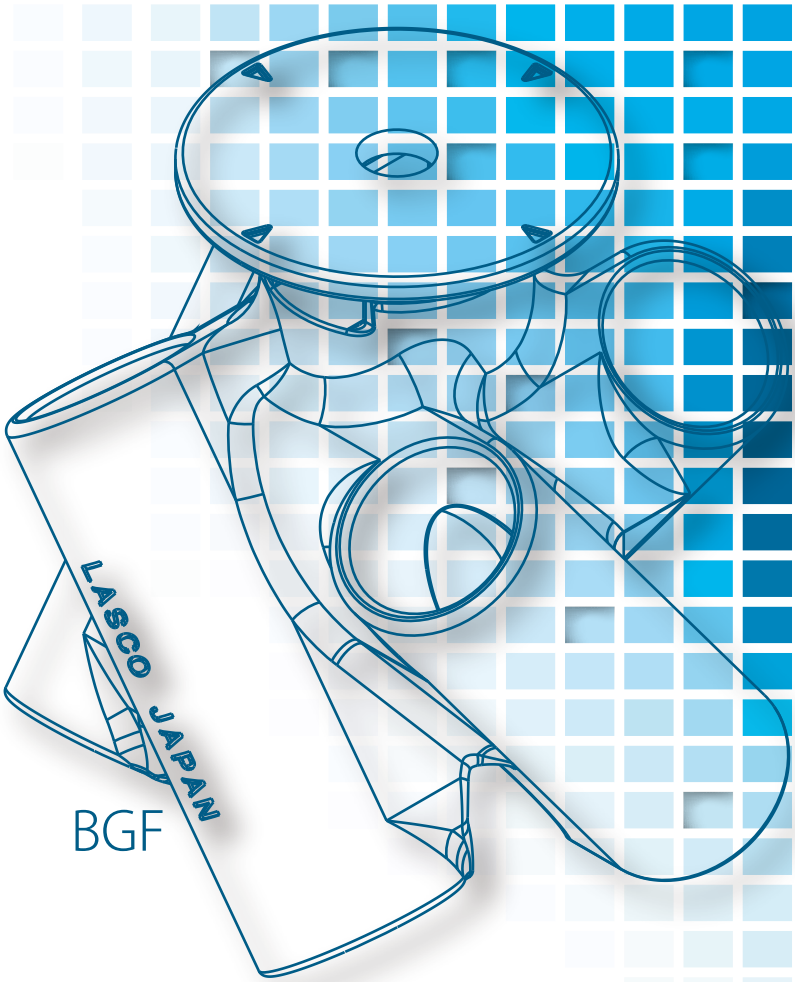
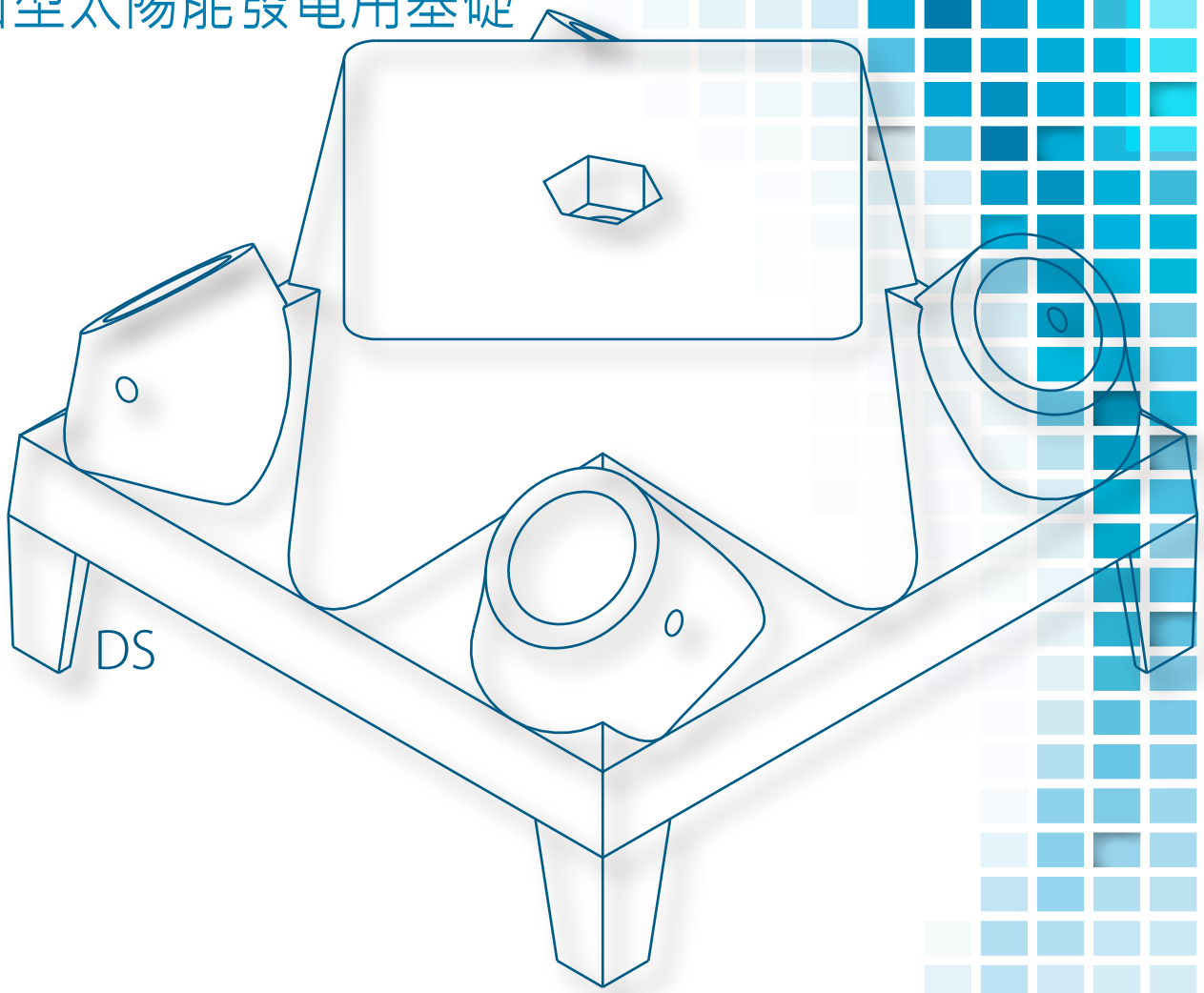


