	Ir mixed oxide
Colour:	Black
Condition:	Microporous
Layer weight:	20 g/m ² IrO ₂ share

Field of Application

- AURUNA®
- RHODUNA®
- PLATUNA®
- Strongly acidic gold electrolytes
- Strongly acidic rhodium electrolytes
- Strongly acidic platinum electrolytes
- Strongly acidic ruthenium electrolytes
- Nickel / nickel-phosphorus electrolytes
- Alkaline zinc electrolytes
- Trivalent chromium electrolytes

Operating Conditions

Anode current density:	0 – 100 A/dm ² Depending on type of expanded metal
Type of current:	Direct current, PP, RPP
Contacting:	Clamping, screwing
Electrolyte temperature:	RT – 80 °C
pH range:	Acidic to alkaline Not for use in strong sulphuric acid solutions

Special Process Hints

The anodes must not remain in the electrolyte without anodic potential for a longer period. When taking the anodes out of the electrolyte, just rinse them well with water and air-dry or blow-dry. Do not use any strong acids (e.g. HCl; H₂SO₄; HF) for cleaning. If chemical cleaning should be necessary, only use weakly alkaline cleaners or weak acids (e.g. citric acid). Do not rub, brush or scrub the anode mechanically.

Subsequent mechanical working should be avoided since this may adversely affect the lifetime.

Anode Monitoring

The anode is monitored by means of the current-voltage ratio. If during operation the voltage increases at constant current, this indicates a partial passivation of the anode. In order to make a statement about the condition of the anode, the current flow in the whole system must be without any significant resistances. Too high contact resistances between contact rail and anode as well as cathode adversely affect the monitoring.

Forms of Supply

- Formed parts according to drawing
- Ti expanded metal: types N; F; G; GS; D
- Titanium sheets, bars and pipes

Precautionary Measures/Safety Hints

For information on safety, please see the corresponding Material Safety Data Sheets!

The valid accident prevention regulations and safety instructions must be observed.

Further Information

+49 (0) 7171 607-292 Technical Support
 +49 (0) 7171 607-321 Sales
 +49 (0) 7171 607-355 Fax
galvano@eu.umicore.com
www.umicore-galvano.com

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Umicore Galvanotechnik GmbH

P.O. Box 12 40 • D-73502 Schwaebisch Gmuend

Delivery address:

Klarenbergstraße 53-79 • D-73525 Schwaebisch Gmuend
GERMANY

Telephone +49 (0) 71 71 / 6 07 - 01

Fax +49 (0) 71 71 / 6 07 - 2 88

e-mail: galvano@eu.umicore.com

www.umicore-galvano.com