陕西旭博钛金属科技有限公司

Shaanxi Xubo Titanium Metal Technology Co.,ltd

Catalog

As a profesional manufacturer of titanium electrodes ,we have been adopting advance coated technology to ensure our porducts 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 hypoclorite 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 them 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	electrodialysis industry	MMO cathodic protection
sewage treatment	swimming pool disinfection	Electrolysis of seawater
sodium hypochlorite generator	Chlor-alkali industry	water heater anticorrosion
Ionized water electrolysis	Electoroplating	Hydrometallurgy

Available Shapes:

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

IRDIUM COATING SERIES TITANIUM ANODE

The oxygen evolution electrode is mainly used in the electrolysis of aqueous sulfuric acid system. IrO2 is an excellent oxygen evolution catalyst that can remain stable in acidic solutions. The iridium-coated titanium electrode is the most promising coated electrode in the field of oxygen evolution.

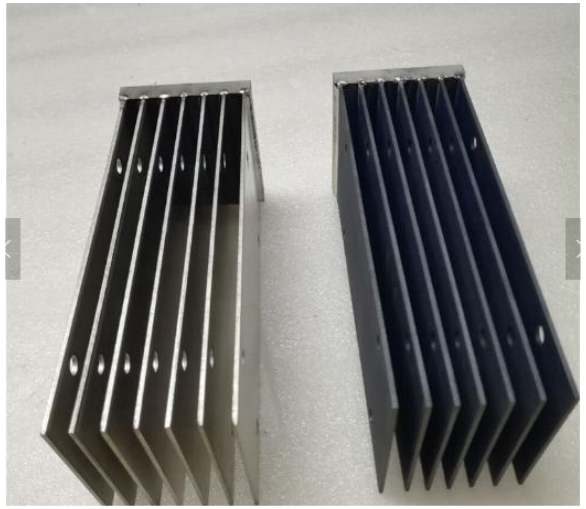
The simple IrO2 coating is easy to fall off, the electrode life is short, and the price is expensive. It is necessary to add some noble or non-precious metals with good catalytic activity to increase the stability of the IrO2 coating. Among them, the Ir-Ta coated electrode is currently used in analysis. One of the best electrodes for oxygen reaction. In addition, the multi-element platinum group metal oxide coating formed by adding other metal oxides to the Ir-Ta coating system helps to improve the application effect of electrodes in various industries.

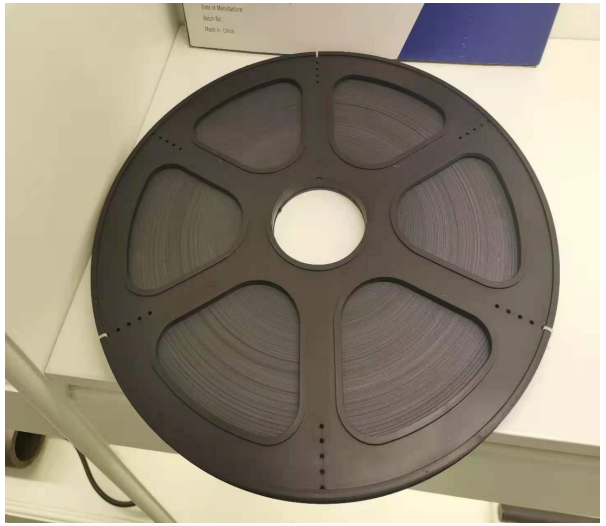
IRDIUM COATING SERIES TITANIUM ANODE

Substrate： pure titanium (Gr1)	Coating:IrO2+X
Current Density:≤20000A/㎡	coating content:≥5g/㎡
Coating thickness:≥10μm	oxygen evolution potential:1.5V(Relative to calomel electrode)

Features:
1.High anti-corrosion characteristic
2.High current efficiency, oxygen evolution overpotential ≤1.5V.
3.Long working life ,high electric catalytic oxidation activity.
4.Substrate could be reused.
5.High current density,high poduction efficiency.
6.Light weight.

