



Floating PV  
Just Float 2&3

Jutracker China  
2022.11

# Content

## Production Overview:

- Just Float2 : Lake, Water Pond
- Just Float3 : Inner & Half Open Sea
- Production Capacity
- Transportation and Installation Introduction

## Case Study

## About Us:

- Company Briefing
- Product Overview
- Global Presence
- Product Testing and Certificate

# Just Float 2

Supporting Float



Walking Float



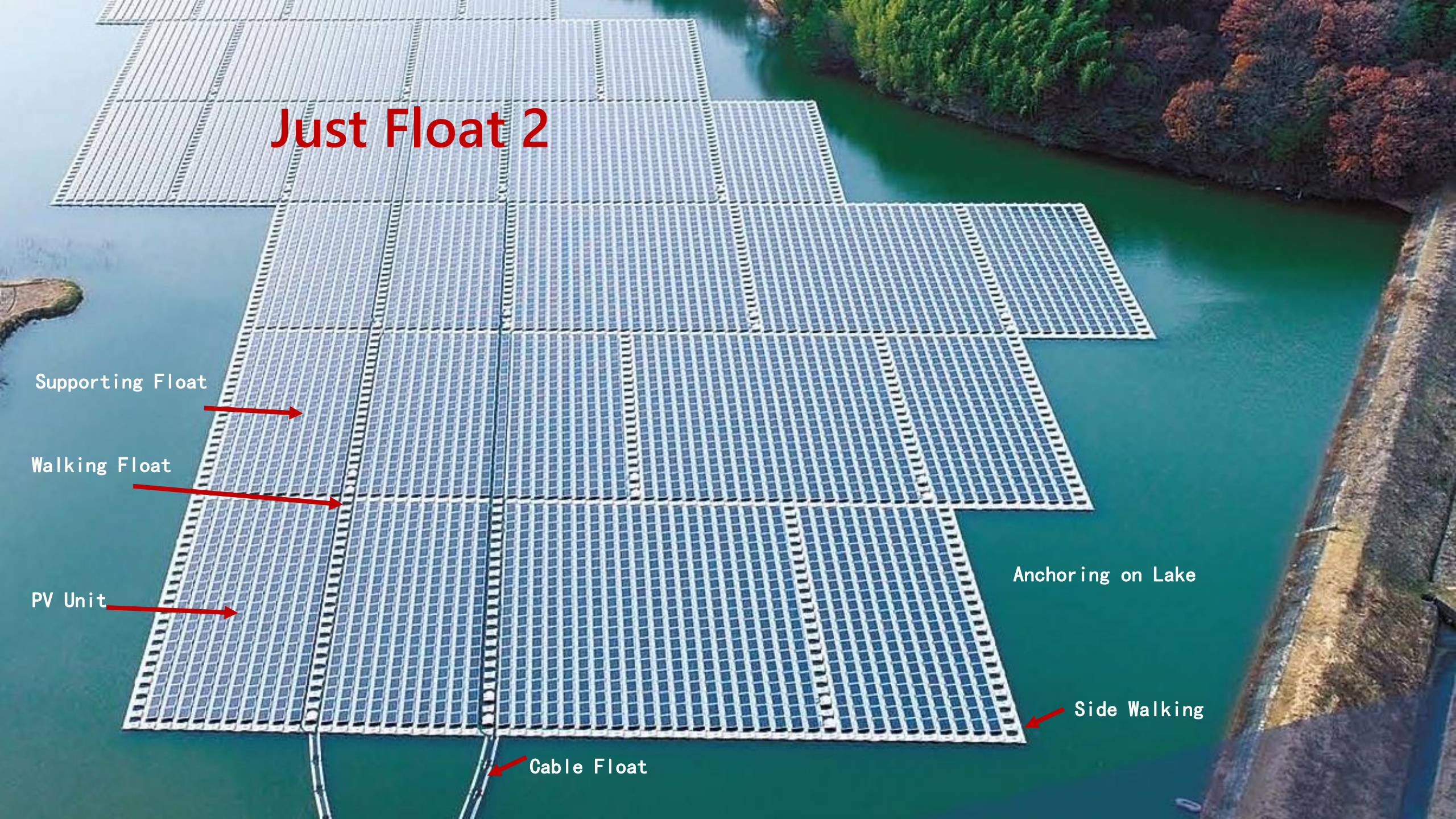
PV Unit



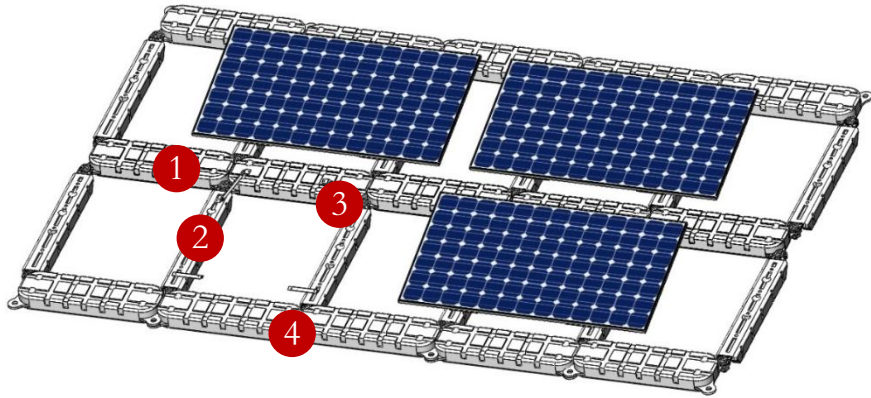
Anchoring on Lake

Side Walking

Cable Float



# Just Float 2



- 1, Walking Float
- 2, Supporting Float
- 3, Screw & Bolt
- 4, Anchoring Position

## RELIABLE, STRAIGHTFORWARD, ECO-FRIENDLY LAB-TESTED AND FIELD-PROVEN



- UV-stabilized HDPE material
- Drinking water compliant; compatible with fresh and natural waters
- Resilience to extreme wind conditions: up to **210 km/h (130 mph)**
- Designed and supplied with site-specific anchoring systems: **bottom, bank** or **hybrid**
- > Max. tested depth: **80 meters**



- Modular system and compatible with most PV equipment
- Swift and simple assembly
- Safe and easy O&M

