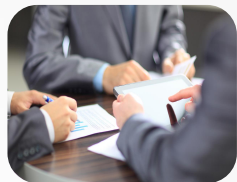


陕西旭博钛金属科技 有限公司

Shaanxi Xubo Titanium Metal Technology Co.,Ltd



Catalog

As a professional manufacturer of titanium electrodes, we have been adopting advanced coated technology to ensure our products with higher cost performance. We can make different sizes and shapes according to designed drawings by clients so as to obtain the best effects.

RuO₂ IrO₂ coated titanium anodes are used in chlor-alkali, sodium hypochlorite, sewage treatment, sea water desalinization, etc.

IrO₂ Ta₂O₅ coated titanium anodes are widely used in the production of electrolytic copper foil, Al foil, organic electrolyte, cathodic protection, etc.

RuO₂ coated titanium anodes are used in caustic potash (KOH), sodium hypochlorite, etc.

Pt coated titanium anodes are used in electrolytic deposition, water treatment, etc.

titanium anode coating, which consists of mixed metal oxide (MMO) such as RuO₂, IrO₂, TiO₂, Ta₂O₅, can distinctly reduce cell voltage during the electrolysis of chlorine evolution & oxygen evolution and have remarkable energy-saving effect & longer lifetime. The substrate can be reused and re-coated. Titanium anode is also called as DSA titanium anode or insoluble titanium anode due to its dimension stability and high corrosion resistivity. With high corrosion resistivity, titanium anode can ensure they won't pollute electrolysis system and increase final products purity so as to reduce maintenance cost of the equipment.

Application fields:

copper recovery in etching liquid
sewage treatment
sodium hypochlorite generator
ionized water electrolysis

electrodialysis industry
swimming pool disinfection
Chlor-alkali industry
Electroplating

MMO cathodic protection
Electrolysis of seawater
water heater anticorrosion
Hydrometallurgy

Available Shapes:

sheet, wire, mesh, tube, ring, strip and mesh basket types, etc.

