



Change your **WATER**

Change your **LIFE**

## Prime Water Premium Water Ionizer

The Ionized Water unit, slightly taller and thicker than a large dictionary on end, is an electrical appliance connected to your kitchen water supply to perform electrolysis on tap water before you drink it or use it in the kitchen for cooking or cleaning.



## PRIME WATER PRODUCTS 9-ELECTRODES CELL FEATURES



**New Larger**  
**9**  
**Platinum**  
**Titanium Plates**

## **New Larger Ultra Efficient Multi-Level Electrolysis chambers**

**New Larger 9 Titanium/Platinum Plates**

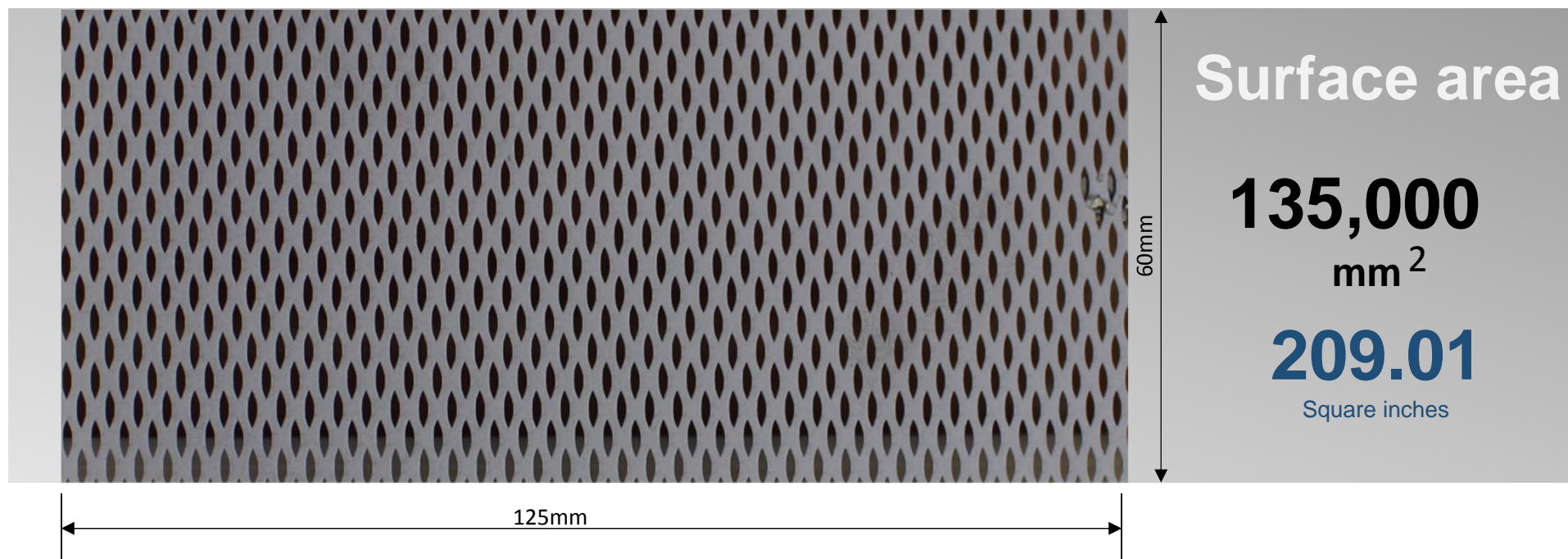
Prime Water Ionizers with Solid and Mesh plate delivers an electrical current to the water through an array of positively and negatively charged Platinum coated Titanium plates.

The more the water passes in and out of the Titanium Mesh system and the greater the electrical charge to the water (especially when powered by the newer SMPS power systems) - the higher the pH (potential of Hydrogen) and the ORP (Oxidation-Reduction Potential) of the drinking water.

A mesh plate uses the same principle as the slotted plate, but improves upon it by providing cross-channeling to more evenly direct electron flow. The applied current more evenly saturates the plate, increasing the effective delivery of electrical current to create better alteration in your water. Mesh plate technology is just like the best irrigation systems



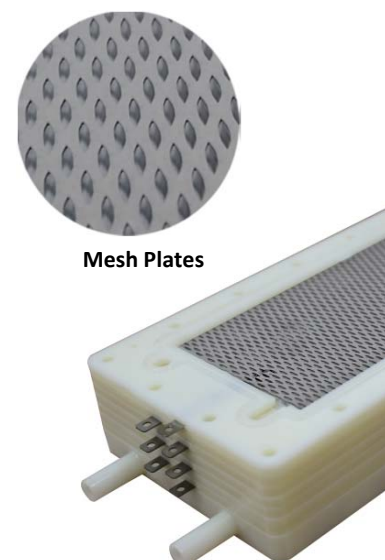
**Multi-Level**



**135,000mm & 209.01 square inches**

## **High Performance Smart & Larger Surface Area Electrode**

Prime Water Ionizers have larger 9 platinum titanium electrodes.  
With its 9 Mesh large platinum titanium plates, it is up for the job at task producing the highest -ORP for prolongs amounts of use making it the best residential water ionizer out there.