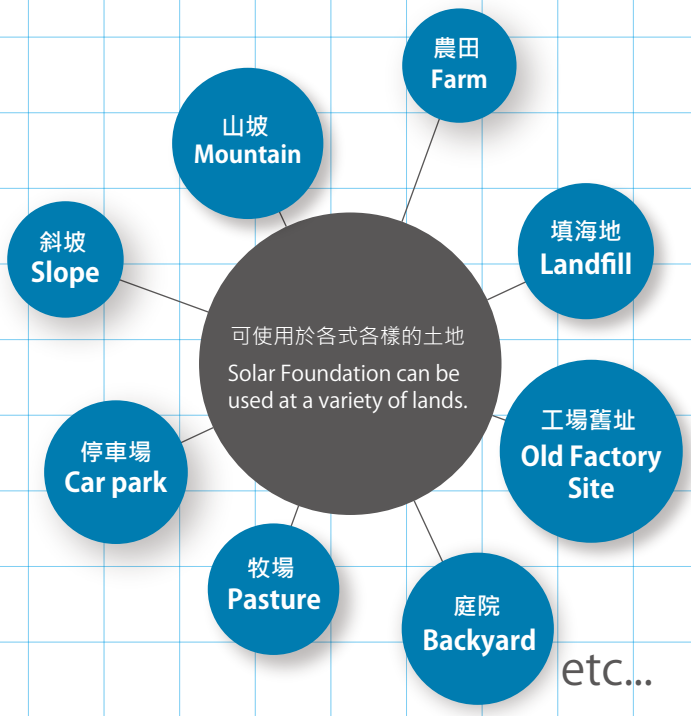
BGF

SOLAR FOUNDATION

地面型太陽能發電用基礎



DS



Solar Foundation為固定的太陽能板塊與 4 根鋼管所組成。鋼管的長度會因地基的狀況與支架的反作用力不同而有所調整。以斜角設置在土中的鋼管就像樹木的根一般。因此比一般直直打入地面的地錨，更能發揮較高的強度。

Solar Foundation consists of one fixing block and four steel pipes. The length of the steel pipes depend on the ground conditions and the reaction force of the mounting system. The steel pipes, which are diagonally driven into the ground, work like roots of a tree. Therefore, Solar Foundation is much stronger than a vertically installed anchor.

SOLAR

防颱能力佳
面對颱風而有著驚人的承受度

☐ **Strong against typhoons:**

It is extraordinally strong against typhoons.

