



NATIONAL METROLOGY LABORATORY
OF THE PHILIPPINES
Providing International Quality Measurements in the Country

CALIBRATION CERTIFICATE
No. 05-2022-FORC-0132

Date of Calibration: December 19, 2024
Calibration Item: Tensile Testing Machine
Capacity: 100 lbf
Measurement Range: 0 to 90 lbf
Resolution: 0.01
Make / Model: Yuelian / STS-100kg
Serial No.: J974953; 14143 (Indicator)
Customer: MANILA CORDAGE COMPANY
No. 116 Progress Ave., Carmelray Industrial Park I
Canlubang, Calamba City, Laguna

MEASUREMENT RESULTS:

Applied Force	Force	Uncertainty	Expanded Relative	Measurement Relative Error	Repeatability Relative Error
Applied Force	Indicated Force	Expanded Uncertainty	Measurement Error	Repeatability Error	
Applied Force 90.0 40.0 60.0 80.0 20.0 0.0 lbf	Indicated Force 40.4 60.7 81.0 20.2 0.0 lbf	Uncertainty Expanded Relative 0.31 0.00 0.89 0.16 0.12 0.39 %	Measurement Relative Error -1.12 -1.18 -1.21 -1.19 0.00 %	Repeatability Relative Error -1.12 -1.18 -1.21 -1.19 0.00 %	
lbf	lbf	%	%	%	%
0.0	0.0	0.00	0.00	0.00	0.00
20.0	20.2	0.89	-1.12	1.37	1.37
40.0	40.4	0.16	-1.11	0.22	0.22
60.0	60.7	0.12	-1.18	0.16	0.16
80.0	81.0	0.39	-1.21	0.63	0.63
90.0	91.1	0.31	-1.19	0.49	0.49

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%.