RUTHENIUM COATING SERIES TITANIUM ANODE

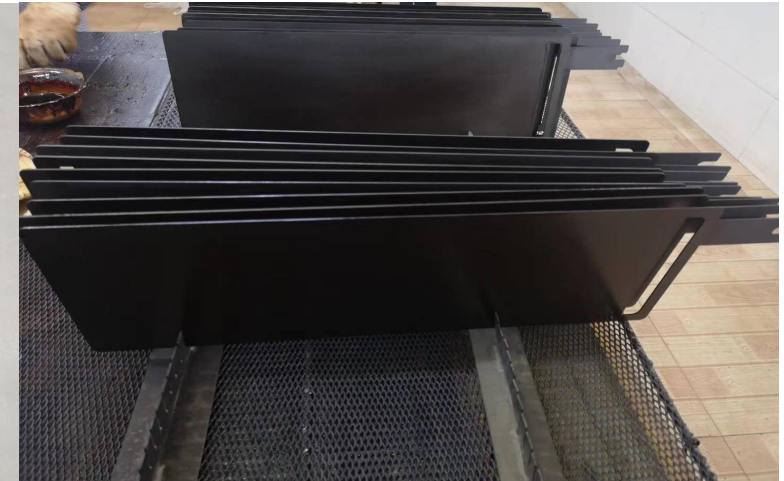
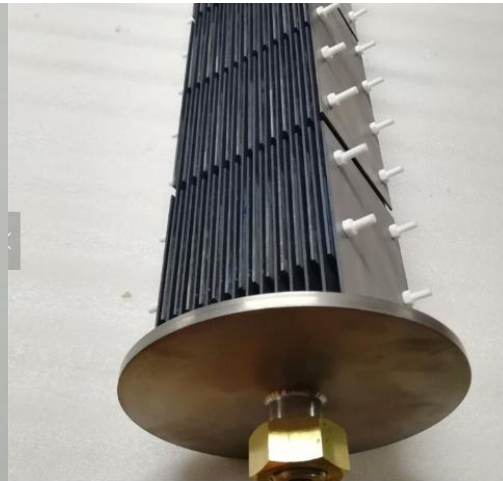
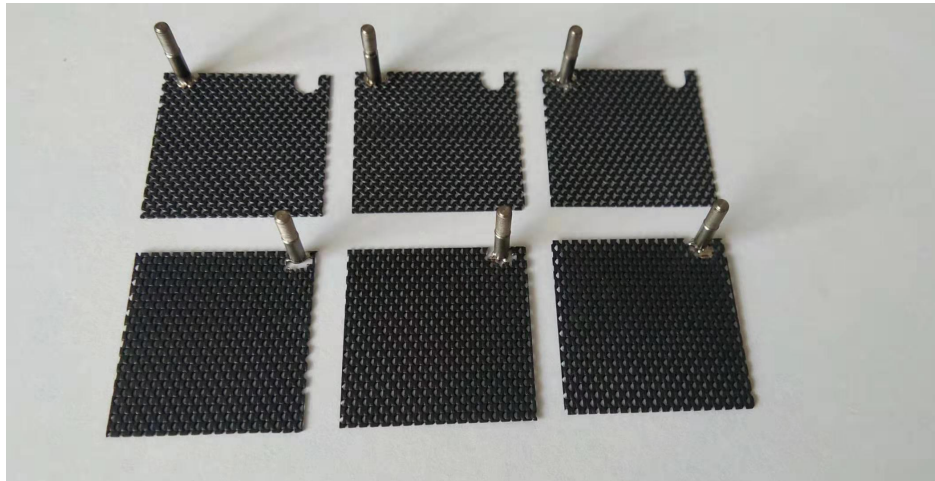
The ruthenium-titanium coated electrode (Ti /Ru O₂-Ti O₂) is the earliest ruthenium-based coated electrode. It was invented by the scientist Henri. Bernard. Beer in 1965, and in 1968 by the chlor-alkali plant of De Nora, Italy. Used in industrial production, the ruthenium-titanium coated electrode has been industrialized. The invention of ruthenium-titanium oxide-coated titanium electrodes greatly promoted the development of the electrochemical industry. As the chlorine evolution overpotential and oxygen evolution overpotential of RuO₂ are very low, it becomes one of the best catalysts for the chlorine evolution reaction and the oxygen evolution reaction.

With the continuous research and development of chlorine evolution electrodes, ternary, quaternary and even pentad coating systems such as RuSnTi, RuIrTi, RuIrTa, RuTiIrSn, RuIrTiSnCo have been developed.



RUTHENIUM COATING SERIES TITANIUM ANODE

Substrate : pure titanium (Gr1)	Coating:Ru₂+X
Current Density:≤10000A/m ²	coating content:10g/m ²
Coating thickness:≥10μm	oxygen evolution potential:1.13V(Relative to calomel electrode)
Features: 1.Good corrosion resistance and pole reversal performace. 2.High current efficiency and energy consumption. 3.Long working life ,can use more than 8 years in chlor-alkali industry. 4.Substrate could be reused.	Test data in chlor-alkali industry: 1.chlorine evolution potential≥1.13V 2.chlorine evolution polarizability:≤40MV 3.strengthening life test :≥3000min Current density:≤10000A/m ² 4.strengthening weight lessness: ≤10mg



CHLORINE PRODUCTION OF SODIUM HYPOCHLORITE GENERATOR

Current density A/m ²	chlorine ion content ppm	chlorine production g/h m ²
300-500	3000-5000	850-1050