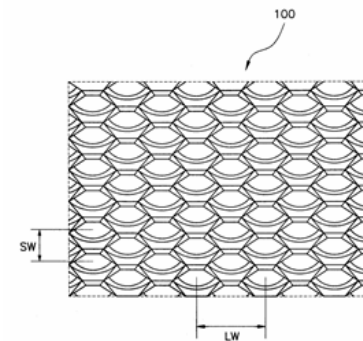
Max Large  
**MESH**  
 Platinum  
 Titanium Plates

## Comparison of Solid Plate Electrodes and Mesh Electrodes

According to a study (Patent Publication 2003-0093171) in order for mesh titanium electrode plates to obtain an increase of 30% in active electrode area, the mesh structure should be LW0.1-2mm SW1.0-4.5mm .

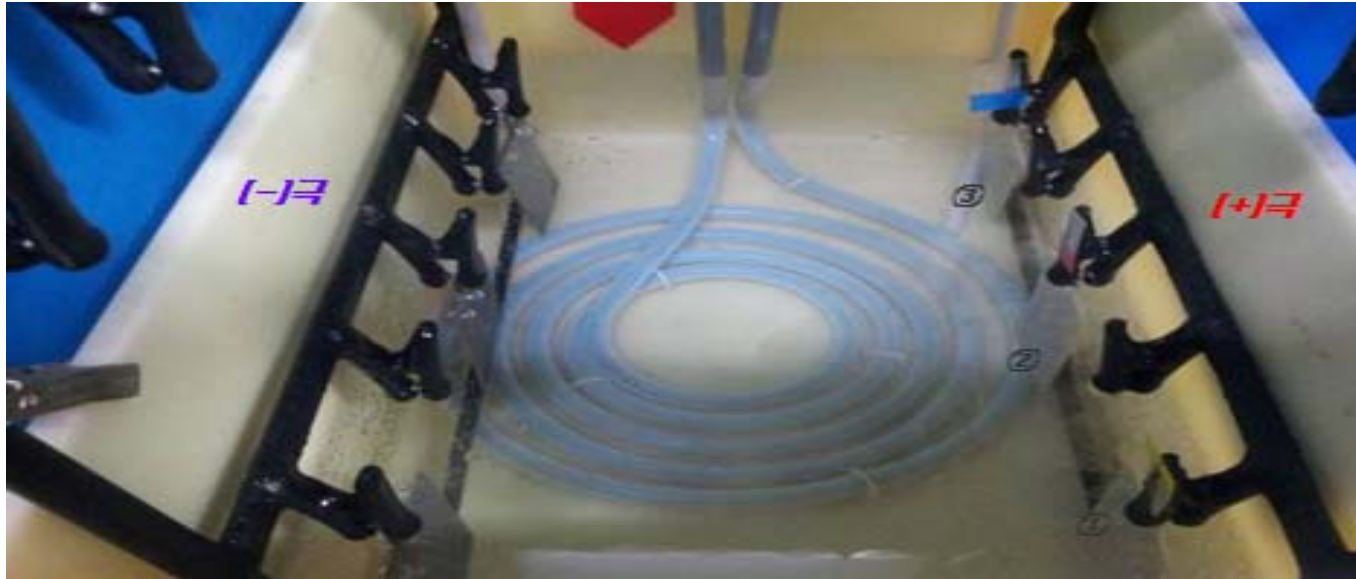
The principle of edge conductivity is well known as electrons travel better and faster along edges rather than flat surface.

Mesh plate increase edge surface area, and it conducts and distributes electrons more uniformly and more efficiently rather than flat surfaces. As the entire surface area of mesh plates act as energy distribution point, there is no concentration of energy to cause burning effect or oxidative corrosion as in solid plates. Hence it is more effective in maintaining pH, ORP and activated Hydrogen. Besides, it is evident that mesh technology creates better water flow.





## Prime Water Plate Technology



## Prime Water Electrodes

# DURABILITY

## PRIME WATER ELECTRODES Internal Durability Test Conducted

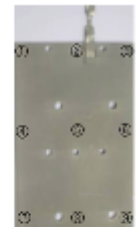
According to the analysis of the test results:

The tests were performed according to standard test methodology.

After each test was taken according to the different flow rates and comparing the analysis to a range of standards, even when not using the standard amounts, water cell life was ten years

- TEST conditions: H<sub>2</sub>SO<sub>4</sub> 0.5mol / l on the electrolyte solution 40 °C, 2A / d m<sup>2</sup> is current, 240hr electrolysis
- TEST Quantity: 3 varieties [Heat 1, Heat 2 times, Brazing products]
- TEST Date: 1/10 08:00
- TEST End Date: 20.01 08:00
- TEST progress results: 240hr after all

n=	1 Pt 1 =	0.22
n=	2 Pt 1 =	0.18
n=	3 Pt 1 =	0.20
n=	4 Pt 1 =	0.19
n=	5 Pt 1 =	0.14
n=	6 Pt 1 =	0.18
n=	7 Pt 1 =	0.21
n=	8 Pt 1 =	0.20
n=	9 Pt 1 =	0.21



Mean	0.190
Standard deviation	0.024
C.O.V. (%)	12.85
Range	0.08
Number of readings	9.0
Min. reading	0.14
Max. reading	0.14
Measuring time	0.22
Operation:	20

