

## **FACTORY AUDITS**

To verify reliable production process in the manufacturing site, the buyer will perform factory inspections before finalize a manufacturer as a new supplier, and such factory audits will be performed again between orders.

### **1 PROCESS CONTROL**

In this section, the inspector will go through all the production lines to see the production process controlling.

#### **1.1 Materials preparing**

#### **1.2 Cell tabbing**

#### **1.3 Cell stringing**

#### **1.4 Lay-up**

#### **1.5 Lamination**

#### **1.6 Framing**

#### **1.7 Electrical connection**

#### **1.8 Clean and visual inspection**

#### **1.9 Name plates, QC pass label, and other label**

### **2 TESTS OF FINISHED PRODUCTS**

Within quality control the manufacturer is obliged to use adequate methods to avoid any defective modules shipping out of the factory.

#### **2.1 Output Power Test**

#### **2.2 High Voltage Test**

#### **2.3 Insulation Resistance Test**

#### **2.4 Other Tests**

- Wet Leakage Test,
- Mechanical Load Test
- Module defects checking
- Others if applicable

### **3. ENVIRONMENT CONTROL**

#### **3.1 Production areas**

#### **3.2 Warehouse of incoming materials**

#### **3.3 Warehouse of finished products**

### **4. STANDARD MODULE CALIBRATION**

The buyer will use his own standard modules to calibrate the manufacturer's standard module to see the difference in the output powers.

### **5. QUALITY MANAGEMENT SYSTEM**

#### **5.1 Documents checking**

In this section, the documentation of the manufacturer's quality management systems will be checked. TUV certification is a must when evaluating the manufacturers. If TUV certification is ongoing, the manufacturer should provide progress confirmation letter.

- Certificates
- Procedure instruction manuals
- Series Number
- Quality management system, manual, and responsible person;
- Module specification
  - Specification of the module;
  - Material list;
  - Specification of Junction box and connector;
  - TUV certificates of junction box, cable, and connector;
  - Specification of diode
  - Back Sheet partial discharge report

#### **5.2 Materials traceability system**

#### **5.3 Continuous improvement**