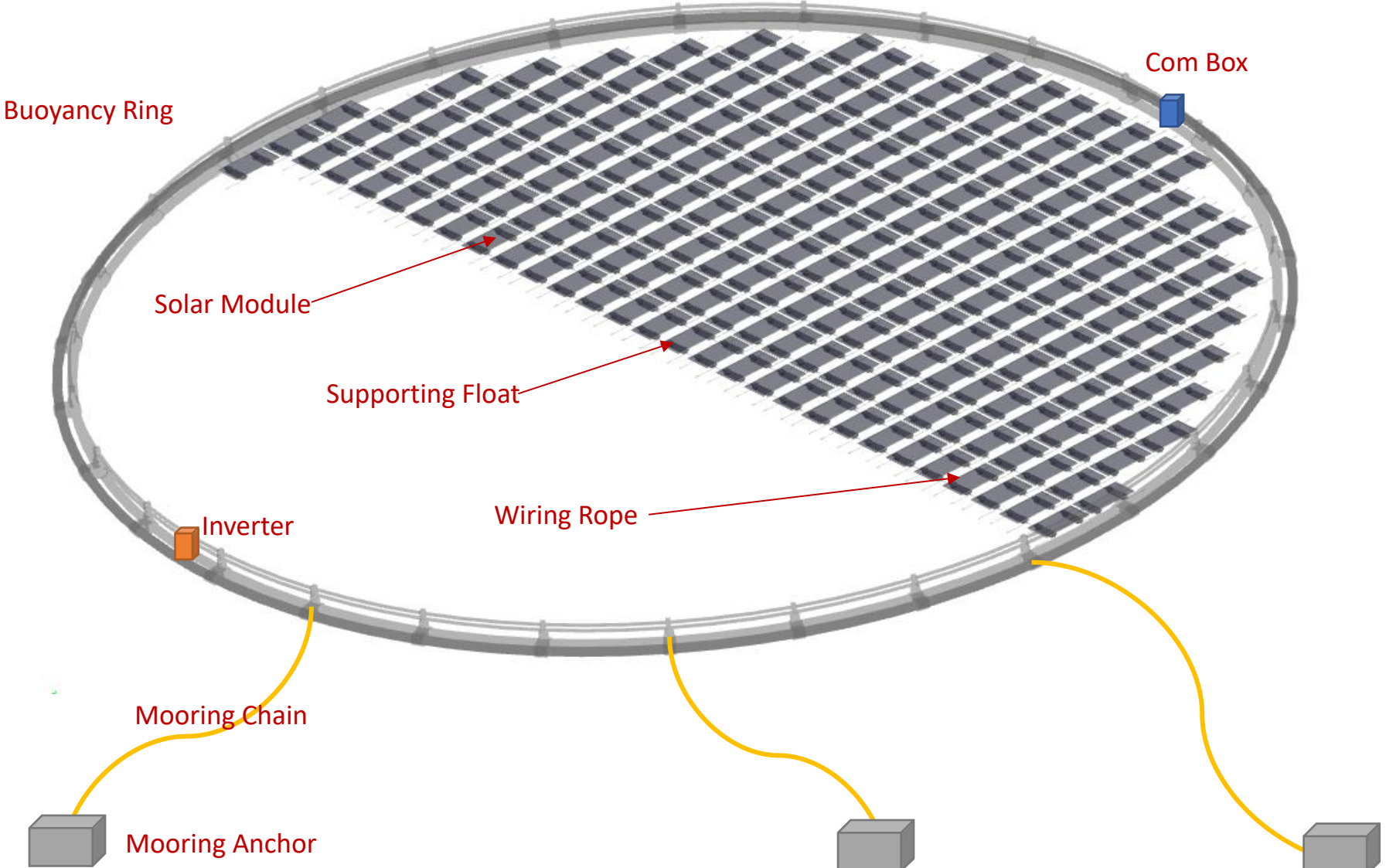


- Reduces evaporation and preserves existing ecosystems
- Easy decommissioning, recyclable materials

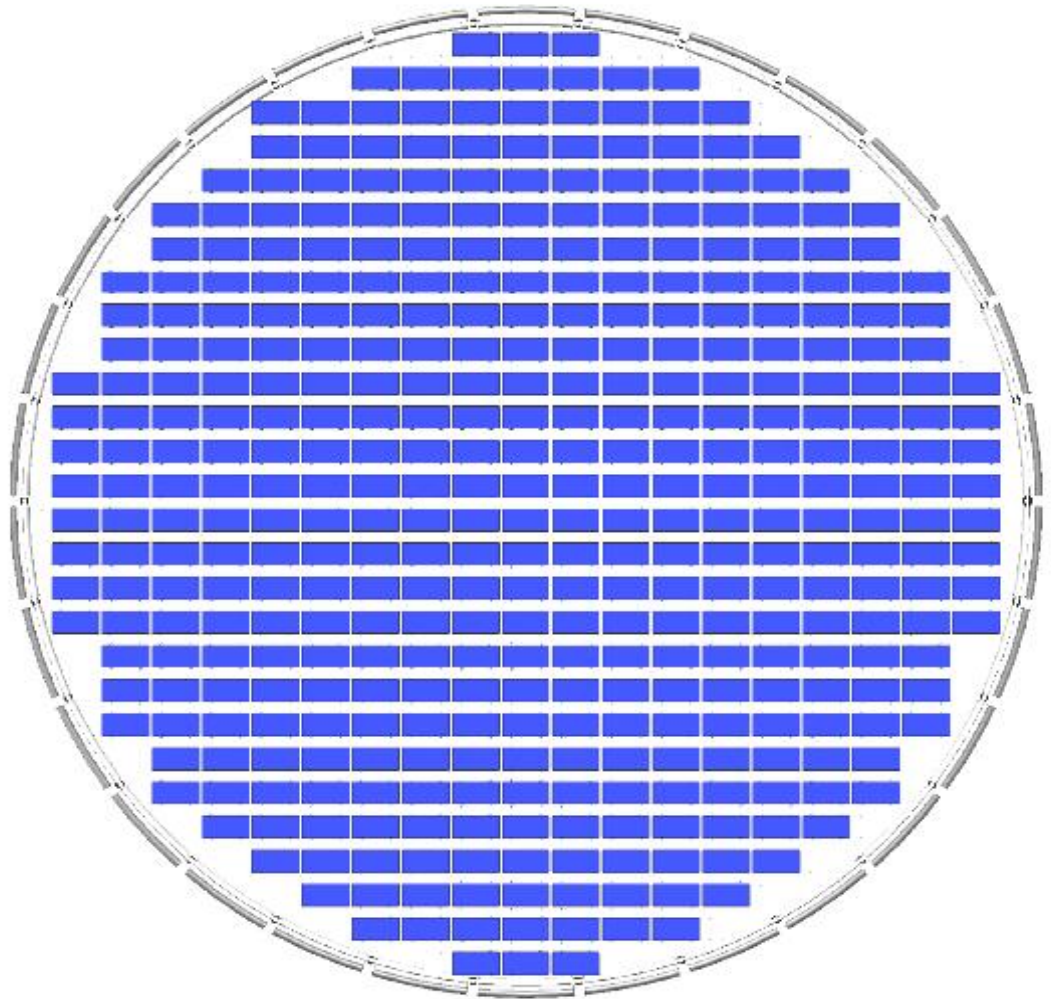


- Enhanced power production due to water's natural cooling effect on panels & cables