## Prime Water Plate Technology

### Electrolytic Performance Water Cell Electrode Performance Test Results



### Prime Water Electrodes

## Performance

NO	Data	Descriptions	Comments
1	Product	Electrolytic Alkaline Water Generator (Prime 1301 – 13Plates)	
2	Test Period	April 11, 2014 to March 27, 2011 (40 days)	Daily Journal kept
3	Total Discharge	36,000 liters (Four people using 10 L per day on average: about 10 years worth)	Standard - 360 day year
4	Basis of usage life	About 10 years	
5	Water pressure	2.5 Kg/cm <sup>2</sup>	Water pressure from unit
6	Water flow rate	2.5 l/min	Alkaline water:1.5l/min Acidic water:1.0l/min
7	This method	Every day five samples were taken to test pH and the average was taken down.	
8	This started cleaning method	The machine was used for 30 min. to produce alkaline water after which the machine went into cleaning cycle then tested.	
9	Testing machine	pH-meter Model:HM-20P Jejo Co.: TOA(Japan)	

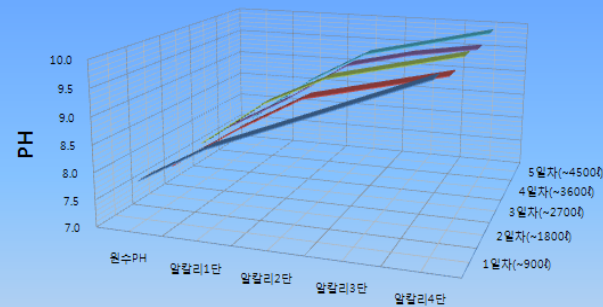
## Prime Water Plate Technology

### Electrolytic Performance Water Cell Electrode Performance Test Results

## Prime Water Electrodes

# Performance

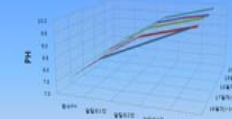
#1~5일차 시험일지 (0~4500ℓ 통수)#



	원수PH	알칼리1단	알칼리2단	알칼리3단	알칼리4단
■ 1일차(~900ℓ)	7.8	8.5	9.0	9.5	10.0
■ 2일차(~1800ℓ)	7.7	8.5	9.2	9.5	9.8
■ 3일차(~2700ℓ)	7.8	8.7	9.3	9.6	9.9
■ 4일차(~3600ℓ)	7.8	8.5	9.3	9.6	9.8
■ 5일차(~4500ℓ)	7.7	8.6	9.3	9.6	9.9

- PH측정값은 5회를 실행정하여 나온 평균값으로 기재함.

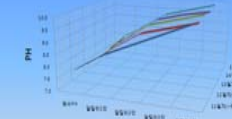
#16~20일차 시험일지 (13500~18000ℓ 통수)#



	원수PH	알칼리1단	알칼리2단	알칼리3단	알칼리4단
20일차(~18000ℓ)	7.7	8.5	9.2	9.5	10.0
19일차(~16500ℓ)	7.7	8.5	9.2	9.5	9.8
18일차(~15000ℓ)	7.8	8.7	9.3	9.6	9.9
17일차(~13500ℓ)	7.8	8.5	9.3	9.6	9.8
16일차(~12000ℓ)	7.7	8.6	9.3	9.6	9.9

- PH측정값은 5회를 실행정하여 나온 평균값으로 기재함.

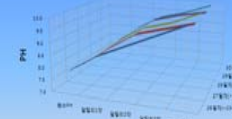
#11~15일차 시험일지 (9000~13500ℓ 통수)#



	원수PH	알칼리1단	알칼리2단	알칼리3단	알칼리4단
15일차(~13500ℓ)	7.7	8.5	9.2	9.5	10.0
14일차(~12000ℓ)	7.7	8.5	9.2	9.5	9.8
13일차(~10500ℓ)	7.8	8.7	9.3	9.6	9.9
12일차(~9000ℓ)	7.8	8.5	9.3	9.6	9.8
11일차(~7500ℓ)	7.7	8.6	9.3	9.6	9.9

- PH측정값은 5회를 실행정하여 나온 평균값으로 기재함.

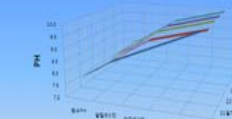
#26~30일차 시험일지 (22500~27000ℓ 통수)#



	원수PH	알칼리1단	알칼리2단	알칼리3단	알칼리4단
30일차(~27000ℓ)	7.8	8.5	9.2	9.5	10.0
29일차(~25500ℓ)	7.7	8.5	9.2	9.5	9.8
28일차(~24000ℓ)	7.8	8.7	9.3	9.6	9.9
27일차(~22500ℓ)	7.7	8.5	9.2	9.5	9.8
26일차(~21000ℓ)	7.7	8.6	9.3	9.6	9.9

- PH측정값은 5회를 실행정하여 나온 평균값으로 기재함.

