



National Association for Proficiency Testing

A Non-Profit Organization Dedicated to Excellence in Metrology and Test Measurement

PRELIMINARY REPORT: NAPT-Force-402

This Preliminary Report documents the results for the ILC/PT listed below, covering all data presented to NAPT for evaluation by your organization. For tests with an established history, a Final Report will be issued after the 30 day review period expires. The Final Report will include a graphical representation of participants' values compared to the artifact mean and the values reported by the other participants.

Preliminary Results Reported To: **Digital Measurement Metrology**
Attention: Edward Gobin
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Date Of Preliminary Report: June 07, 2005
Date Of Participation in ILC/PT: May 26, 2005

ILC/PT NAME: NAPT-Force-402
Digital Force Gage
Discipline: Force
Artifact Type: Force
Manufacturer: Custom
Model Number: DFGS-50
Serial Number: A2351

Data analysis of your reported values indicates that your organization performed **10 out of 10 measurements satisfactorily**. Please note that reference data is subject to change between issuance of Preliminary and Final Reports. If any data reported in this Preliminary Report is incorrect or if you would like to submit any revisions/corrections of your reported data, please contact us within 30 days.

All NAPT programs are conducted in accordance with ISO/IEC Guide 43-1 and ILAC G13:2000 requirements for proficiency testing providers. Please contact NAPT with any questions regarding this Preliminary Report.

Preliminary analysis of the data your organization submitted to NAPT is shown below. Reported values are compared against the reference value only. In the Final Report, your reported values will also be analyzed against the values reported by other participants enrolled in this ILC/PT.

Measurement Description	Reported Value Reference Value	Reported Uncertainty Reference Uncertainty	En	S/U
Force				
10 Force - 10 lb Tension	10.00 Lbf 10.00	0.09 0.02	0	S
20 Force - 20 lb Tension	19.98 Lbf 19.99	0.09 0.02	0.11	S
30 Force - 30 lb Tension	30.00 Lbf 29.99	0.09 0.02	0.11	S
40 Force - 40 lb Tension	39.98 Lbf 39.98	0.09 0.02	0	S
50 Force - 50 lb Tension	49.98 Lbf 49.98	0.09 0.02	0	S
10 Force - 10 lb Compression	10.00 Lbf 9.99	0.09 0.02	0.11	S
20 Force - 20 lb Compression	20.00 Lbf 19.99	0.09 0.02	0.11	S
30 Force - 30 lb Compression	30.00 Lbf 29.98	0.09 0.02	0.22	S
40 Force - 40 lb Compression	40.00 Lbf 39.99	0.09 0.02	0.11	S
50 Force - 50 lb Compression	50.00 Lbf 49.99	0.09 0.02	0.11	S

NOTES:

1. Values may be rounded. Rounding does not affect data analysis and is for reporting purposes only
2. All uncertainties are at (or normalized to) K=2 (coverage factor associated with a 2-sigma, 95%, normal distribution)
3. $En = (\text{participant's reported value} - \text{reference value}) / \text{SQRT}(\text{participant's reported uncertainty}^2 + \text{reference uncertainty}^2)$
4. S/U: S (Satisfactory) = participant's computed En is within range of ± 1 ; U (Unsatisfactory) = participant's computed En is outside range of ± 1