

竖装组件拆箱说明Unpacking manual for vertical installation of modules

设备和工具：刀具、手套、吊车/叉车（叉车叉齿厚度 $\leq 85\text{mm}$ ）、拆包支架；

Equipment and tools: knives, gloves, crane/forklifts (The fork thickness of the forklift should be less than 85mm)、unpacking supports;

人员：不得少于3人，其中防倒包装2人；在户外进行拆箱时，禁止在下雨的条件下作业；

Personnel: No less than 3, including 2 for anti tilt packaging; It is forbidden to work in rainy conditions during unpacking outdoors;

拆前检查：拆包前确认组件是否呈垂直状态（无歪斜）、检查组件外包装是否完整、单托组件打包带紧固完好；

Pre-disassembly inspection: Please confirm whether the module is in a vertical position, check if the outer packaging of the module is intact, and ensure that the packaging straps of the single-tray module are securely fastened before unpacking.

说明：外箱印刷和标示内容随产品型号批次不同有差异，下面所有图示供参考，打包带位置及数量以实际为准。

Explanation: The outer box printing and labeling contents vary with the product model batch; The printing and marking shown in all the pictures below are for reference only.



步骤1

采用吊车卸货时，根据组件重量和尺寸选用足够拉力的吊绳，箱体上方使用与组件外包装箱同宽度的木板或专用工装支撑吊带，下托组件托盘底部增加金属钢管或专用工装支撑固定吊带，避免挤压箱内组件，竖包组件一次最多只允许吊装1托；轻放至水平地面。

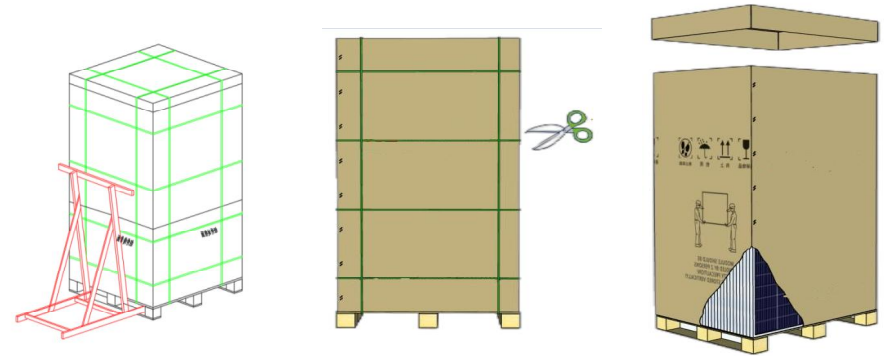
采用叉车卸货时，避免叉车碰撞组件箱体，防止损坏内部组件；轻放至水平地面。

Step 1

When unloading with a crane, it is necessary to select a lifting rope with sufficient tensile force based on the weight and size of the module. A wooden board or special tooling with the same width as the outer packaging box of the module should be used to support the lifting strap above the box. Additionally, metal steel pipes or special tooling should be added to support and fix the lifting strap at the bottom of the lower tray of the module to avoid squeezing the modules inside the box.

Vertically packaged modules are allowed to be lifted and installed in batches of one tray at a time. They should be gently placed on a horizontal surface.

When unloading with a forklift, it is important to avoid collisions with the module boxes to prevent damage to the internal modules. they should be gently placed on a horizontal surface.

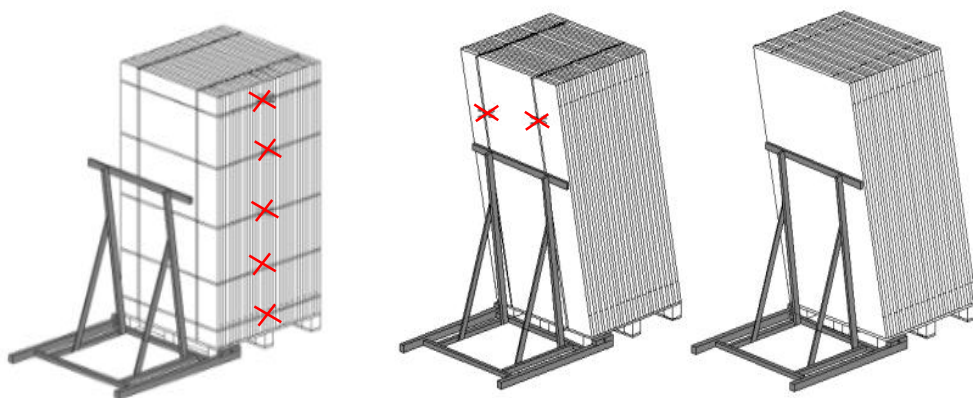


步骤2

组件拆箱前应在组件长边背面15~20cm位置放置支撑物（专用的支撑架或者一托未拆箱组件），并仔细核对箱体张贴的唛头确认组件型号、功率、数量及序列号，检查包装箱是否完好。确认无误后去除防水罩与缠绕膜，拆除外箱打包带，取下箱盖和围板。

