

CERTIFICATE OF PRODUCT CONFORMITY

Dubai Central Laboratory Department (DCLD) of Dubai Municipality
hereby attests that the product(s)

Solar Collector

(Details as per the attached Scope of Certification)

manufactured by:

ZHEJIANG JURE SOLAR TECHNOLOGY CO. LTD.

No. 8 Puhui Road, Economic Development Zone, Shengzhou City, Zhejiang, China

have been assessed in accordance with DCLD Document Ref. No. DM-DCLD-RD-DP21-2001 (IC) "General Rules for DM third party product certification system through factory assessment" and the relevant Specific Rules, and were found in conformity with the standard specification:

BS EN 12975-1:2006 +A1: 2010

Accordingly, DCLD hereby authorizes the above manufacturer
to affix the DCL Product Conformity Mark on the above-mentioned product(s).



for / ENGR. AMIN AHMED AMIN
Director, Dubai Central Laboratory Department
Dubai Municipality



مركز الاعتمادات العالمي للأداء
Emirates International Accreditation Centre
CB-003-PRD

Certificate No: CL18020570
Valid Until: 16/03/2020



Current Issue Date: 17/03/2019
Original Issue Date: 17/03/2018

The attached Scope of Certification bearing the same Certificate Number forms an integral part of this Certificate.
This Certificate is an electronic document subject to the Terms and Conditions of the Product Certification System and shall not be reproduced except in full.

**DUBAI CENTRAL LABORATORY DEPARTMENT
DCL PRODUCT CONFORMITY CERTIFICATION SCHEME**

**SCOPE OF CERTIFICATION
FOR CERTIFICATE NO. CL18020570**

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| Certificate Issued To: | ZHEJIANG JURE SOLAR TECHNOLOGY CO. LTD. (SUN HEATING TEC INC.) No. 8 Puhui Road, Economic Development Zone, Shengzhou City, Zhejiang China |
| Applicable Standard Specification: | BS EN 12975-1:2006 +A1: 2010 – Thermal solar systems and components – Solar Collectors – Part 1: General requirements |
| Applicable Specific Rules: | RD-DP21-2178 (IC) – Specific Rules for Certification of Solar Collectors as per BS EN 12975-1 Through Factory Assessment RD-DP21-2084 (IC) – Guidelines for Factory Production Control Plan for Solar Collector Manufacturers |

| S/N | Product Description | Brand Name | Product Details |
|-----|---|------------|--|
| 1 | <p>FLAT PANEL SOLAR TYPE COLLECTOR</p> <p>Absorber materials: Aluminum sheet blue sputtering coating with fin dimensions of 1950mm x1170mm x 0.4mm and solar absorptance $\geq 95\%$ & hemispherical emittance 5% , Laser welded with Copper pipes Low iron wove tempered glass 3.2mm thickness top cover with $\geq 91.0\%$ solar transmittance and 1994mm x 1214mm dimension Polyester staple fiber thermal insulation thickness of 35mm for back insulation. Polyester staple fiber thermal insulation and thickness of 15mm for side insulation. Enclosure Side Material: Double Layer Aluminum alloy Profile (brown or silver white) Enclosure Back Material: Colored and galvanized plate Frame fastening methods (pop, rivets, screws, etc.: pasted Collector Enclosure-Seal Compound: Silicone Adhesive Collector Enclosure-Predominant Hardware: Aluminum profile</p> | "SOLAQUA" | <p>FLAT PANEL SOLAR TYPE COLLECTOR MODEL: SHT 2500A</p> <p>Gross Area of 2.44m² Aperture Area of 2.28 m² Absorber Area of 2.28 m² Gross dimensions (without support frame): 2000 x 1220 x 76 mm Weight (empty) : 45 Kg Fluid Content: 1.6 litres Absorber Pipe: Copper Number of risers : 11 risers Riser diameter or dimensions: 8mm^o x 0.6mm Distance between risers: 97mm Dimensions: 1950mm x 1170mm x 0.4mm Headers diameter or dimensions: 22mm^o x 0.8mm Flow pattern: parallel</p> <p>Maximum operation temperature: 120 °C Maximum operation pressure @ 45 °C: 800 kPa (8 bar) Maximum operating pressure @ maximum temperature of operation: 800 kPa (8 bar) Heat transfer medium: water/anti-freeze fluid Maximum Stagnation Temperature: 180 °C</p> |