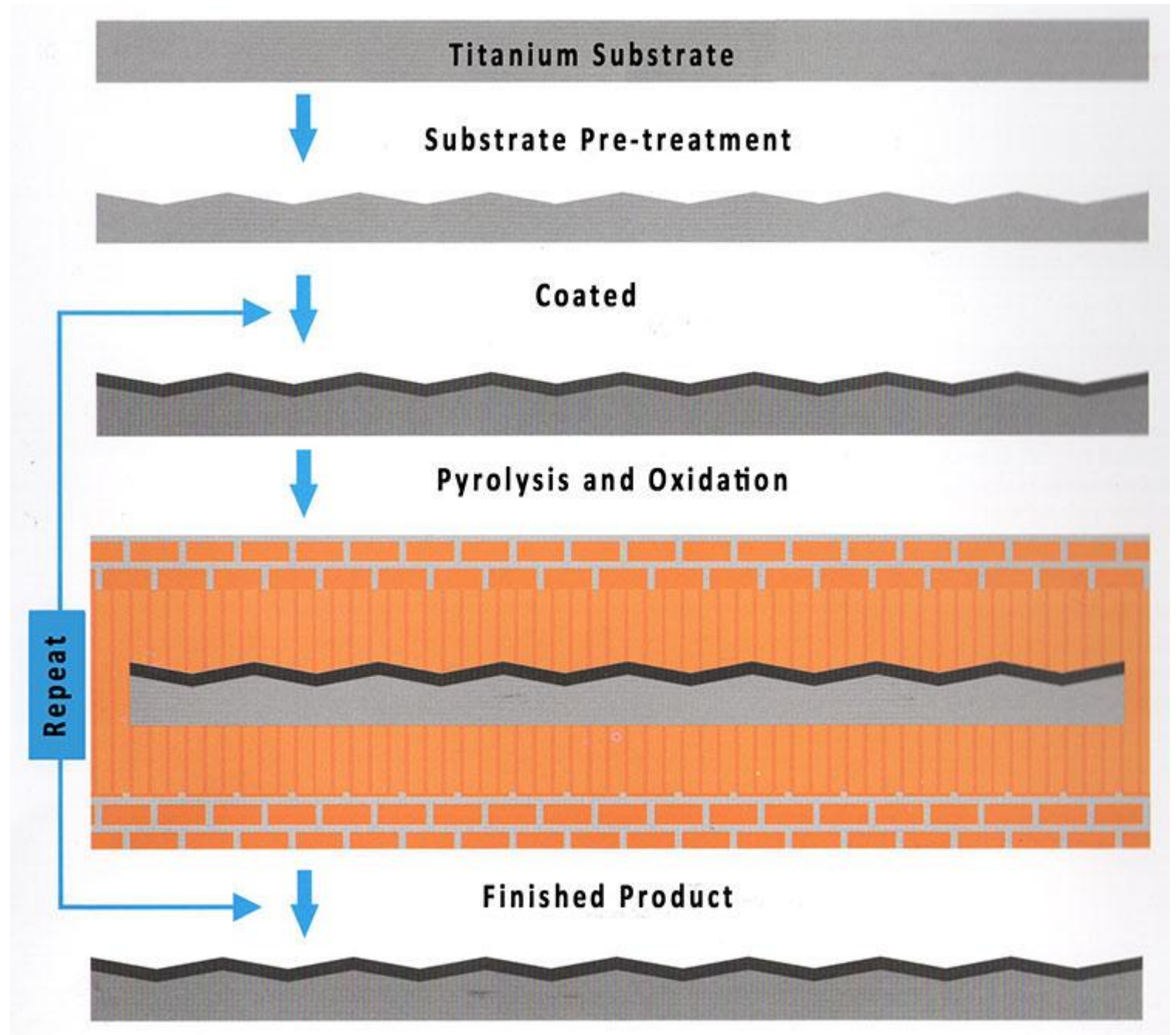


Sodium hypochlorite generator

XUBO Titanium Anode Sodium Hypochlorite Details

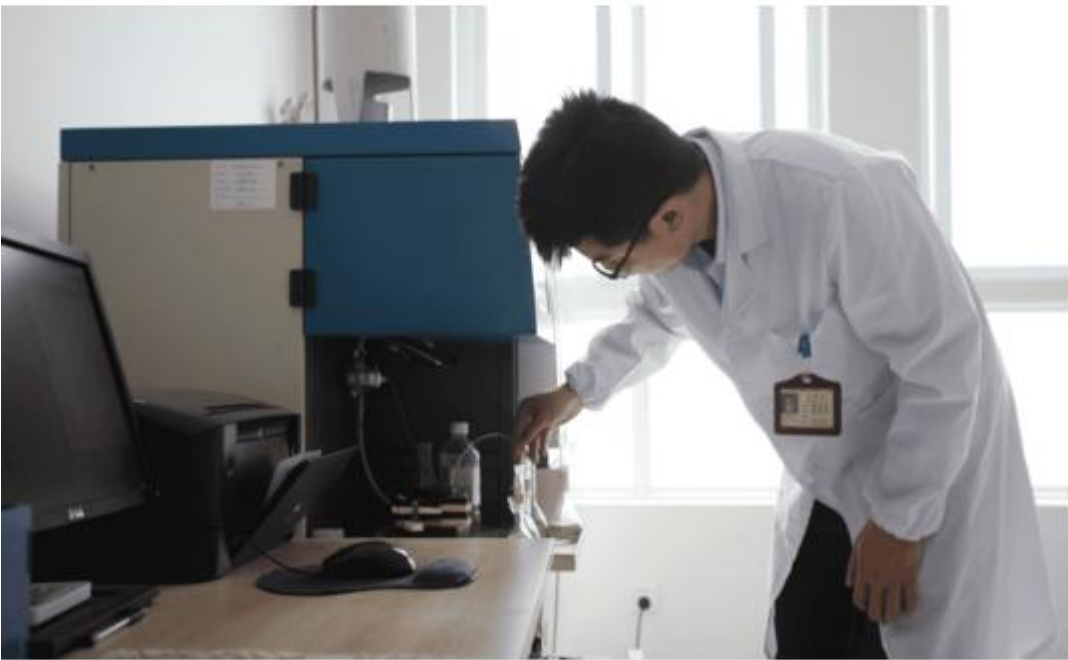
Yield	current	Voltage	water intake	Flange OD	shell diameter	system total length	Inlet and Outlet Diameter
50g/h	30-40A	7-8V	7-10L/h	140mm	80mm	420mm	32.3mm
100g/h	30-40A	14-16V	12-20L/h	140mm	80mm	670mm	32.3mm
200g/h	60-80A	14-16V	25-40L/h	170mm	110mm	670mm	32.3mm
300g/h	90-120A	14-16V	45-70L/h	200mm	130mm	670mm	32.3mm
500g/h	90-130A	21-24V	62-100L/h	200mm	140mm	760mm	32.3mm
800g/h	120-160A	28-32V	100-160L/h	240mm	160mm	970mm	63.3mm
1000g/h	135-180A	28-32V	125-200L/h	240mm	160mm	970mm	63.3mm
1500g/h	280-360A	21-24V	160-260L/h	240mm	160mm	1390mm	63.3mm
2000g/h	340-410A	21-24V	250-400L/h	240mm	190mm	1390mm	63.3mm
3000g/h	520-600A	21-24V	450-600L/h	240mm	230mm	1750mm	63.3mm
4000g/h	680-750A	21-24V	500-800L/h	310mm	230mm	1750mm	110.6mm
5000g/h	700-800A	28-32V	650-1000L/h	310mm	230mm	2250mm	110.6mm

Processing Flow



JOINTING R&D

Improving current efficiency and prolonging service life are the core technical indicators of DSA titanium electrodes. Different industries have different requirements for the performance of titanium electrodes. Even if the same industry uses the same system of electrocatalytic coatings for different electrolytes, it may not be possible. Bring the ideal use effect. Based on years of accumulated R&D and production experience and a high-level technical team, the company can tailor a coating system that meets its own production environment for target customers to meet the differentiated needs of different industries or different customers in the same industry.



Development of electrode materials for high chlorine evolution efficiency and long life.
Development of electrode materials for high acidity and long life oxygen evolution.
Development of new electrode materials for mixed acid systems.



Development of high-oxygen ultra-base metal electrode materials
Development of electrode materials in special fields