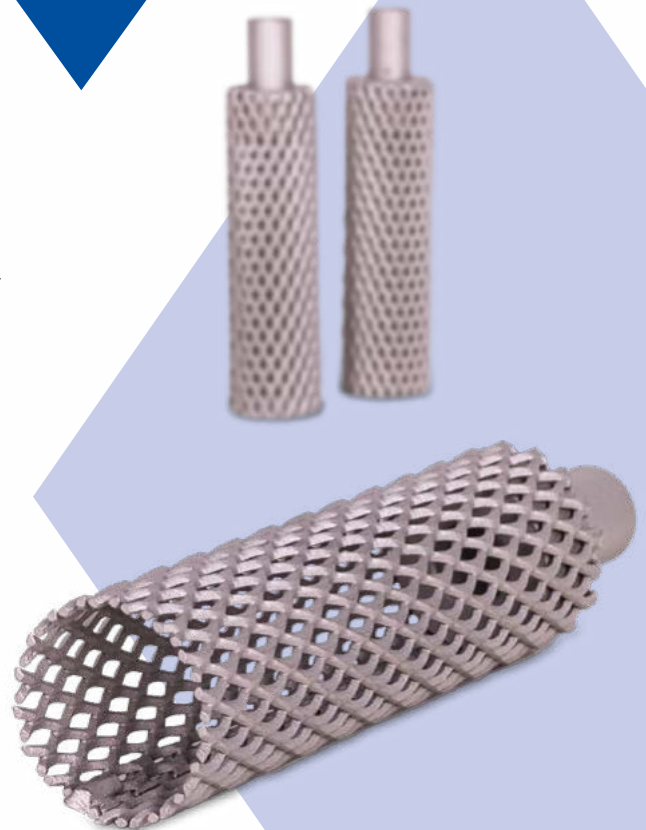


METAKEM

Precious metals & anodes

Platinised Niob-Anodes

For the highest demands in hard chrome plating



Anodes

Platinised Niob-Anodes

Specifications

Carrier metal:	Niobium, Nb
Material:	99.99 % Nb
Anode body made of:	Expanded metal, sheet metal, tube, rod, wire
Construction:	According to customer requirements
Thickness of the Pt layer:	1.5 - 5 µm, in special cases up to 20 µm
Pt layer by means of:	Galvanic
Current density:	≤ 100 A / dm ²
Application as:	Anode and bipolar electrode
pH of the electrolyte:	0 - 11 recommended
Bath temperature:	≤ 60°C recommended



Request product:

→ metakem.de/en/request

The **PtNb-Anode** combines the electrochemical behaviour of platinum with the very high corrosion resistance of niobium in acidic media; the same applies to the **PtNb-Anode** as to the **PtTi-Anode**, but above all:

- ♦ The electrical resistance of niobium is one tenth of that of titanium
- ♦ Higher resistance of niobium in acidic baths
- ♦ Avoidance of Pt underetching in very acidic baths
- ♦ Can be used in baths with a low fluoride content
- ♦ Long service life even with very high current density
- ♦ Replatinisation justifies the expensive niobium carrier

The anode body made of expanded metal, sheet metal, rod, wire or tube is niobium. The activating Pt layer is the same as for PtTi.

Niobium has up to 10 times the breakdown voltage of titanium and therefore outstanding corrosion resistance. Long anode service life can be achieved even at very high current densities (up to 100 A / dm²).

It can also be used in baths with a low fluoride content and the **PtNb-Anode** made of expanded metal is preferred for good current distribution on the cathode. Expanded metal ensures a high spreading capacity, good electrolyte exchange and compact design with low weight.

Expanded metal types:

METAKEM offers various mesh sizes available for Nb expanded metals, see our [Overview of expanded metal types](#).