設置地點不受限
鬆軟地基、斜坡、沙地等等

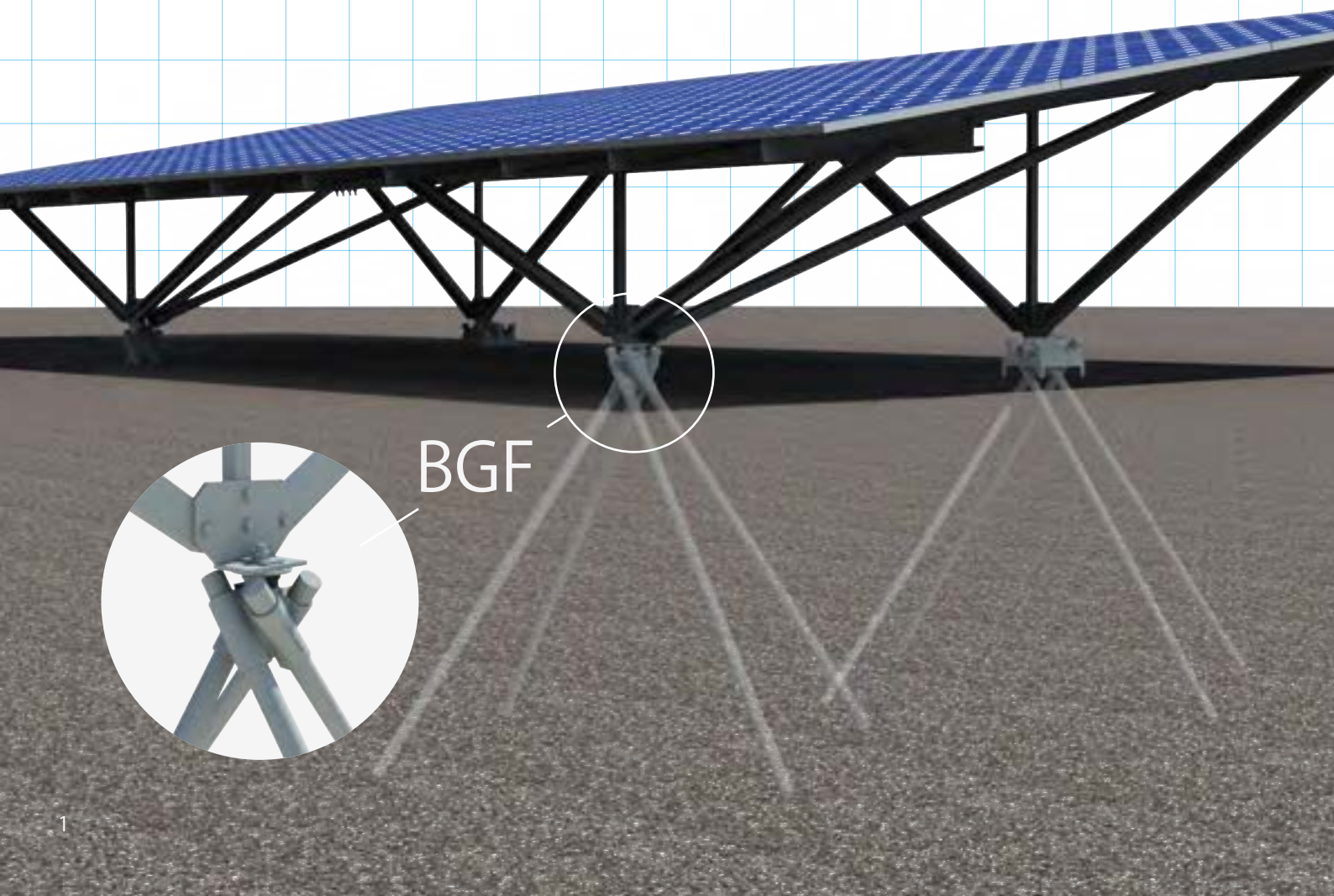
☐ **Applicable to various gorunds**

Soft grounds, steep slopes, and sands are all acceptable.

工期短
不需地基改良、開挖、回填

☐ **Fast installation**

No requirement of soil improvement, excavation and backfilling.



Solar Foundation可適用於各式各樣的支架。

Solar Foundation can flexibly respond to various mounting systems.

也有製作可對應其它廠商支架的連接零件。

We can offer custom-made fittings for other company' s mounitings.

可以根據太陽能板的角度，支架的高度，擺放位置的組合需求來設計支架。

We can design a mounting system in accordance with your requirements such as panel angle, frame height, and array combination.

太陽能發電用支架
Mounting system for photovoltaic application

FOUNDATION

* 我司的工程團隊將會根據JIS標準來設計支架與計算結構。因此需了解設計風速，地基狀況等資訊。

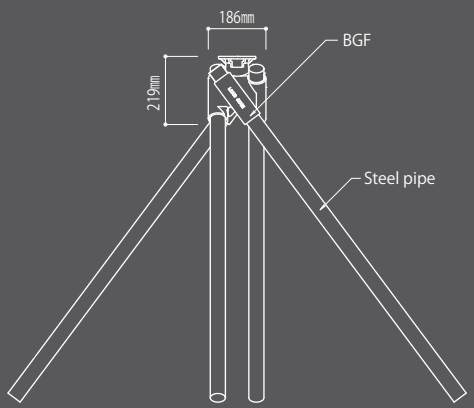
Our engineer team would properly design and calculate our mountings complying with JIS. We need the information about the design wind speed and the soil condition.

** 太陽能發電設置地的地基工程通常會花費較多成本與時間。但Solar Foundation 不需地基工程即可設置。

The site preparation for a photovoltaic power plant is usually time and cost consuming. But Solar Foundation could be installed without any preparation works.

*** 使用手持的電動工具即可進行Solar Foundation 的設置。

Solar Foundation can be installed with a handheld power tool.



BGF (Base Ground Foundation)

重量：8.5kg
材質：BGF 零件 ... 鑄鋼
鋼管 ... STK400（熱浸鍍鋅）

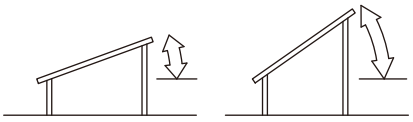
Weight : 8.5kg
Material : BGF ⋯ Cast steel (Hot dip galvanizing)
Steel pipe ⋯ STK400 (Hot dip galvanizing)

* BGF 施工法擁有自一般財團法人日本建築綜合試驗所（GBRC）所取得的「建築技術性能證明」。
The BGF construction method has received the " Certificate for Building Technology Performance" from General Building Research Corporation of Japan (GBRC).