# Just Float 3

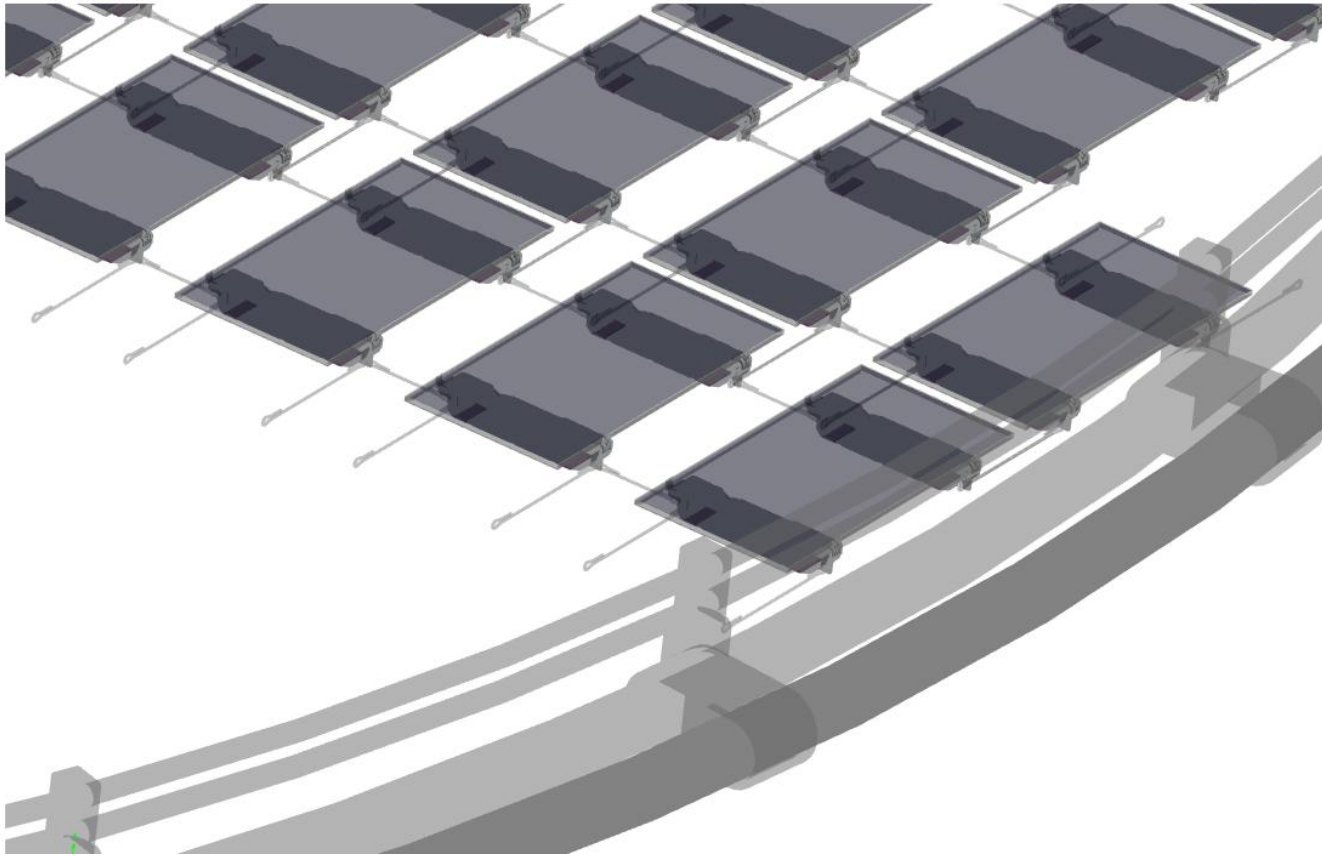


# Just Float 3 - parameters



Product Type	Just-Float3-D30	Just-Float3-D40	Just-Float3-D50
<i>Parameters</i>			
Max Wind Speed m/s	28	36	46
Diameter m	30	40	50
Surface Area m <sup>2</sup>	708	1260	1960
Module Size Wp	550	550	550
Module Number	200	360	570
Product Power KWp	110	200	315
System Voltage V	1500	1500	1500
Inverter Size KWac	80	160	250

# Just Float 3 - Components



<i>System Components</i>	
<i>Buoyancy Ring</i>	<i>HDPE+UV</i>
<i>Supporting Float</i>	<i>HDPE+UV</i>
<i>Wiring Rope</i>	<i>Stainless Steel</i>
<i>Mooring Chain</i>	<i>Stainless Steel</i>
<i>Mooring Anchor</i>	<i>Stainless Steel</i>
<i>Solar Module</i>	<i>Mono-PERC</i>
<i>DC Cable</i>	<i>PV-1F 4mm2</i>
<i>Inverter Type</i>	<i>String Inverter</i>
<i>Com Box</i>	<i>Data + Video</i>
<i>Interface</i>	
<i>AC output</i>	<i>800Vac</i>
<i>Com Output</i>	<i>Wireless 4G</i>

