

SHIPMENT INSPECTION

The Buyer is entitled to carry out inspections and tests before the shipment of the PV modules (the "Modules"). These inspections and tests may be performed by the Buyer's staff or external staff assigned by the Buyer (the "Inspector").

As part of the inspections, an analysis of a certain quantity of the Modules randomly extracted from the batch may be performed. Afterwards, the Buyer will make a preliminary decision on the quality of the Modules contained in the batch. For the avoidance of doubt, this decision will in no way limit the rights of the Buyer with respect to any defects of the Modules under other warranties.

A batch is defined, as one shipment to be received by the Buyer from the Seller. In one shipment, there could be one or more containers with a number of Modules per container.

INSPECTIONS AND TESTS

1 DETERMINATION OF THE MAXIMUM POWER (5% sampling for each container)

It must be assured that a precise output power report of the modules will be provided by the seller before every shipment. In this section, some samples will be extracted from the batch randomly, and these samples will be tested under the benchmark set by the standard module. The inspector will compare the output power report provided by the seller with the test result of the samples to check any deviation.

2 MATERIALS AND MATERIAL COMBINATIONS CHECK

As agreed by the buyer and the seller, only the components and materials listed in the contract will be used for the modules production. In this section the conformity of the module production with the listed components and materials will be verified by means of random sampling of work slips, inventory records, and delivery notes during the past period.

3 VISUAL INSPECTIONS (Based on Level I, double sampling plan, ISO 2859-1)

Within quality control the manufacturer is obliged to deliver no defective module in the shipment. In the visual inspection, the Inspector will check the samples with the aim to identify existing faults, which are shown as the follows,

- a) Broken or cracked cells;
- b) More than 1 scratch or pollution on cell surface for a diameter or length more than 5mm;
- c) Cells touching one another or the frame;
- d) Distance between cells less than 1.0mm;
- e) Cracked, bent, misaligned or torn external surfaces;
- f) Any scratch in the back sheet
- g) The depth of the cockle in the back sheet more than 0.3mm;
- h) Any cockle in the back sheet with a diameter or length more than 10mm;
- i) More than 4 cockles with a diameter or length more than 5mm;
- j) Any scratch in the glass surface with length more than 10mm; Or more than 4 scratches in the glass surface;
- k) Any bubble with a diameter or length more than 1.0 mm; Or Bubbles more than 1 piece;
- l) Any dust with a diameter or length more than 3.0 mm; Or dusts more than 4 pieces;
- m) Faulty interconnections or joints;
- n) Female and male connectors cannot be automatically locked, or can be loosened by pulling with hand;

- o) Failure of adhesive bonds;
- p) Bus bar ribbon has copper coating exposing;
- q) The distance between Bus bar ribbon and frame is less than 8mm;
- r) Tacky surfaces in the plastic materials;
- s) Active electrical areas are not covered;
- t) Damaged or unclear serial number or label;
- u) Any other defect that could affect the normal behaviour of the module.

4 PACKING AND LOADING CONTROL

Packing and loading the modules the container will be controlled by the inspector to ensure the shipment. In this section, the inspector will check the following details.

- a. Security against fracture;
- b. Seaworthy package;
- c. Identification marking ;
- d. OEM labelling according the buyer's specifications; (10 samples for each container)
- e. Container loading for convenient handling/unloading;