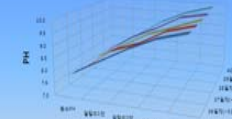
#21~25일차 시험일지 (18000~22500ℓ 통수)#



	원수PH	알칼리1단	알칼리2단	알칼리3단	알칼리4단
25일차(~22500ℓ)	7.8	8.5	9.2	9.5	10.0
24일차(~21000ℓ)	7.7	8.5	9.2	9.5	9.8
23일차(~19500ℓ)	7.8	8.7	9.3	9.6	9.9
22일차(~18000ℓ)	7.8	8.5	9.2	9.5	9.8
21일차(~16500ℓ)	7.7	8.6	9.3	9.6	9.9

- PH측정값은 5회를 실행정하여 나온 평균값으로 기재함.

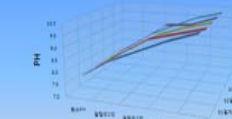
#36~40일차 시험일지 (31500~36000ℓ 통수)#



	원수PH	알칼리1단	알칼리2단	알칼리3단	알칼리4단
40일차(~36000ℓ)	7.8	8.5	9.2	9.5	10.0
39일차(~34500ℓ)	7.7	8.5	9.2	9.5	9.8
38일차(~33000ℓ)	7.8	8.7	9.3	9.6	9.9
37일차(~31500ℓ)	7.8	8.5	9.2	9.5	9.8
36일차(~30000ℓ)	7.7	8.6	9.3	9.6	9.9

- PH측정값은 5회를 실행정하여 나온 평균값으로 기재함.

#31~35일차 시험일지 (27000~31500ℓ 통수)#



	원수PH	알칼리1단	알칼리2단	알칼리3단	알칼리4단
35일차(~31500ℓ)	7.8	8.5	9.2	9.5	10.0
34일차(~30000ℓ)	7.7	8.5	9.2	9.5	9.8
33일차(~28500ℓ)	7.8	8.7	9.3	9.6	9.9
32일차(~27000ℓ)	7.8	8.5	9.2	9.5	9.8
31일차(~25500ℓ)	7.7	8.6	9.3	9.6	9.9

- PH측정값은 5회를 실행정하여 나온 평균값으로 기재함.

## Electrolytic Performance 40 days test result

## Prime Water Plate Technology



Prime Water  
Electrodes  
**SAND  
BLASTING**

## Plates Sand Blasting Technology

### Automatic Blast Guns & Traverse Moving System

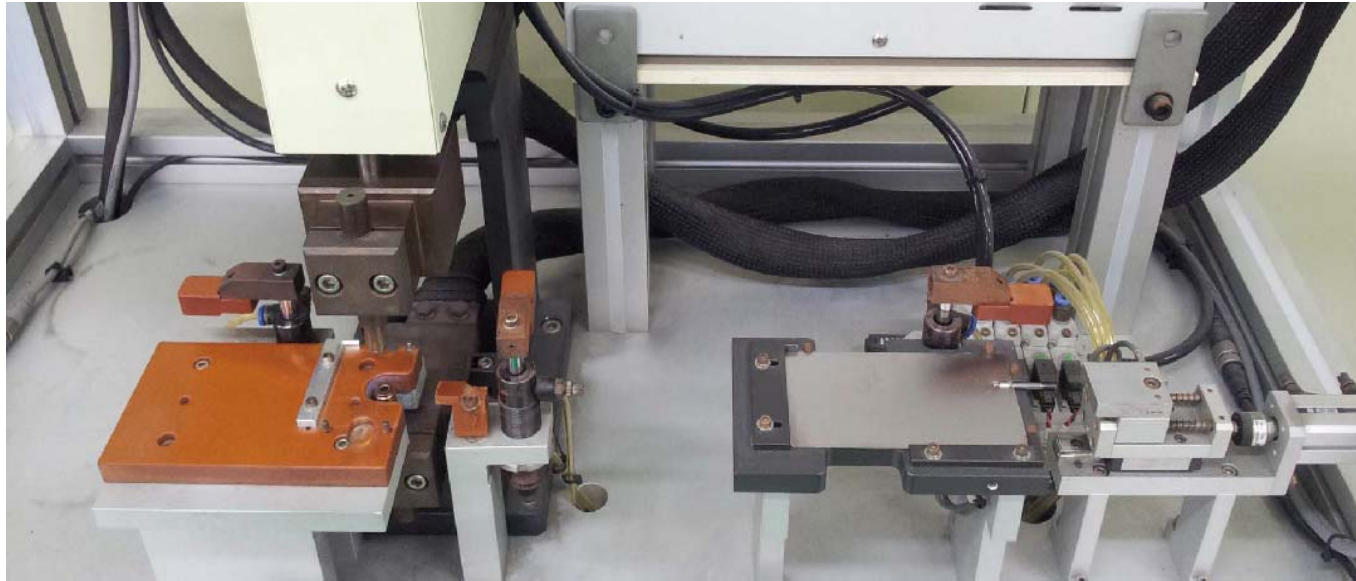
In order to improve the performance of the Anode Oxide Coating between the metal and the substrate is closely a very important factor. Therefore, the Anode Oxide Coating system, it must be strictly the substrate pretreatment, such as degreasing, sand blasting and etching, etc.

Roughened titanium substrate including blasting and etching in two steps, wherein spray Sand is caused by Macro rough. Generally, considered: Blasting can remove the surface oxide film of titanium, exposing fresh Surfaces; Sand rough will make the surface of the compressive stress in the state is conducive surface coating and the substrate binding.





