

# PV MODULES...

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# ARE THEY ALL THE SAME?

# Are All PV Modules The Same?

- It is a perfectly valid question and you might be tempted to say “Yes”.
- But is it true?
- Let’s find out...

# Solar Cells

## Our EverExceed Modules

Use solar cells from top-quality companies: Qcells (German)

Advantages:

- High quality
- High reliability
- Stable performance

PV modules will actually work reliably for 25 years and more!

## Competitors

Use cheap solar cells from the Chinese domestic market

Disadvantages:

- Low quality
- Low reliability
- Highly unstable performance

PV modules will not work for 25 years!

# Soldering

## Our EverExceed Modules

Use fully-automatic soldering production line

Advantages:

- High consistency
- High quality
- High reliability

## Competitors

Use manual soldering

Disadvantages:

- Low consistency
- Low quality
- Low reliability

# Encapsulation

## Our EverExceed Modules

Use top-quality thick EVA (Ethylene Vinyl Acetate) sheets and TPT (Tedlar Polyester Tedlar) sheets from Japan

### Advantages:

- Water-proof and water vapour proof
- Acid-proof and alkaline-proof
- Anti ultraviolet radiation

PV modules can withstand bad weather for 25 years and more!

## Competitors

Use low quality thin EVA sheets and PET sheets

### Disadvantages:

- Not water-proof and water-vapour-proof
- Not acid-proof and alkaline-proof

PV modules cannot withstand wet weather, temperature changes and start degrading in 2-3 years

# Sealing Glue

## Our EverExceed Modules

Use high quality special glue meant exclusively for the PV industry

Advantages:

- High acid resistance
- High alkaline resistance
- High reliability

PV modules will last for 25 years and more!

## Competitors

Use general purpose glue

Disadvantages:

- Low acid resistance
- Low alkaline resistance
- Low reliability

PV modules will start degrading in 3-5 years and age easily

# Junction Box

## Our EverExceed Modules

Use very good quality TUV certified junction box with diode protection and IP65 rating

Advantages:

- Rust proof

PV modules will last for 25 years and more!

## Competitors

Use cheap junction box without diode protection and low IP rating

Disadvantages:

- Not rust proof

Junction box will start rusting in 3-5 years and modules will not last for 25 years

# Sealing Glue

## Our EverExceed Modules

Use high quality special glue meant exclusively for the PV industry

### Advantages:

- High acid resistance
- High alkaline resistance
- High reliability

PV modules will last for 25 years and more!

## Competitors

Use general purpose glue

### Disadvantages:

- Low acid resistance
- Low alkaline resistance
- Low reliability

PV modules will start degrading in 3-5 years and age easily



# Aluminium Frame

## Our EverExceed Modules

Use top quality, thick (35mm / 45mm / 50mm) frame from leading manufacturers which are strong with a sturdy inter-locking system.

### Advantages:

- Very safe
- Can withstand 120+ km/hr winds

## Competitors

Use thin (5mm / 10mm / 15mm) frames which are weak and with screw-on type of inter-locking system which is not sturdy

### Disadvantages:

- Not safe
- Cannot withstand high speed winds

# Net Result?

- EverExceed PV modules have:
  - High conversion efficiency with high reliability
    - Our conversion efficiency of **15-17%** is one of the highest in the industry
  - Low mismatch of cell performance during encapsulation
  - Excellent performance under low lighting
  - Low hot spot effect
  - Low degradation under light exposure