# Transportation



Use flexible mode of transportation to minimize logistics costs

**1 MWp =** Approximately 10 to 12 containers  
(depending on the configuration select)





# Installation



Site Preparation



Fix PV Module



Floating Platform  
Assembly



Platform in water

*Work Efficiency*

**1 kWp/ Labor Time**

# Buoyancy Ring on Beach





# Buoyancy Ring on Port

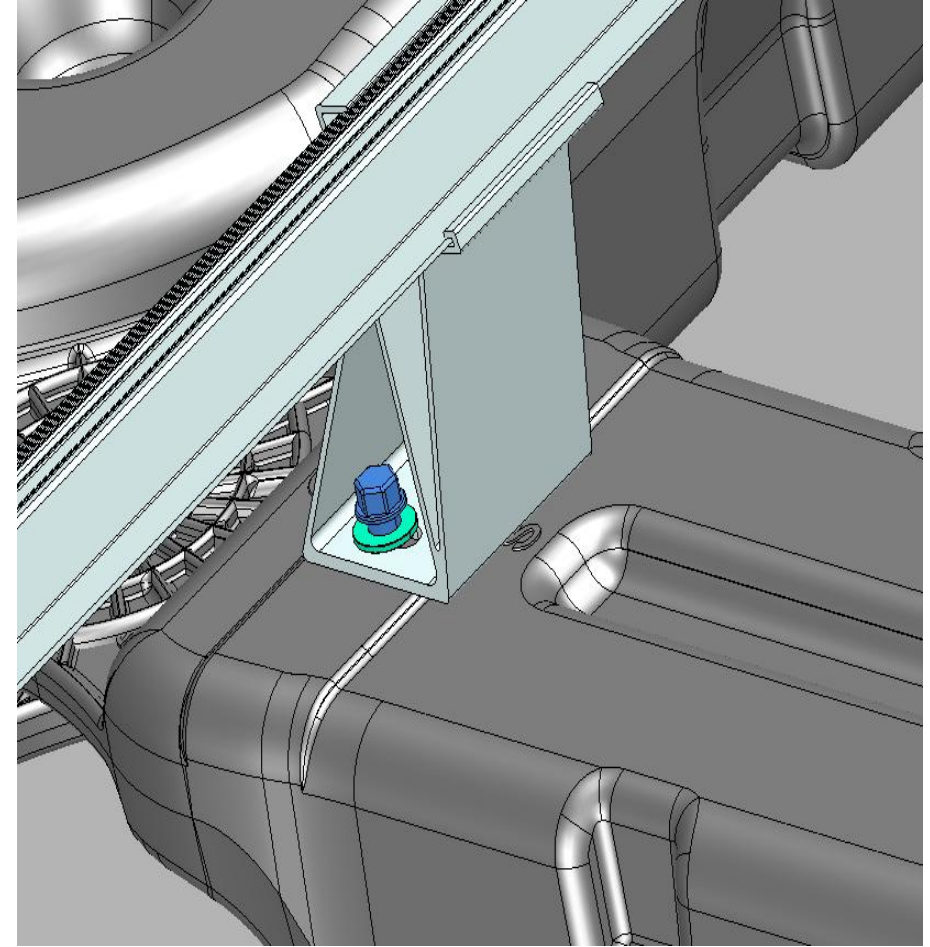
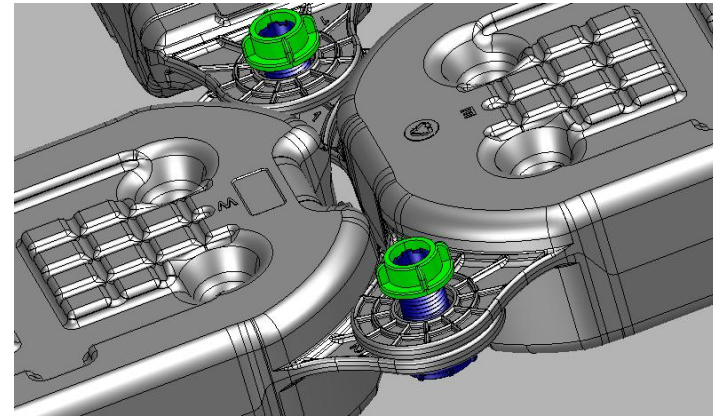
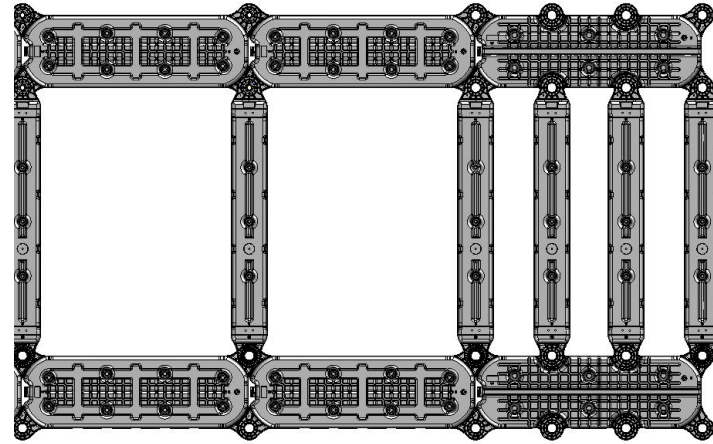