Substrate





IRDIUM COATING SERIES TITANIUM ANODE

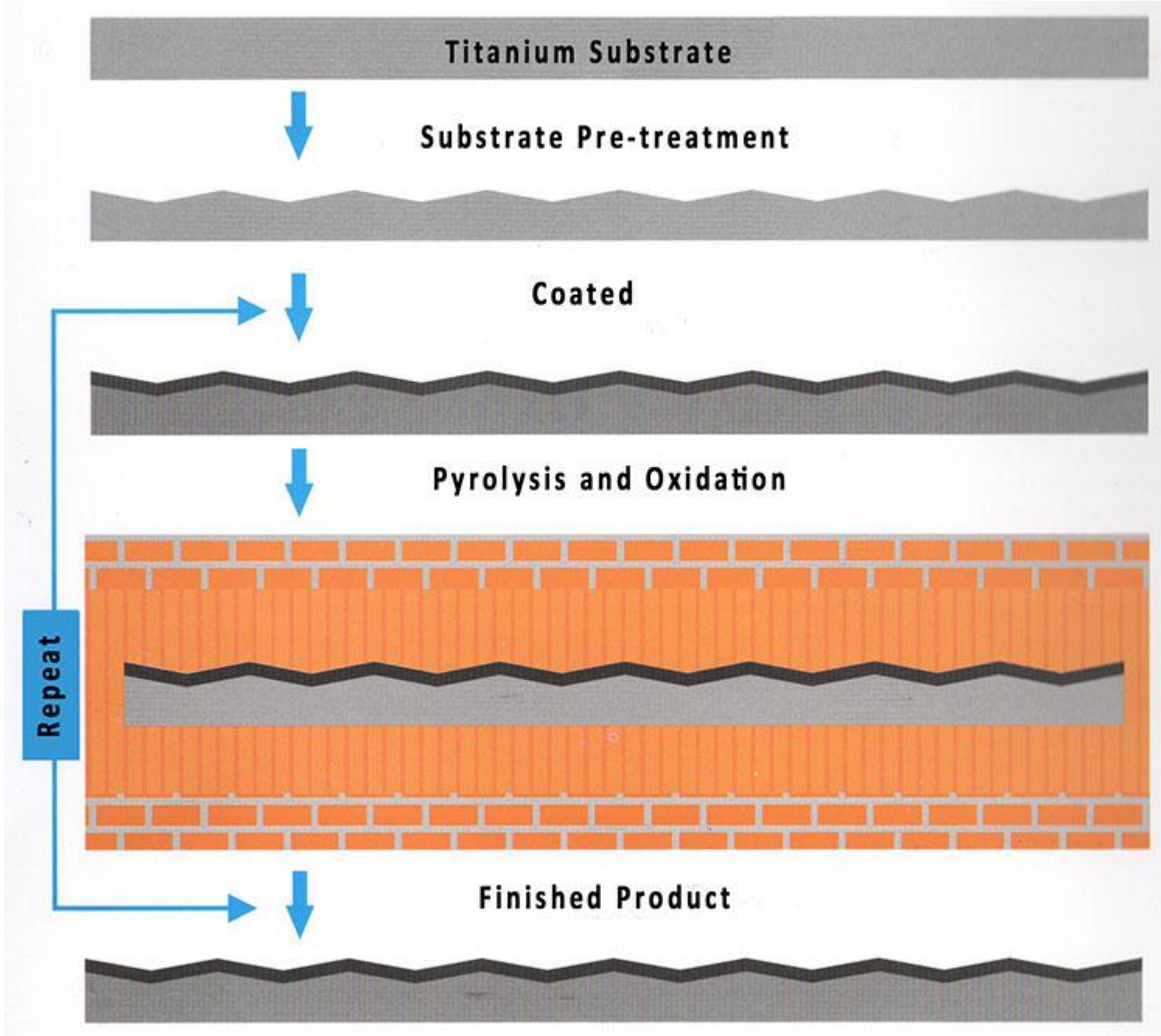
Project for annual output with 100 thousands of tons electrolytic manganese

Anode type	current density A/㎡	Consumption of per ton KWh	production kg/pc	Life
Lead oxide anode	370-420	5800-6000	3.5--3.8	18month
MMO anode	370-420	5400-5600	3.7--4.0	36month

Project for annual output with 50 thousands of tons electrolytic manganese

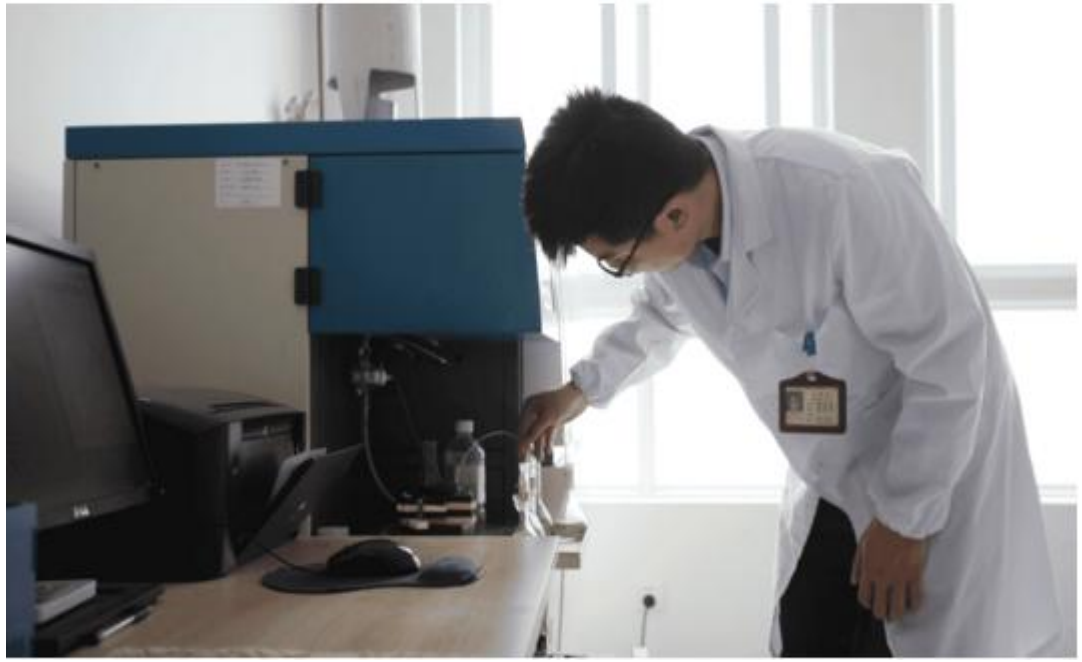
Anode type	current density A/㎡	Cell voltage V	current effiency	Life
Lead oxide anode	100-230	3.9-4.0	89%-91%	18month
MMO anode	100-230	3.6-3.7	93%-95%	> 36month

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