## Prime Water Plate Technology



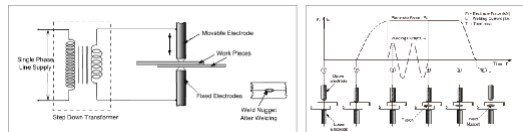
# SPOT WELDING

## Spot Welding Technology

### Spot Welding

In resistance spot welding, two or more sheets of metal are held between electrodes through which welding current is supplied for a defined time while force is exerted on the work pieces. The principle is illustrated in the figure on the left below.

The welding cycle starts with the upper electrode moving and contacting the work pieces resting on lower electrode which is stationary. The work pieces are held under pressure and only then heavy current is passed between the electrodes for a preset time. The area of contact between metals is raised to welding temperature due to the flow of current through the contact surfaces of the work pieces. Pressure between the two electrodes squeezes the hot metal together thus completing the weld. The weld nugget formed is allowed to cool under pressure and then pressure is released. This total cycle is known as resistance spot welding cycle and is illustrated in the figure on the right below.



## Prime Water Plate Technology



# PRODUCTION

## Plate Production Process (1/2)



### Press

Titanium shape processing in the press



### Electrode machining

Electrode cutting and rolling process



### Washing

Removal of oil and grease from media and cut pieces



### Spot Welding

Welding of the metal terminal to the electrode.



### Sanding

Sand blasting process to improve plating adhesion



### Racking

Titanium electrodes loaded onto plating jig



### Skimmer

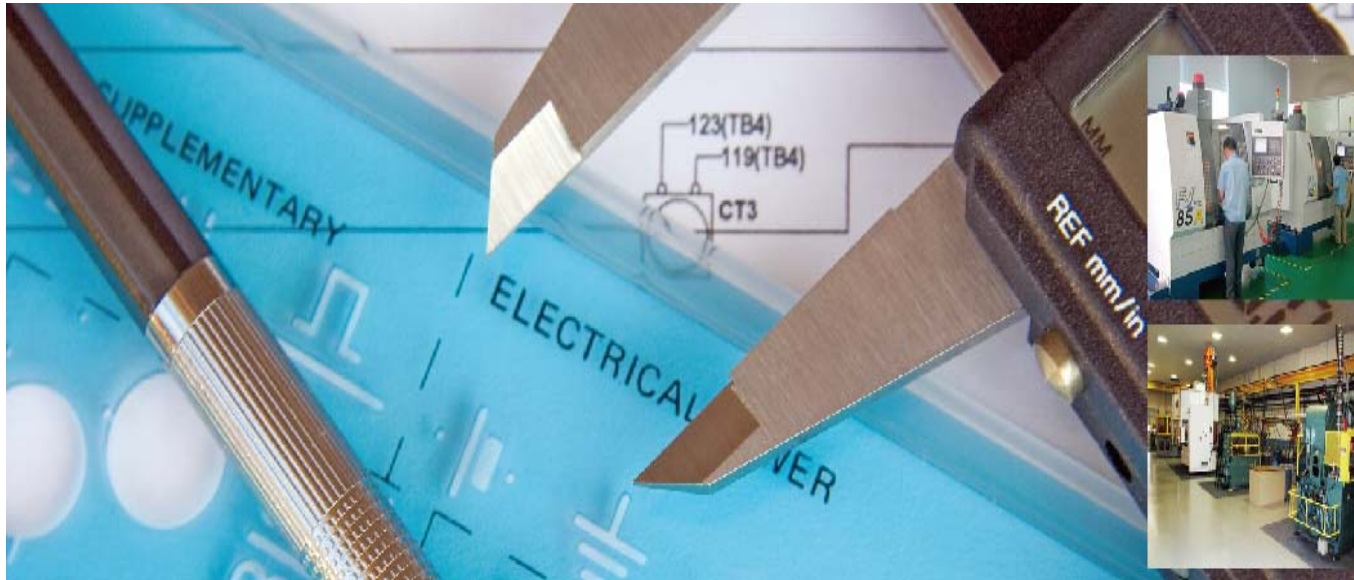
Removal of any surface grease or oil



### Etching

Removal of oxidation from titanium surface

## Prime Water Plate Technology



## PRODUCTION

### Plate Production Process (2/2)



#### Etching

Removal of oxidation from titanium surface



#### Activator

Surface of titanium activated to improve plating adhesion



#### Platinum Plating

Titanium plated with platinum



#### Drying

Water is removed from the surface of the platinum



#### Heat Treatment

Heat treated in furnace to strengthen adhesion of Platinum to titanium.



#### Shipping Inspection

Reliability and appearance Inspection / Certificate of Inspection issued



#### Packing/Shipping

Packing/Shipping



## Prime Water Plate Technology



## PLATING MEASURING

### Platinum Plating Measuring Technology

Energy dispersive x-ray fluorescence analysis is a method for measuring the thickness of coatings and for analyzing materials.

It can be used for the qualitative and quantitative determination of the elemental composition of a material sample as well as for measuring coatings and coating systems. The analysis uses methods that are well established in both laboratory and industrial environments and can be readily applied using modern equipment.