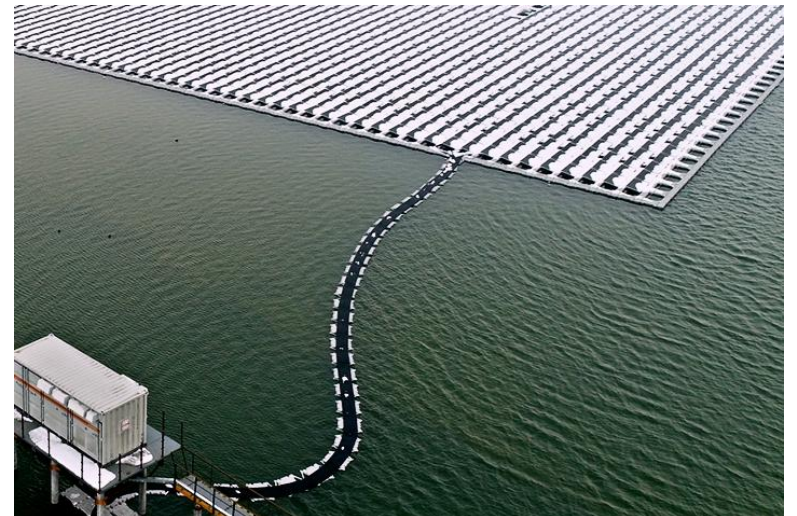
vivo X80 · ZEISS

2022/11/08 13:41

# Float Connection

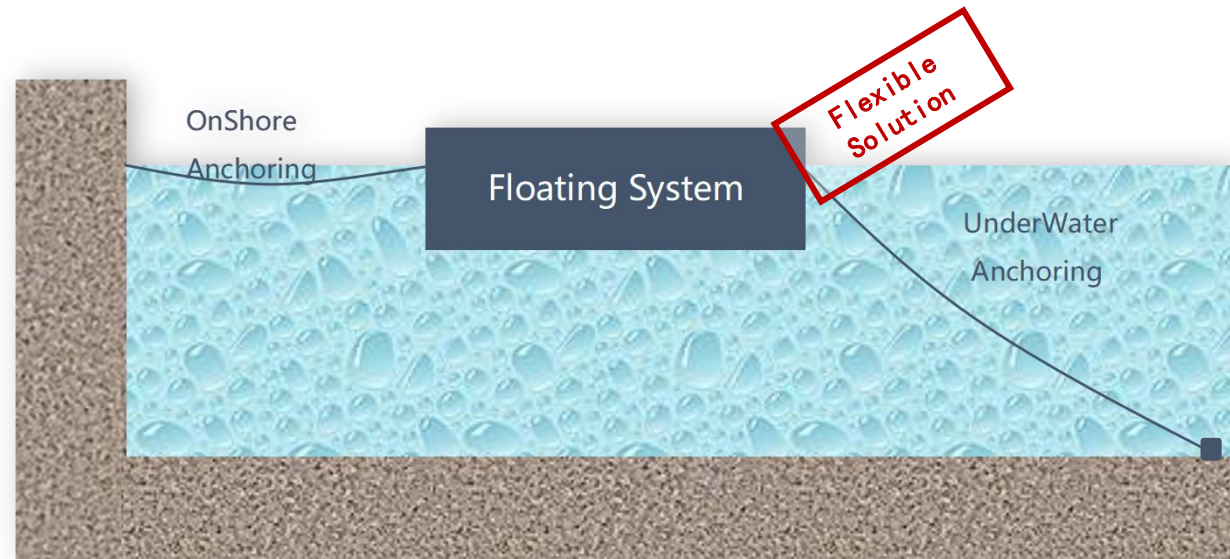
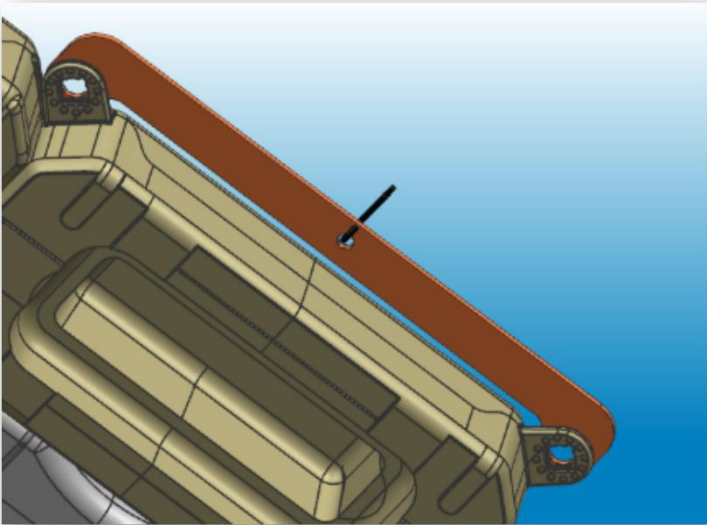


# Cabling



# Anchoring

- Floating power stations require anchoring systems to maintain the location of floating islands and ensure that floating power stations are resistant to environmental factors (e.g. wind, waves, currents, etc.).
- From design to installation, we oversee the entire process of anchoring the system, providing you with the best comprehensive solution for peace of mind.
- Customised design for the site , material supply , installation work





# Anchoring



*Withstand Harsh  
Environments*



*Best Economic  
Benefits*



*Meet each site  
and local  
regulations*

- ## Anchoring Type

JuFloater installations based on different anchor types:

Underwater anchoring, embankment anchoring, or mixed anchoring

Spiral pile anchoring, pointed anchoring, or heavy anchoring



*Success record*

*Over 2,500 anchors*

*Maximum depth 80*

*meters Maximum*

*water level varies by*

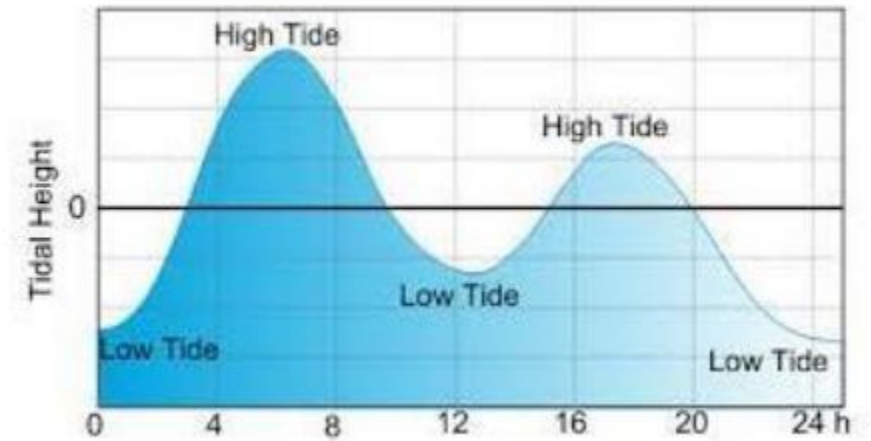
*30 meters*

# Case Study

## *Global Installed Capacity*



# ChenYa, TaiWan Case Study



Low tide occurs every 12h24min, so almost 2 full cycles per day - Every day the reference time is delayed for 50 min  
3 zones will be alternatively fully dry and fully under water depending on tide.

Ground is not perfectly flat, north part has higher ground level and wet hours will be shorter in our quarter than in the south half.

3.5 hours of water in the south half, and 3 hours of water in the north half. The extreme north part will probably only be totally covered with water for 2h per tide.