# Our EverExceed Modules

## Module Construction



Aluminum alloy frame

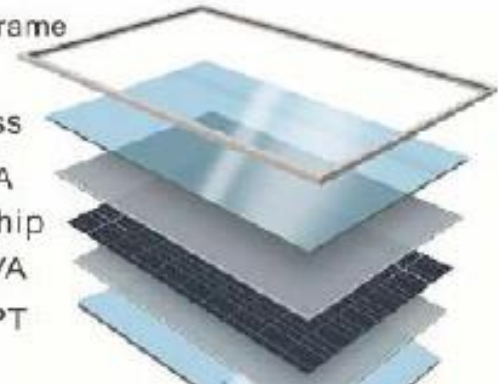
Glass

EVA

Solar chip

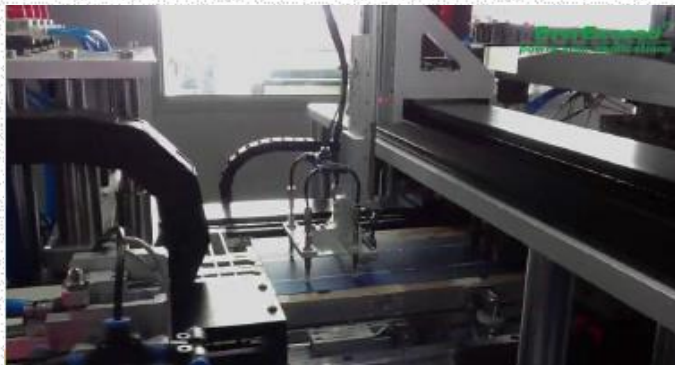
EVA

TPT



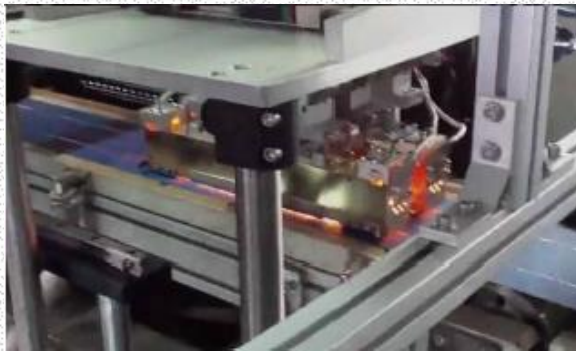
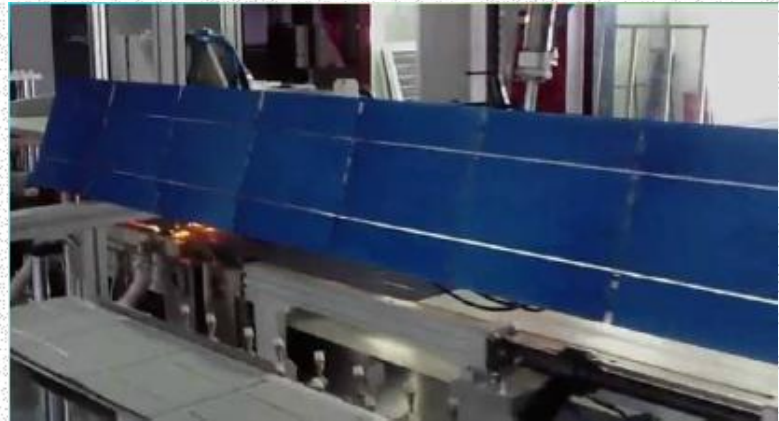
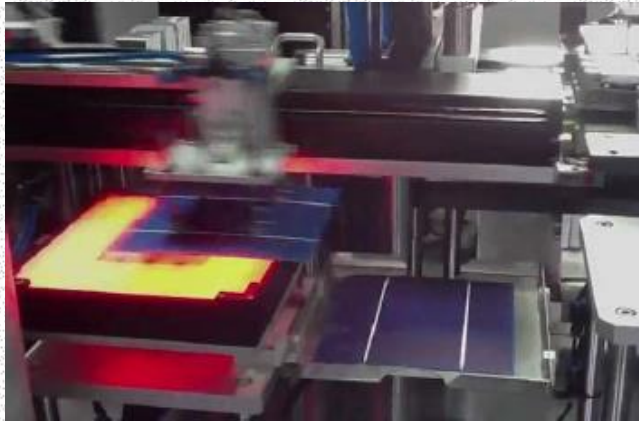
# Our EverExceed Modules

## Automatic Soldering Equipment



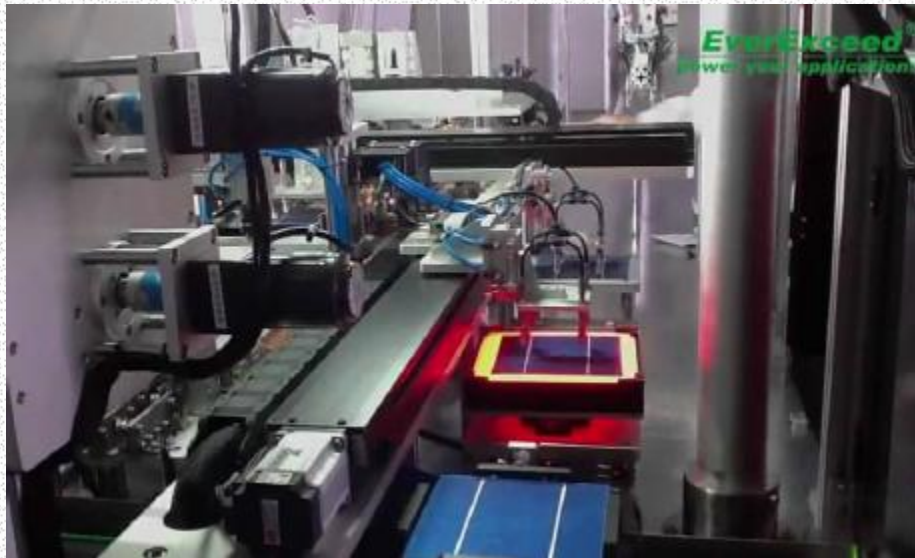
# Our EverExceed Modules

## Production Equipment



# Our EverExceed Modules

## Production Equipment



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## Production Equipment



# Our EverExceed Modules



EverExceed modules are the most reliable solar PV modules for off-grid and grid-tied residential and commercial solar systems.



# So Are All PV Modules The Same?

- We don't think so, and we hope you will agree
- Choose your PV modules wisely!

Thank you!



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