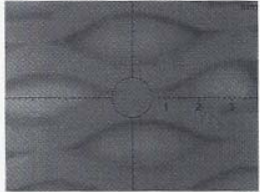
Platinum plating measuring equipment offers some outstanding advantages.

It covers virtually all technically relevant elements and works non-destructively and with no contact with the sample.

Measuring times range in the seconds and takes rarely longer than one minute to complete.

Measurements can be completed quickly and usually without extensive sample preparation. With our measuring equipment, it is possible to measure both thickness and chemical composition of homogeneous materials and coatings. Even traces of harmful substances can be detected in a very wide range of samples.



		
n=	1 Pt 1 =	0.158 um
n=	2 Pt 1 =	0.162 um
n=	3 Pt 1 =	0.163 um
n=	4 Pt 1 =	0.168 um
n=	5 Pt 1 =	0.169 um
<b>Mean</b>		<b>0.164 um</b>
<b>Standard deviation</b>		<b>0.005 um</b>
<b>C.O.V. (%)</b>		<b>2.91</b>
<b>Range</b>		<b>0.012 um</b>
<b>Number of readings</b>		<b>5</b>
<b>Min. reading</b>		<b>0.158 um</b>
<b>Max. reading</b>		<b>0.169 um</b>
<b>Measuring time</b>		<b>5 sec</b>



## Prime Water Plate Technology



PURITY  
PLATINUM  
**99.99%**

## Purity of Platinum 99.99%

Platinum has great value.

Platinum is among the finest, purest and rarest precious metals on earth.

This type of electrode is ideal for the production of chlorine because its long life, high efficiency and stability at low voltages allows it to reduce running costs.

Dimensionally stable Titanium anode are the state of art as anodes for a wide range of electrochemical applications.

The excellent stability of titanium against surface and pitting corrosion make it dimensionally stable permitting dramatic innovations in equipment design, operation conditions and energy consumptions of many electrolysis processes.

The application of coatings containing mixed metal oxides (MMO) such as RuO<sub>2</sub>, IrO<sub>2</sub>, TiO<sub>2</sub> and Ta<sub>2</sub>O<sub>5</sub> allows it to reduce remarkably the over potential for anodic chlorine and anodic oxygen evolution.

Additionally the excellent stability of the MMO coated titanium anode consequently do not contaminate the electrolysis system, improving the products purity and maintenance costs.

DSE (anodes) are generally used to produce chlorine in saline solution.

Purity of Platinum  
(by difference) = 99.99+ %

**VALE** Certificate of Spectrographic Analysis

Action Refinery  
Bailey Road  
London NW10 6BN  
Telephone: 020 8955 6031  
Fax: 020 8453 0307

Date: 21/03/2014

**Platinum**

Product:	Sponge	Reference:	2985
Pd	17	Pb	n.d.
Rh	n.d.	Cr	n.d.
Ru	n.d.	Mn	n.d.
Ir	n.d.	Al	n.d.
Au	n.d.	Mg	n.d.
Ag	n.d.	Sn	n.d.
Os	n.d.	As	n.d.
		Sb	n.d.
* Ca	n.d.	Bi	n.d.
Fe	n.d.	Te	n.d.
Cu	7	B	n.d.
Ni	n.d.	Co	n.d.
Zn	n.d.	Si	n.d.
Mo	n.d.	P	n.d.
Cd	n.d.	* Na	n.d.
W	n.d.	Se	n.d.