# ChenYa, TaiWan Case Study

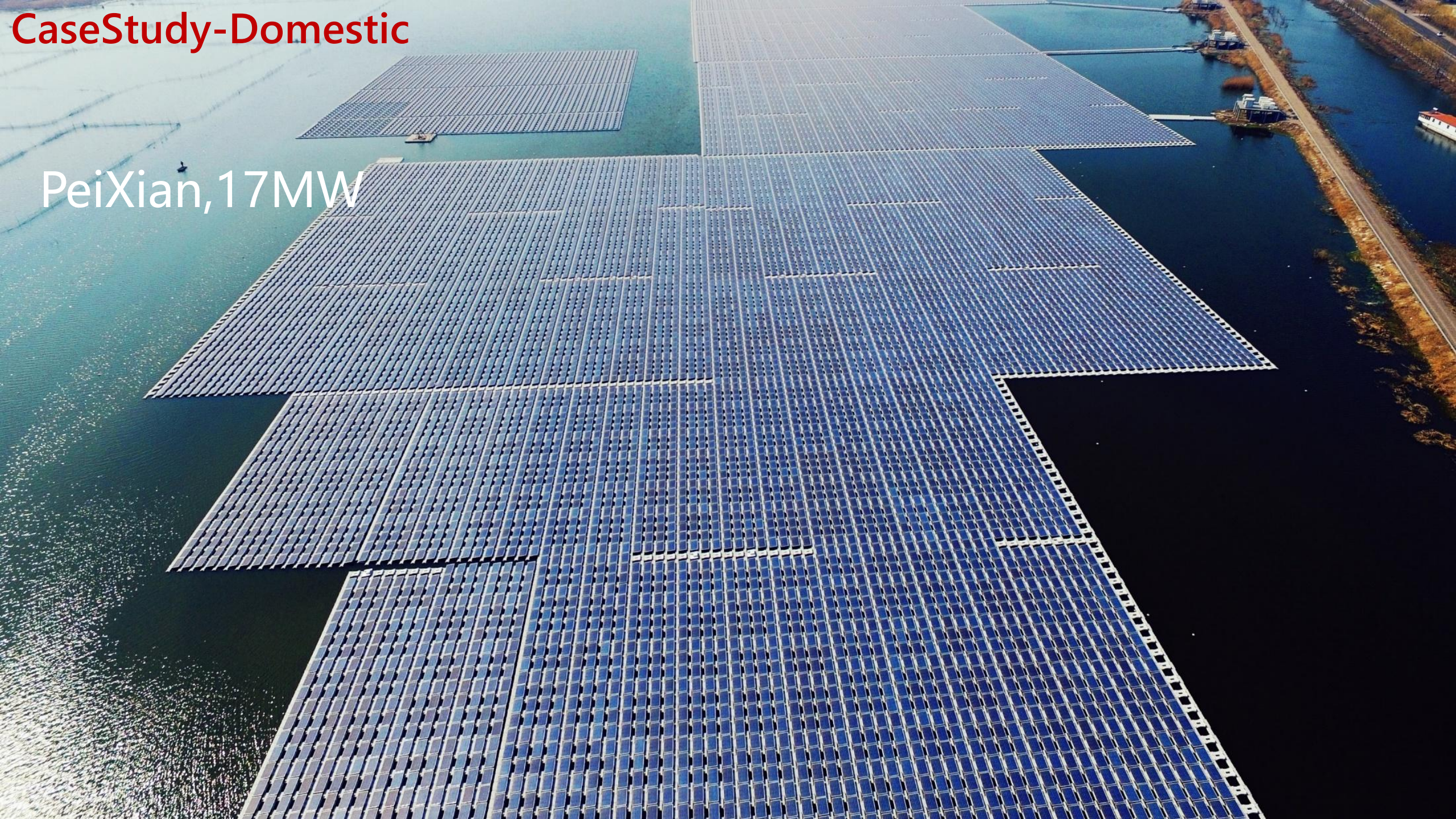


Ground is creamy,  
composed of really fine  
particles (sand and clay)  
mixed with water



# CaseStudy-Domestic

PeiXian, 17MW



# CaseStudy-Domestic

HuaiBei, AnHui 60MW



# CaseStudy-Israel



# CaseStudy-Overseas-UK





# CaseStudy-Japan



# Case Study-Yantai, ShangDong



- Founded in 2015, Sales&Marketing Center in ShangHai, R&D center in Suzhou
- Floating R&D and technical experience over 10 Years, over 1GW shipment
- Over 12 years experience, Solar, mechanical, electrical, engineering and design, project development
- IEC Member for Solar PV Standard Standard
- Technology Incubator Partner Of Shanghai Jiao Tong University



**10 years+**

Experience



**IEC Member**

Solar Tracker Standard



**1GW+**

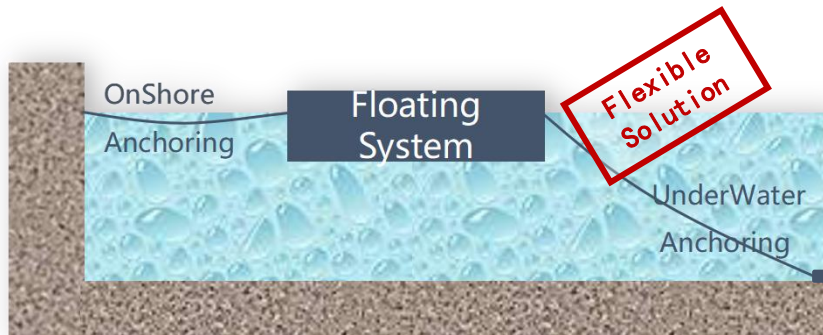
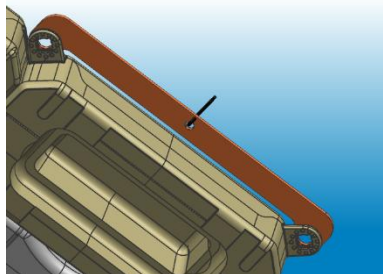
Shipment

# Ju-Float Overview

Floating solar system is power plant built on water face like pond, lake, reservoir etc., in order to solve the large land occupation problem of traditional ground solar system. Floating solar systems mainly consist of PV modules, combiner boxes, convertors, transformers, cables and floating bodies.



- No ground occupation
- On water face, save cost of land and trench work
- Water cooling effect on modules, more power
- Reduce dust/soil pollution
- Modular design, easy install and maintain



Save Precious Land

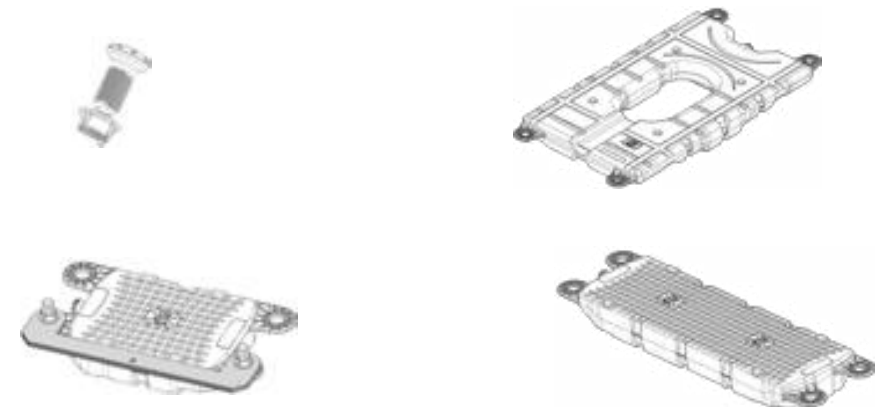
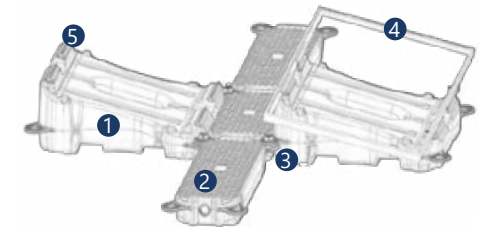