** 鋼管的長度會根據負重與地基條件而有所調整。
The pipe length is determined by the load and the soil conditions.

模組的設置形式　Installation forms of modules

1. 模組的安裝角度　Mounting angle of solar modules

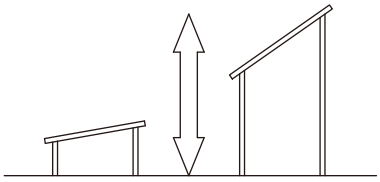


模組的設置形式
Any angle is available to produce.

安裝角度5°
Mounting angle: 5°

安裝角度20°
Mounting angle: 20°

2. 支架的高度　Height of solar arrays

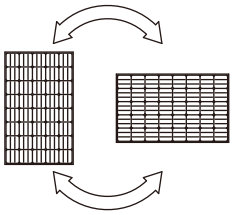


可自由設定
Any height is configurable.

距離地面較近的施工案例
Height near to the ground level

在柱子下方保留空間的施工案例
The case of using long posts to make a space

3. 橫放・直放　Placing solar modules vertically or horizontally

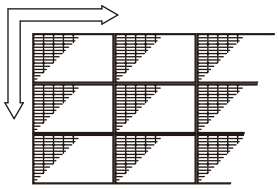


兩種都可製作
Both directions are available to produce.

橫放
Vertical pattern

直放
Horizontal pattern

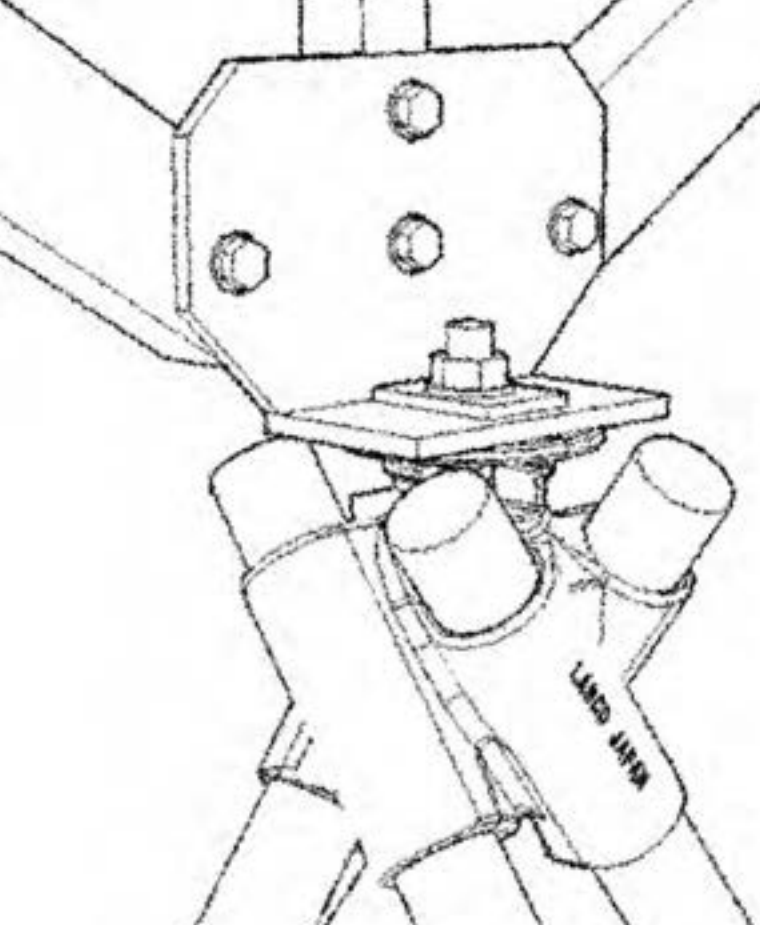
4. 行數・列數　Number of lines and rows



可自由設定
Any numbers are configurable.

