

## CALIBRATION CERTIFICATE

No. 02-2019-FORC-0028

Date of Calibration : **March 13, 2019**  
Calibration Item : **Tensile Testing Machine**  
Capacity : **2000 kgf**  
Measurement Range : **0 kgf to 1000 kgf**  
Resolution : **0.1**  
Make / Model : **Gotech/AI-7000-M (Load Cell); Fairbanks/GT1110 (Indicator)**  
Serial No. : **TC150801739 (Load Cell); t1232131 (Indicator)**  
Customer : **SYCWIN COATING & WIRES, INC.**  
**93 Joy St., Grace Village, Balingasa, Quezon City**

### MEASUREMENT RESULTS:

Indicated Force		Applied Force	Relative Expanded Uncertainty	Relative Accuracy Error	Relative Repeatability Error	Class
kN	kN	kN	%	%	%	
0.0	0.00	0.00	0.00	0.00	0.00	-
100.0	100.00	100.76	0.37	-0.76	0.58	1
200.0	200.00	200.19	0.18	-0.10	0.13	1
300.0	300.00	300.12	0.27	-0.04	0.35	1
400.0	400.00	400.12	0.16	-0.04	0.02	1
500.0	500.00	499.95	0.19	0.02	0.17	1

### UNCERTAINTY OF MEASUREMENT:

The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor  $k = 2$ . It has been determined in accordance with the "JCGM 100:2008 Evaluation of measurement data- Guide to the Expression of Uncertainty in measurement". The value of the measurand lies within the assigned range of values with a probability of approximately 95%.

STANDARD USED :

Name of Standard	Make/Model	Calibration Certificate No.	Traceability
Load Cell SN XXXXX	HBM/U15	0	Traceable to SI through KRISS - Korea

CALIBRATION PROCEDURE:

The testing machine under calibration was subjected to specified force values which were applied on the force-proving instrument and readings were noted.

The relevant reference document for this calibration is ISO 7500-1:2018, Metallic materials – Verification of static uniaxial testing machines.

ENVIRONMENTAL CONDITIONS:

Ambient Temperature :  $(25 \pm 2) ^\circ\text{C}$   
Relative Humidity :  $(54.5 \pm 5) \%$

REMARKS:

- The above results were those obtained at the time of calibration and refer only to the testing machine calibrated in compression.
- No adjustment was performed on the testing machine. The user should determine suitability of the testing machine for its intended use.
- The testing machine was calibrated at the Quality Assurance Laboratory of SYCWIN COATING & WIRES, INC. at 93 Joy St., Grace Village, Balingasa, Quezon City.

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