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SOLYCO Solar AG
Dr. Lars Podlowski
Baseler Straße 60
12205 Berlin
Germany

Quote No.: G2023Q91
Order No.: G202385
Report No.: G202385_ML_Solyco_V3
Date: 12.09.2023

Contact

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Mechanical Load Test Qualification Report

Dear Dr. Lars Podlowski,

SOLYCO SOLAR AG (Customer) has contracted PI Berlin to perform mechanical load (ML) tests on the provided PV modules. We hereby give a summary report based on the test results gained during project G202385. The results were gained in the laboratory of PI Photovoltaic-Institute Berlin AG, an ISO 17025 accredited laboratory. The laboratory report is attached in the Annex.

Test items

The sampling was done by the client. The test results in this report relate only to the test object. The module was apparently without defects.

Manufacturer: SOLYCO Solar AG, Type: L-BG 28/75, glass-glass module,
SN: SUADDD01-000286.

Performed Tests

The module was tested as per mechanical load test conditions given in IEC 61215-2:2021 (MQT 16), which states that the minimum test load should be 2400 Pa. The test was performed with a test load of 2400 Pa for pull and 6000 Pa for push.

Initial and final measurements were conducted for visual inspection (VI), power under standard test conditions (STC), wet leakage (WL) test, and electroluminescence, i.e., before and after the ML test. The measurement uncertainty for power determination is $\pm 1.9\%$. All tests are performed as per IEC 61215-2:2021.

The modules were delivered to PI Photovoltaic-Institute Berlin AG on 05.06.2023. The testing was done by the laboratory from 05.06.2023 to 09.06.2023.

Results

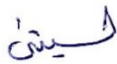
Table 1 : Result summary for test module SUADDD01-000286

Module SN: SUADDD01-000286					
	P_{MPP} (W)	ΔP_{MPP} to previous value (%)	WL* ($M\Omega \cdot m^2$)	EL	VI
Label	75.00	-	-	-	
Initial	67.98	10.3	5647	No defects	No defects
Final	67.97	0.01	5647	No defects	No defects

*Note: For WL, the minimum pass value is $40 M\Omega \cdot m^2$.

The tested module passed the ML test.

Signatures



Created by
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Senior Project Manager

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Annex



Figure 1: Front of module specimen

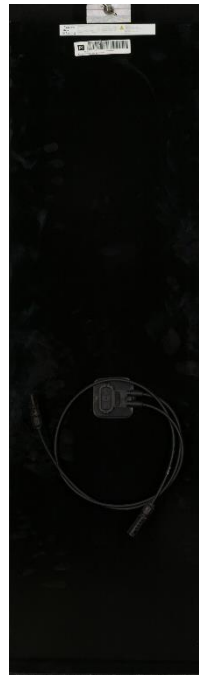


Figure 2: Back of module specimen

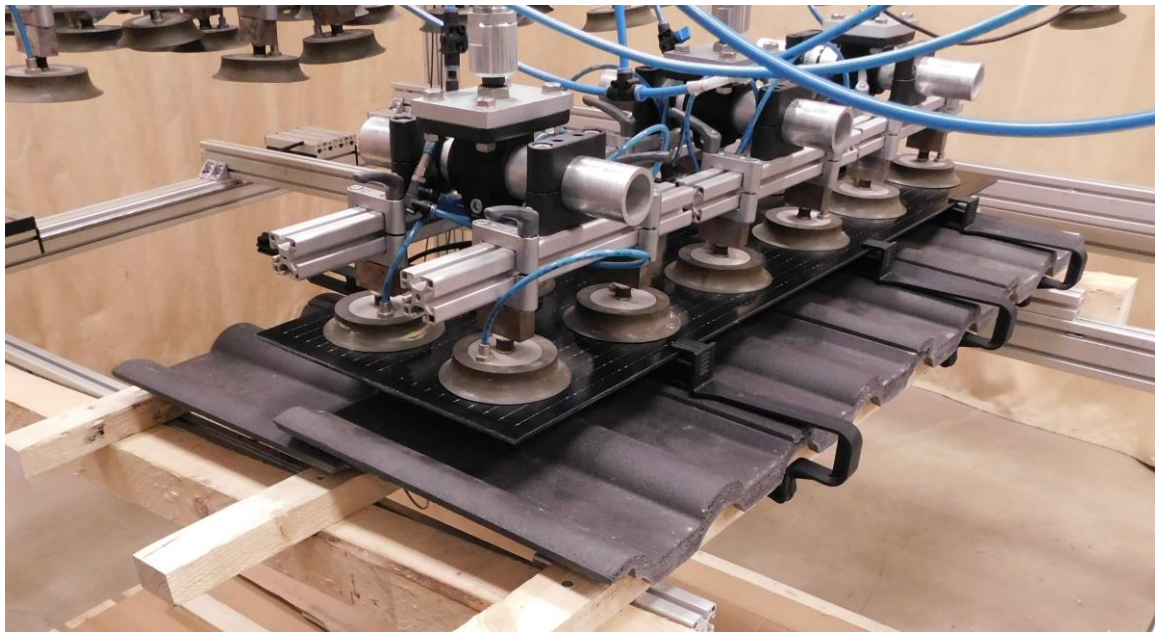


Figure 3: Photo of ML test