Purity of Platinum (by difference) = 99.99+ %

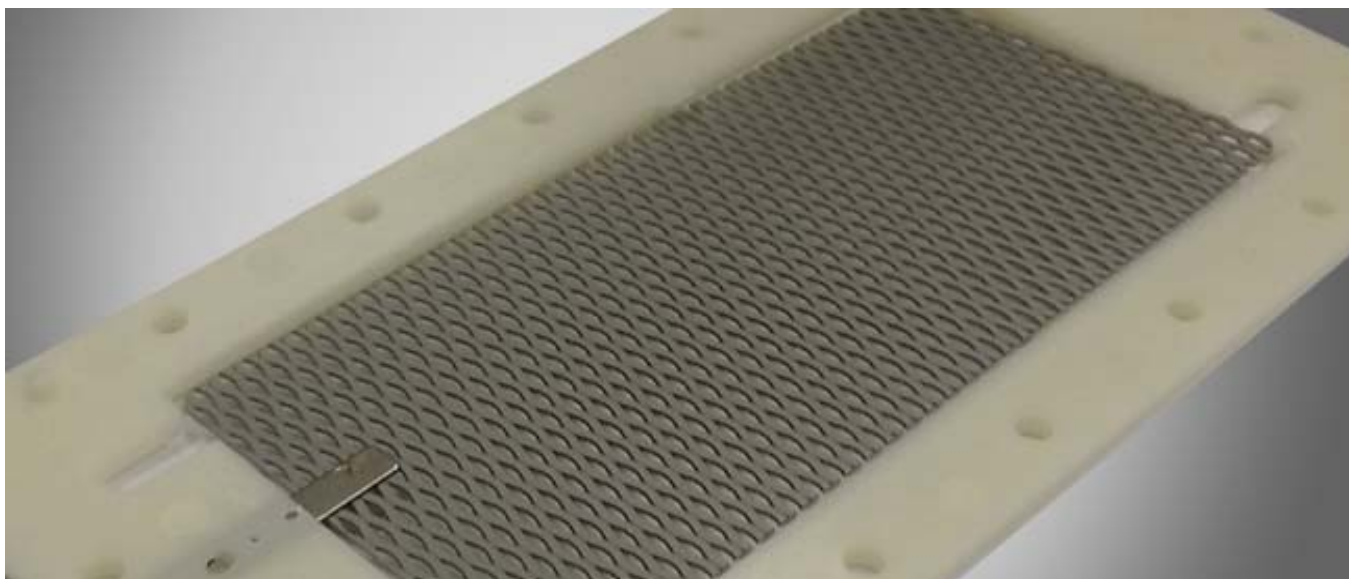
Ignition Loss 0.001 %

Analyst: Pul Shan Cheng  
Supervisor: A. Meskini

All values reported in parts per million unless otherwise stated.  
Analytical Methods used: SPEC-001, SPEC-005  
\*Ca and \*Na is not UKAS accredited

n.d. - not detected  
See QSR - 037 QSP - 307

## Clean & Safety Materials



# CLEAN & SAFETY

## Safety Platinum Titanium

Sample : Metal Specimen (Pt/Ti Plate)				
TEST RESULTS				
TEST ITEM	UNIT	SAMPLE	RESULT	TEST METHOD
H	%	-	0.003	KS D 2532 : 2007
O	%	-	0.06	KS D 2533 : 2009
N	%	-	0.002	KS D 2530 : 2007
C	%	-	0.02	KS D 6000 : 2004
Fe	%	-	0.04	KS D 6000 : 2004(ICP)
Ti	%	-	remainder	KS D 6000 : 2004
Pt	%	-	0.86	KS D 6000 : 2004(ICP)
USAGE : QUALITY CONTROL				
NOTE : 1. The test results on this test report are only limited to the samples and sample names provided by the customer and KTR do not guarantee the quality of all products of the customer. 2. This test report shall not be used for public relation, advertisement, lawsuit and any other purposes outside the scope of its defined usage.				

KTR(Korea Testing & Research Institute) Test Report

SGS

Test Report No. : F690101/LF-CTSAYAA13-27633

Issued Date: 2013. 06. 12 Page 2 of 4

Sample No. : AYAA13-27633.001

Sample Description : Pt electrode

Item No./Part No. : N/A

Materials : Titanium

Heavy Metals				
Test Items	Unit	Test Method	MDL	Results
Cadmium (Cd)	mg/kg	With reference to IEC 62321:2008, ICP	0.5	N.D.
Lead (Pb)	mg/kg	With reference to IEC 62321:2008, ICP	5	N.D.
Mercury (Hg)	mg/kg	With reference to IEC 62321:2008, ICP	2	N.D.
Hexavalent Chromium (Cr VI) By boiling water extraction*	**	With reference to IEC 62321:2008	-	Negative

Flame Retardants-PBBs/PBDEs				
Test Items	Unit	Test Method	MDL	Results
Monobromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Dibromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Trisbromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Tetrabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Pentabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Hexabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Heptabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Octabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Nonabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Decabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Monobromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Dibromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Trisbromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Tetrabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Pentabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Hexabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Heptabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Octabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Nonabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Decabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.

NOTE:  
(1) N.D. = Not detected (<MDL)  
(2) mg/kg = ppm  
(3) MDL = Method Detection Limit  
(4) - = No regulation  
(5) Negative = Undetectable / Positive = Detectable  
(6) \* = Qualitative analysis (No Unit)  
(7) \* = Boiling-water-extraction:  
Negative = Absence of Cr(VI) coating  
Positive = Presence of Cr(VI) coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm<sup>2</sup> sample surface area.

SGS Test Report

## Clean & Safety Materials



# ION EXCHANGE MEMBRANE

## Ion Exchange Membrane

First, PTFE offers excellent chemical resistance.

POREFLON is chemically stable and does not degrade when exposed to virtually all chemicals.

Second, POREFLON is extremely tough and thus has a long service life.

Third, POREFLON is highly permeable to water thanks to its high porosity.

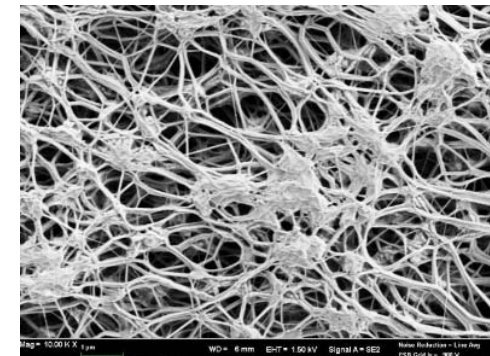
The illustration of POREFLON shows the microscopic structure of our POREFLON products.

The white area is made of PTFE fibers. The black parts represent voids, or pores.

The ratio of pore spaces to the total volume is referred to as the porosity.

Without strength limitations and other restrictions, the porosity of POREFLON can be increased up to around 90%.