100% Recycling

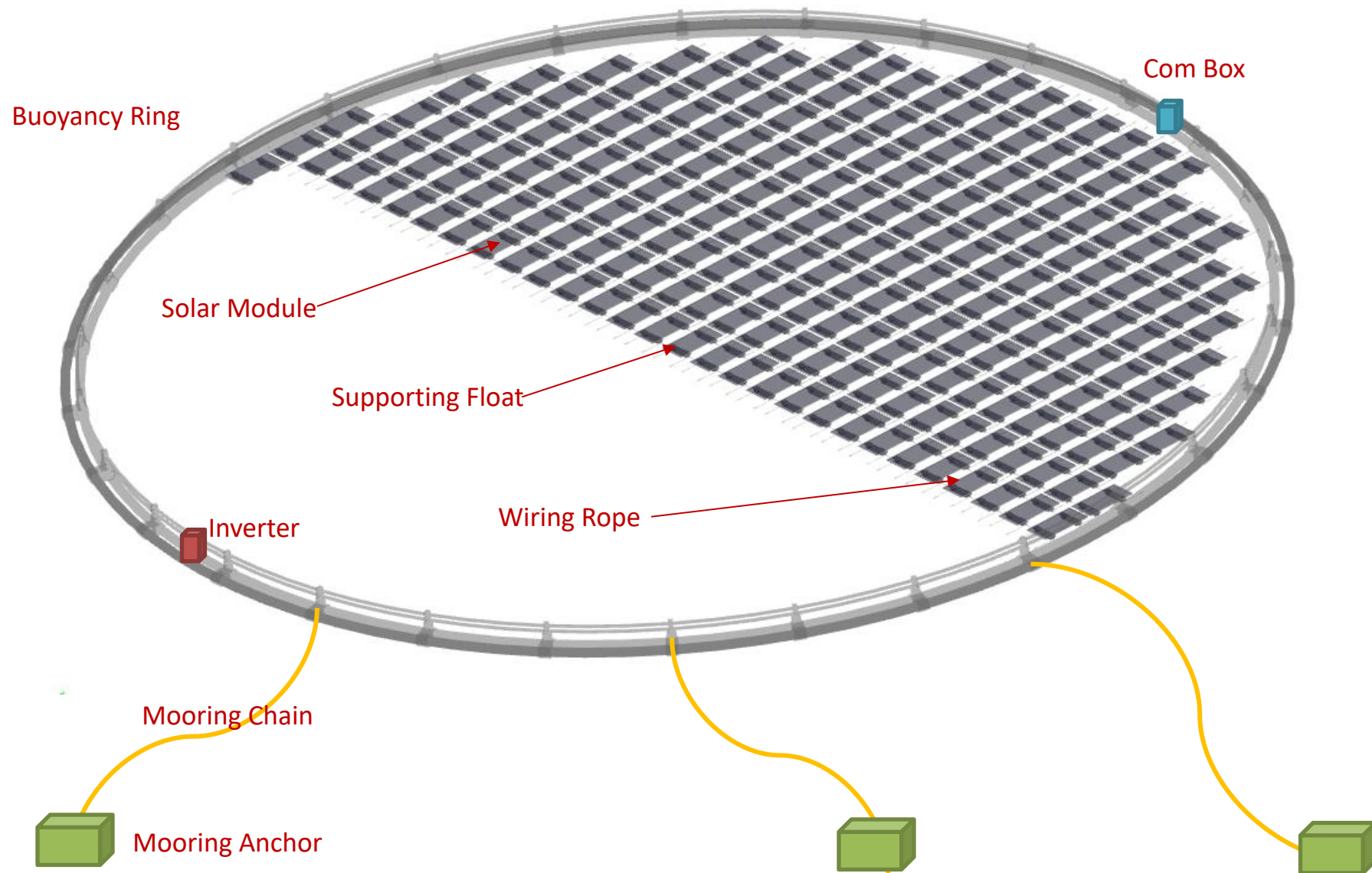


Constrain Water Evaporation

- 1 Main float
- 2 Secondary float
- 3 Connection Pin
- 4 PV Module
- 5 Fix System



# Ju-Float Overview




- 1, JustFloat-3
- 2, Parameters
- 3, System Components
- 4, Installation
- 5, Production & Delivery
- 6, Demo

# Global Presence



 Sales&Marketing Center:ShangHai,China  
R&D technical Center:SuZhou,China

 **Production Base in China**  
KunShan, JiangSu

 **Overseas Service Center**  
Malaysia  
India  
South Africa  
KSA  
Brazil  
Israel

# Testing&Certificate

**科标检测**  
Scid Testing

## 测试报告

### Test Report

报告编号 (No.): SCT-A20160311-006N 第 2 页 共 20 页

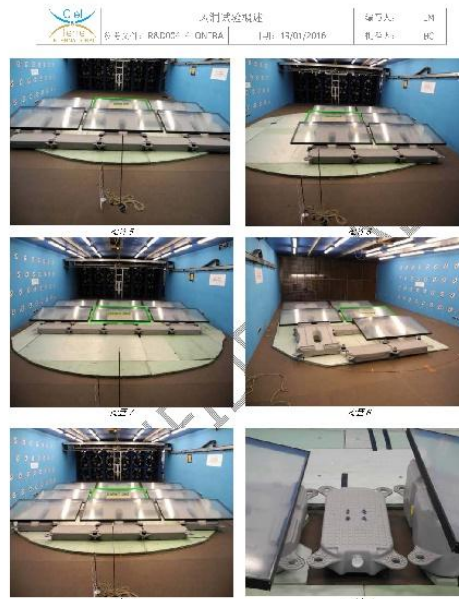
测试信息/Test Information	
测试类别/Test Type	委托测试
测试日期/Test Period	2016-03-14 — 2016-03-24
测试项目/Test Item	表面盐雾 (110°C, 2h)、表面盐雾 (-40°C, 2h)、耳环盐雾力、浮游浮力、盐外老化 (240h)、弯曲强度、冲击强度、REACH
测试设备/Test Equipment	老化试验箱, 恒湿恒湿试验箱, 微机控制电液伺服试验机, 紫外老化试验箱, 摆锤式冲击试验机, 微机控制电液伺服试验机, UV-VIS, I-GMS, HPIC, GC-MS 等
测试标准/Test Standard	参照 GB/T 1048.1-2006, GB/T 1043.1-2008, GB/T 16423.3-2014, GB/T 9341-2008, 法规(CEC) No.1907/2006 (REACH), 约定方法对产品进行测试
测试结果/Test Conclusion	测试依据第 3-18 页。  
备注/Remark	本公司测试服务对客户收费, 并不包括DUT复原特性。