行數5
5 rows pattern

行數10
10 rows pattern



工程實績
Construction results

CASE 1　斜坡
Slopes

CASE 2　丘陵地
Hiils

CASE 3　鬆軟地基
Soft Grounds

CASE 4　重型機械難以進入地點
Places where heavy equipment can't approach

CASE 5　大規模太陽能發電
Large Scale Projects

Project: Torikai-ura　Place: Hyogo prefect., Japan

傳統建設太陽能發電系統的施工法，會使用重型機械施工，以地錨與水泥來建設基礎工程。
但簡易基礎施工法的「Solar Foundation」不需使用重型機械。 此基礎施工法可對應各種各樣的地盤， 且可靠人力施工。 不論發電系統的大小， 均被使用在各式各樣的場所， 並都獲得良好的評價。
下一頁將介紹至今為止工程實績的一部分。

In order to construct solar power plants by conventional methods like using piles and concrete foundations, it is necessary to make grounds flat by using heavy equipment.
But “Solar Foundation” is one of the simplest method to make foundations. It has been highly evaluated because it can adapt to various grounds and it doesn’ t require any heavy equipment when installing.
It has been used in many places not only small places like a backyard or a car park but also large scale solar plants.

CASE 1 斜坡 Slopes

Project: Sanda-city

地點：兵庫縣，日本

Place: Hyogo prefect., Japan

Project: privately owned land

地點：兵庫縣，日本

Place: Hyogo prefect., Japan

Project: Ai-Ai Baseball park

地點：滋賀縣，日本

Place: Shiga prefect., Japan

Project: Slopes at a car park

地點 : 京都府，日本

Place: Kyoto prefect., Japan

Project: Tarumi-city

地點 : 兵庫縣，日本

Place: Hyogo prefect., Japan

Before installation

Project: Toyooka-city

地點 : 兵庫縣，日本

Place: Hyogo prefect., Japan

CASE 2　丘陵地　Hills

Project: Landfill

地點：苗栗縣，台灣

Place: Miaoli County, Taiwan

Project: Luzhu-district

地點：桃園市，台灣

Place: Taoyuan City, Taiwan

Project: Uji-city

地點：京都府，日本

Place: Kyoto prefect., Japan

Project: Akaiwa-city

地點：岡山縣，日本

Place: Okayama prefect., Japan

Project: Goshiki-town

地點：兵庫縣，日本

Place: Hyogo prefect., Japan