A higher porosity implies less resistance to the passage of water and translates into higher water permeability.



## Clean & Safety Materials



## Safety Ion Exchange Membrane

### Test Result(s)

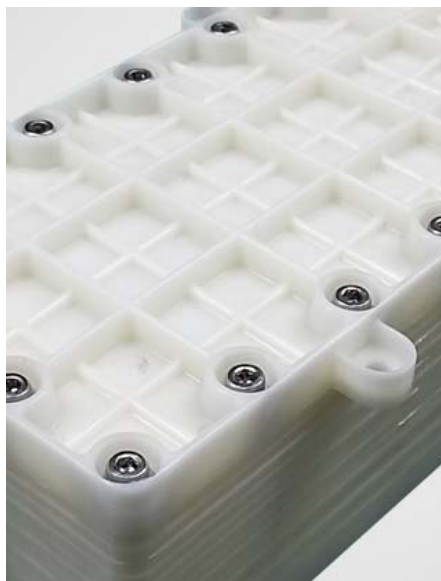
PART NAME No.1 : WHITE SHEET

Test Item(s)	Unit	Method	MDL	Result No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321-5: 2013 and performed by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321-5: 2013 and performed by ICP-AES.	2	n.d.
Mercury (Hg)	mg/kg	With reference to IEC 62321-4: 2013 and performed by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI)	mg/kg	With reference to IEC 62321: 2008 and performed by UV-VIS.	2	n.d.

<div>SGS</div> <div> <b>Test Report</b> No. : CE/2015/B5119 Date : 2015/12/02 Page: 2 of 6 </div> <div> SUMITOMO ELECTRIC FINE POLYMER, INC.  1-950 ASASHIRONISHI KUMATORI-CHO SENNAN-GUN, OSAKA, JAPAN </div>				
<b>Test Result(s)</b> PART NAME No.1 : WHITE SHEET				
Test Item(s)	Unit	Method	MDL	Result No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321-5: 2013 and performed by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321-5: 2013 and performed by ICP-AES.	2	n.d.
Mercury (Hg)	mg/kg	With reference to IEC 62321-4: 2013 and performed by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI)	mg/kg	With reference to IEC 62321: 2008 and performed by UV-VIS.	2	n.d.
<b>Sum of PBBs</b>	mg/kg		-	n.d.
Monobromobiphenyl	mg/kg		5	n.d.
Dibromobiphenyl	mg/kg		5	n.d.
Tribromobiphenyl	mg/kg		5	n.d.
Tetrabromobiphenyl	mg/kg		5	n.d.
Pentabromobiphenyl	mg/kg		5	n.d.
Hexabromobiphenyl	mg/kg		5	n.d.
Heptabromobiphenyl	mg/kg		5	n.d.
Octabromobiphenyl	mg/kg		5	n.d.
Nonabromobiphenyl	mg/kg		5	n.d.
Decabromobiphenyl	mg/kg		5	n.d.
<b>Sum of PBDEs</b>	mg/kg		-	n.d.
Monobromodiphenyl ether	mg/kg	With reference to IEC 62321-6: 2015 and performed by GC/MS.	5	n.d.
Dibromodiphenyl ether	mg/kg		5	n.d.
Tribromodiphenyl ether	mg/kg		5	n.d.
Tetrabromodiphenyl ether	mg/kg		5	n.d.
Pentabromodiphenyl ether	mg/kg		5	n.d.
Hexabromodiphenyl ether	mg/kg		5	n.d.
Heptabromodiphenyl ether	mg/kg		5	n.d.
Octabromodiphenyl ether	mg/kg		5	n.d.
Nonabromodiphenyl ether	mg/kg		5	n.d.
Decabromodiphenyl ether	mg/kg		5	n.d.



## Clean & Safety Materials



# SAFETY PLASTIC

## Safety Plastic Materials

### Heavy Metals

Unit : mg/kg

Test Items	Results	MDL	Test Method
Pb	ND	5	ICP/OES, IEC 62321-5:2013
Cd	ND	2	
Cr	ND	2	
Hg	ND	1	Direct Mercury Analyzer, IEC 62321-4:2013

Component - Plastics									
E67171									
LG CHEMICAL LTD									
20 YODONG-DO, YONGDONGPO-GU, SEOUL 150-721 KR									
HI121(R)									
Acrylonitrile Butadiene Styrene (ABS), finished as pellets									
	Min Thick	Flame			RTI	RTI	RTI		
Color	(mm)	Class	HAZ	HAZ	ENc	Reg	Reg	Reg	Reg
ALL	1.5	HB	3	0	95	95	95	95	95
	3.0	HB	3	1	100	100	100	100	100
Comparative Tracking Index (CTI): 0									
High-Voltage Arc Tracking Rate (HVT): 2									
Dielectric Strength (kV/mm): 27									
(1) - May be followed by optional suffix letter from A-Z incl., except F, and except Grades AF387G, HT740B, XP401B, LP112A, AF387G, AF387S.									
ABS121L 94 small scale test data does not pertain to building materials, furnishings and related contents. ABS121L 94 small scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.									
Report Date: 1078-10-11									
Last Revised: 2006-12-15									
Underwriters Laboratories Inc.									