批准: 宋文涛  
审核: 邢石磊  
编辑: [Signature]

科标检测 (青岛) 测试中心  
Scid Testing (Qingdao) Detection Center

地址: 青岛 市南 区 香港中路 101 号 10 楼 1001 室  
电话: 0532-8999-9935 邮箱: scid@scid.com.cn  
青岛 市南 区 香港中路 101 号 10 楼 1001 室  
电话: 0532-8999-9935 网址: www.scid.com.cn

Chemical analysis and testing of floating materials



ONERA International

Aeronautical and Aerospace Laboratory (ONERA) wind tunnel experiments

**CONFIDENTIAL**

### BRITISH STANDARD TESTING

#### NON-METALLIC MATERIALS FOR USE WITH DRINKING WATER (BS 6920: 2014)

### TEST REPORT

Product: Hydrello™ Main and Small Float  
Report Reference: M 105952  
Page 1 of 6 Pages

Ciel et Terre International  
3, rue du Docteur Huard  
59660 Hellennes  
FRANCE

Report Date: 25<sup>th</sup> June 2015

**Executive Summary** - when assessed by the methods given in BS 6920:2014 the samples of this product are deemed suitable for use in contact with cold water intended for human consumption.

**NOTES:**  
1. The results given in this report relate only to the items tested, and not necessarily to the full lot from which they were taken.  
2. This test work was undertaken in the UKAS accredited (Special Issue) laboratory of Thomas Water Utilities Ltd, UKAS registration number 0677, unless otherwise stated.  
3. Copyright in any intellectual property rights are outside the scope of UKAS accreditation.  
4. This test report shall not be reproduced, except in full, without our prior written approval.

Water Quality Impact Assessment Report - British Standard Laboratory

## ポリエチレンの劣化分析/PE damage investigation

**KYOCERA**

表面層 (A点)、表面層から100um離れた場所 (B点)、B点から100um離れた部分 (C点) で赤外スペクトルを測定  
⇒表面層 (A点) では1716cm<sup>-1</sup>にピークが確認されるが、C点では確認されていない (表面層100um程度劣化が起きている)  
Fig.6より表面層から60μm程度が劣化していると思われる。(1920um~1860um)  
Investigated UV damage on Surface layer (A), 100um from A (B), 100um from B (C).  
⇒Confirmed large peak of UV damage on 1716cm<sup>-1</sup> point of (A). Little peak on (B). No peak on (C). According to Fig.6, around 60 μm of UV damage can be confirmed from "My-port" investigation.




Fig.5 FT-IR装置に付随しているCCDカメラ像

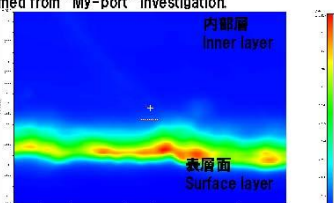


Fig.6 1460cm<sup>-1</sup>と1716cm<sup>-1</sup>のピーク強度比のイメージ像

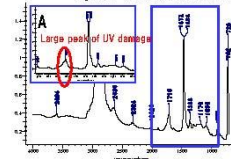


Fig.7 A点での赤外スペクトル

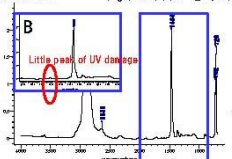


Fig.8 B点での赤外スペクトル

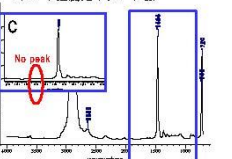
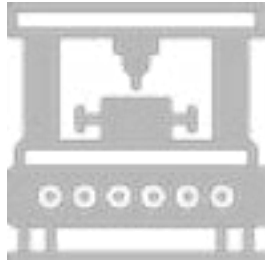


Fig.9 C点での赤外スペクトル

Japan Kyocera UV Damage resistance test

# Production Capacity



*In the construction process of floating PV power projects on the surface of the water, from manufacturing to commissioning, each link to implement strict quality control, to ensure high quality*

*The floats are manufactured using a blow molding process and advance in shipping and installation inventory management and quality assessment, the entire process can be traced*



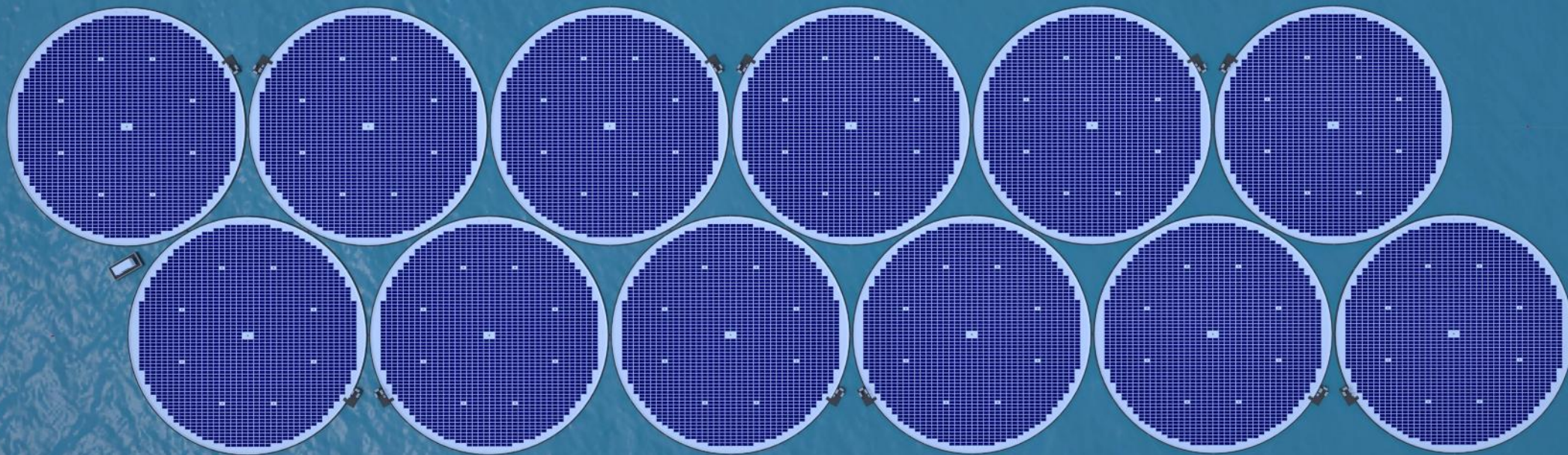
**5** Production Lines  
In 3 Countries

**3** Days  
Can Produce 2MWp

**1,000,000**  
2021 Annual  
Capacity



J racker  
聚之义



Thanks For Watching