Project: Nanbu-town

地點：鳥取縣，日本

Place: Tottori prefect., Japan

Mounting foundations

CASE 3 鬆軟地基 Soft Grounds

Project: Shimonoseki-city

地點：山口縣，日本

Place: Yamaguchi prefect., Japan

Driving steel pipes

Project: Yamatokoriyama-city

地點：奈良縣，日本

Place: Nara prefect., Japan

Project: Jincheng-township

地點：金門縣，台灣

Place: Kinmen County, Taiwan

CASE 4 重型機械難以進入地點 Places where heavy equipment can't approach

Project: Kume-country

地點：岡山縣，日本

Place: Okayama prefect., Japan

Project: Jhihben-township

地點：台東縣，台灣

Place: Taitung County, Taiwan

Project: Ohno

地點：兵庫縣，日本

Place: Hyogo prefect., Japan

CASE 5 大規模太陽能發電 Large Scale Projects

Project: Akune-city

地點：鹿兒島縣，日本

Place: Kagoshima prefect., Japan

Project: Takarazuka-city

地點：兵庫縣，日本

Place: Hyogo prefect., Japan

Project: Farmland

地點：台南市，台灣

Place: Tainan City, Taiwan

Project: Koumi-town

地點：長野縣，日本

Place: Nagano prefect., Japan

Project: Nasu-city

地點：栃木縣，日本

Place: Tochigi prefect., Japan

Project: Narita-city

地點：千葉縣，日本

Place: Chiba prefect., Japan

Project: Noda, Demizu-city

地點：鹿兒島縣，日本

Place: Kagoshima prefect., Japan

Project: Satsumasendai-city

地點：鹿兒島縣，日本

Place: Kagoshima prefect., Japan

INSTALLATION PROCESS
工程順序

01 搬入建材
Carrying in Materials

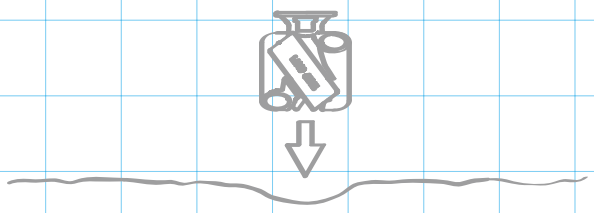
02 測量基礎位置
Surveying

04 釘入鋼管
Driving Steel Pipes

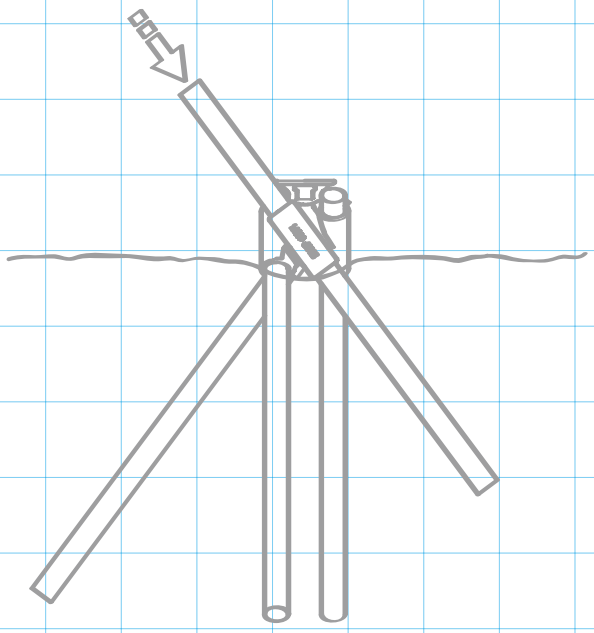
05 基礎設置完成
Completion of Foundations

07 支架組裝
Assembling Mountings

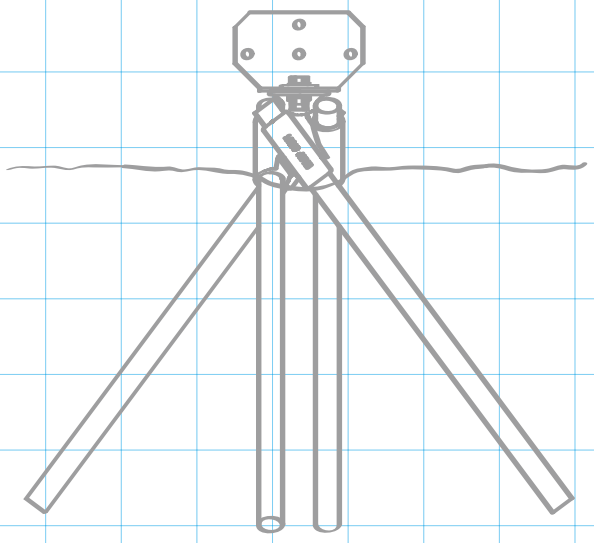
08 太陽能板安裝
Fixing Solar Panels



03 調整高度 Leveling



06 安裝柱腳零件 Installing Brackets



09 完成 Finish!

Slopes
斜坡

Hills
丘陵地

Soft Grounds
鬆軟地基

Without Heavy Equipment
重型機械難以進入地點

Large Scale Projects
大規模太陽能發電

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