Step 2

Before unpacking the modules, supports (special support frames or a pallet of unpacked modules) should be placed at a position 15 to 20cm from the back of the long side of the module. Carefully check the shipping marks on the box to confirm the module model, power, quantity, and serial number, and inspect whether the packaging box is intact. After confirmation, remove the waterproof cover and stretch wrap, unpack the strapping belts of the outer box, and take off the box cover and side panels.

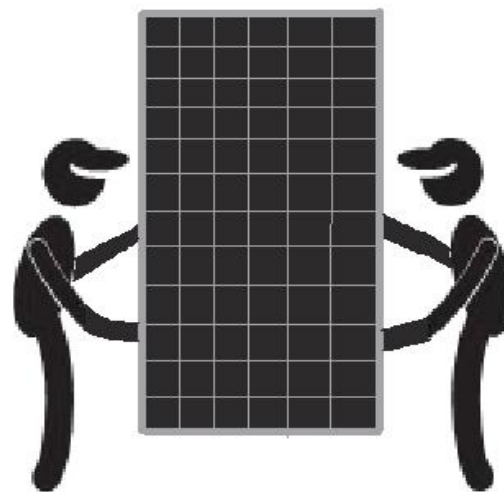


步骤3

在托盘短边两侧各站一人，一人扶住组件，另一人由下到上用刀具割开横向打包带。在拆除所有横向打包带后，双人轻推组件斜靠支撑物上，确认放置稳定后再放手并拆除竖向打包带。

Step 3

Two people should stand on each side of the short edge of the pallet, with one person holding the module in place while the other cuts through the horizontal packing straps from bottom to top using a knife. After removing all the horizontal packing straps, the two people should gently push the module against the support object at an angle. Once the placement is stable, they can let go and remove the vertical packing straps.

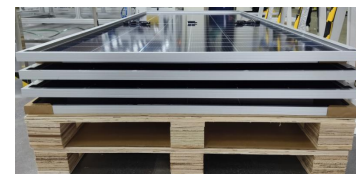
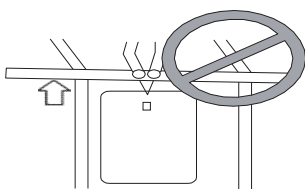
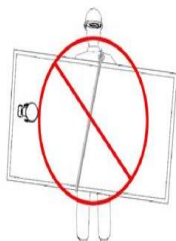


步骤4

两人抓住组件长边，同时用力立式搬运至指定地点。

Step 4

Two people should grasp the long edges of the module and simultaneously lift it upright with force to transport it to the designated location.



注意事项:

- 1、长期储存时，保留原包装并加盖遮雨布，不允许堆码。
- 2、转运时固定包装箱于运输平台，禁用三轮车，确保牢固。
- 3、禁止单人背或绳子背组件，不得提拉导线或接线盒。
- 4、禁止踩踏组件。
- 5、拆箱后未安装组件应平放，双托盘支撑，在托盘上放置包装箱盖，首块组件玻璃面朝上，其余组件玻璃面朝下堆叠，堆叠数量不超过16块。
- 6、用叉车将带托盘的包装箱移动到作业区域时，移动组件过程中避免激烈颠簸和震动，避免运输过程中托盘向后倾倒。

Notes:

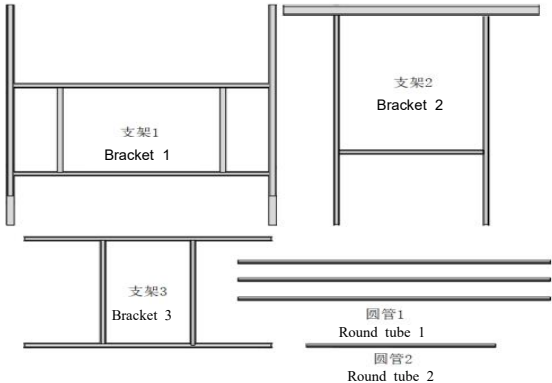
- 1、For long-term storage, retain the original packaging and cover it with a waterproof cloth. Do not stack.
- 2、When transporting, securely fix the packaging boxes on the transportation platform. Avoid using tricycles and ensure stability.
- 3、It is prohibited to carry modules on one's back or with a rope, and it is not allowed to pull or lift the wires or junction boxes.
- 4、Do not step on the modules.
- 5、Uninstalled modules after unpacking should be placed horizontally, supported by double pallets. Place the packaging box cover on the pallet, with the glass face of the first module facing up and the glass faces of the remaining modules facing down for stacking. The number of stacked modules should not exceed 16.
- 6、Use a forklift to move the packing box with pallet to the working area, and avoid violent bumps, vibrations and dumping the pallet backwards during transportation. If it is a manual forklift, enter from the short side of the pallet.

拆包支架装配作业指导书 Unpacking support assembly operation instructions

拆包支架分为8个结构部件：

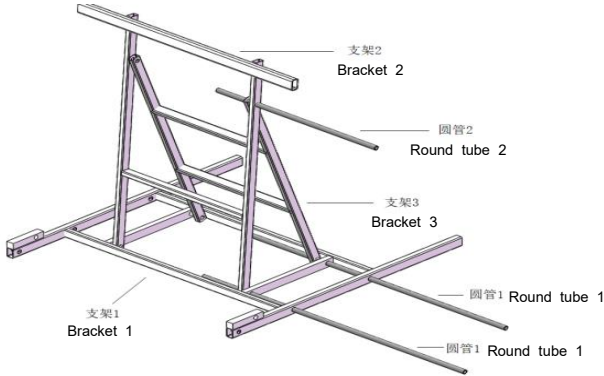
The unpacking support is divided into 8 structural components:

- 1.支架1×1、支架2×1、支架3×1、圆管1×3、圆管2×1，以及4枚圆管插销，如图A所示；
1. Support 1*1, Bracket 2*1, Support 3*1, Round tube 1*3, Round tube 2*1, and 4 round pipe pins,as shown in figure A;
- 2.如图B示意,使用2根圆管1、圆管2将各支架组合固定；
2. As shown in Figure B, use two round tubes 1 and 2 to assemble and fix each support;
- 3.如图C示意，将组装好的支架放入组件倚靠面一侧，支架1一侧突起部分超过托盘最外侧角墩；使用1根圆管1插入支架1与托盘靠近的圆孔，同时将圆管插销插入4根圆管的锁定孔，完成组装；
- 3.As shown in Figure C, place the assembled bracket on the side of the module's leaning surface, with the protruding part of bracket 1 extending beyond the outermost corner block of the pallet. Insert a circular pipe 1 into the circular hole near the bracket 1 and the pallet, and simultaneously insert the circular pipe pin into the locking holes of the four circular pipes to complete the assembly.
- 4.图D为基础支架和加强支架装配完成图。
4. Figure D shows the assembly completion of foundation support and reinforcement support.



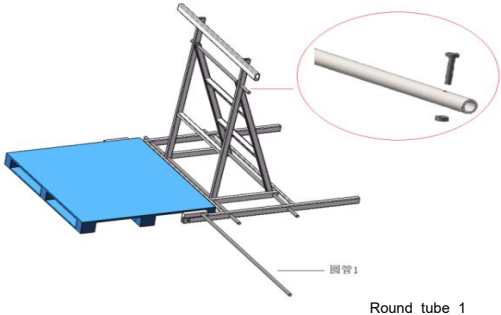
图A 支架部件分解图

Figure A Exploded view of support components



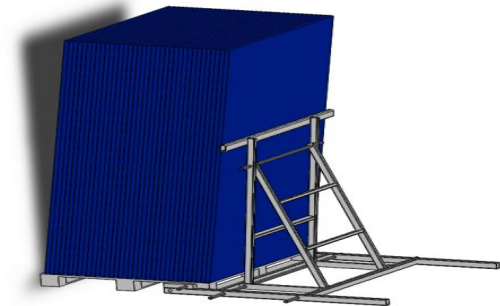
图B 倚靠支架组装示意一

Figure B Assembly diagram I of leaning support



图C 倚靠支架组装示意二

Figure C Assembly diagram II of leaning support



图D 倚靠支架安放示意

Figure D Schematic diagram of leaning against the support

注意：支架放置完毕后，切勿遗漏安全插销安装！

Note: After the bracket is placed, do not omit the installation of safety latch!