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| 2 | <p>FLAT PANEL SOLAR TYPE COLLECTOR</p> <p>Absorber materials: Aluminum sheet blue sputtering coating with fin dimensions of 1950mm x 950mm x 0.4mm and solar absorptance $\geq 95\%$ & hemispherical emittance 5% , Laser welded with Copper pipes Low iron wove tempered glass 3.2mm thickness top cover with $\geq 91.0\%$ solar transmittance and 1990mm x 990mm dimension Polyester staple fiber thermal insulation thickness of 35mm for back insulation. Polyester staple fiber thermal insulation and thickness of 15mm for side insulation. Enclosure Side Material: Double Layer Aluminum alloy Profile (brown or silver white) Enclosure Back Material: Colored and galvanized plate Frame fastening methods (pop, rivets, screws, etc.): pasted Collector Enclosure-Seal Compound: Silicone Adhesive Collector Enclosure-Predominant Hardware: Aluminum profile</p> | <p>"SOLAQUA"</p> | <p>FLAT PANEL SOLAR TYPE COLLECTOR MODEL: SHT 2000A</p> <p>Gross Area of 2.00m² Aperture Area of 1.85 m² Absorber Area of 1.85 m² Gross dimensions (without support frame): 2000 x 1000 x 76 mm Weight (empty) : 35 Kg Fluid Content: 1.3 litres Absorber Pipe: Copper Number of risers : 9 risers Riser diameter or dimensions: 8mm^o x 0.6mm Distance between risers: 97mm Dimensions: 1950mm x 950mm x 0.4mm Headers diameter or dimensions: 22mm^o x 0.8mm Flow pattern: parallel</p> <p>Maximum operation temperature: 120 °C Maximum operation pressure @ 45 °C: 800 kPa (8 bar) Maximum operating pressure @ maximum temperature of operation: 800 kPa (8 bar) Heat transfer medium: water/anti-freeze fluid Maximum Stagnation Temperature: 183 °C</p> |
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DCL PRODUCT CONFORMITY CERTIFICATION SCHEME**

**SCOPE OF CERTIFICATION
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| | FLAT PANEL SOLAR TYPE COLLECTOR | "SOLAQUA" | FLAT PANEL SOLAR TYPE COLLECTOR MODEL: SHT 4*10A |
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| 3 | <p>Absorber materials: Aluminum sheet blue sputtering coating with fin dimensions of 3000mm x1170mm x 0.4mm and solar absorptance $\geq 95\%$ & hemispherical emittance 5% , Laser welded with Copper pipes Low iron wove tempered glass 3.2mm thickness top cover with $\geq 91.0\%$ solar transmittance and 3044mm x 1214mm dimension Polyester staple fiber thermal insulation thickness of 35mm for back insulation. Polyester staple fiber thermal insulation and thickness of 15mm for side insulation. Enclosure Side Material: Double Layer Aluminum alloy Profile (brown or silver white) Enclosure Back Material: Colored and galvanized plate Frame fastening methods (pop, rivets, screws, etc.): pasted Collector Enclosure-Seal Compound: Silicone Adhesive Collector Enclosure-Predominant Hardware: Aluminum profile</p> | | <p>Gross Area of 3.72m² Aperture Area of 3.51 m² Absorber Area of 3.51 m² Gross dimensions (without support frame): 3050 x 1220 x 86 mm Weight (empty) : 65 Kg Fluid Content: 3.4 litres Absorber Pipe: Copper Number of risers : 11 risers Riser diameter or dimensions: 10mm^o x 0.6mm Distance between risers: 100mm Dimensions: 1950mm x 1170mm x 0.4mm Headers diameter or dimensions: 28.6mm^o x 0.9mm Flow pattern: parallel Maximum operation temperature: 120 °C Maximum operation pressure @ 45 °C: 800 kPa (8 bar) Maximum operating pressure @ maximum temperature of operation: 800 kPa (8 bar) Heat transfer medium: water/anti-freeze fluid Maximum Stagnation Temperature: 176 °C</p> |

NOTE1: This document forms part of the Certificate of Product Conformity bearing the same certificate number.

NOTE2: The above products shall bear the DCL Conformity Mark.

Original Issue Date : 17 March 2018

Current Issue Date : 17 March 2019

Valid Until : 16 March 2020

ARIF HUSAIN AL MARZOOQI
Products Conformity Assessment Section Manager
Dubai Central Laboratory Department