

# Certificate of Calibration

Certificate #: 1592965  
Purchase Order #: 4373

**Calibration Performed By:**

PROBATA CORPORATION  
14600 Metro Plaza Blvd.  
PO BOX 4090 (73083)  
Edmond, OK 73013  
(405) 607-4813 / FAX (405) 607-4832

**For:**

ILLIANA INSTRUMENTATION SERVICE  
1831 GOVERT DRIVE  
  
SCHERERVILLE IN, 46375  
onsite:

**Equipment Information**

<b>Manufacturer:</b>	CONSOLIDATED DEVICES	<b>Asset Number:</b>	1724
<b>Model:</b>	4002-I-DTT	<b>Serial Number:</b>	062188-143
<b>Description:</b>	TORQUE TRANSDUCER	<b>Department:</b>	
<b>Range/Grad:</b>	40.0 - 400.0 IN-LB	<b>Location:</b>	
<b>Temp./RH:</b>	68.0 deg F, / 32.0 % rH	<b>User:</b>	UNK
<b>Cal Date:</b>	1/23/2023	<b>Cal Procedure:</b>	33K6-4-3176-1
		<b>Revision Date:</b>	1/31/2022

**Calibration Results**

**Received Condition:** MEASURED VALUES < LIMITS  
**Returned Condition:** AS FOUND/AS LEFT DATA IS THE SAME  
**Notes:**

**Probata Calibration Standards Used for Certification**

Asset #	Manufacturer	Model #	Description	Last Cal.	Cal. Due Date
0502	TROEMNER	WEIGHT SET HANGER (10PC)	WEIGHT SET HANGER-(10 PC)-CLASS F	4/20/2022	4/20/2023
1041	TROEMNER	WEIGHT SET	WEIGHT SET (29 PC)-CLASS 6	4/20/2022	4/20/2023
1188	CDI	2000-152-0	TORQUE BUTTERFLY WHEEL	8/2/2021	8/2/2023

Probata certifies that the above instrument meets or exceeds specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the International System of Units (SI), through the National Institute of Standards and Technology (NIST) or other National Metrology Institutes participating in the CIPM-MRA or radiometric techniques or natural physical constants. This calibration complies with ANSI/NC SL Z540-1-1994, ISO 17025 and meets the quality standards set forth in ISO 9001. This document applies only to the calibration of the item described.

No statement of conformity with specifications is made or implied on this certificate. However, measurement results are reviewed, where applicable, to establish where any measurement result exceeded the manufacturer's specifications.

ALL RESULTS MAY BE INVALID BASED ON CONDITIONS AS RECEIVED. THIS CERTIFICATE MAY NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF PROBATA CORPORATION



Approved By: *Jon Scruggs*  
**JON SCRUGGS**  
QUALITY TECHNICIAN

Calibrated By: *Peter Zolla*  
**PETER ZOLLA**  
CALIBRATION TECHNICIAN

**Equipment Information**

**CDI Model 4002-I-DTT Digital Torque Tester**  
**Range: 40 to 400 in/lbs**  
**Calibration Results**

<b>Parameter Tested</b>	<b>Nominal</b>	<b>As Found</b>	<b>As Left</b>	<b>Low Limit</b>	<b>High Limit</b>	<b>EU (k=2)</b>	
<b>Clockwise Torque Verification</b>							
10" Wheel Weight Applied							
4 lbs. Applied	39.957 inlb	39.92	39.92	39.76	40.16	0.04	inlb
8 lbs. Applied	79.914 inlb	79.89	79.89	79.51	80.31	0.08	inlb
16 lbs. Applied	159.828 inlb	159.5	159.5	159.03	160.63	0.16	inlb
24 lbs. Applied	239.742 inlb	239.4	239.4	238.54	240.94	0.24	inlb
32 lbs. Applied	319.657 inlb	319.4	319.4	318.06	321.26	0.32	inlb
40 lbs. Applied	399.571 inlb	398.7	398.7	397.57	401.57	0.40	inlb
<b>Counterclockwise Torque Verification</b>							
10" Wheel Weight Applied							
4 lbs. Applied	39.957 inlb	39.94	39.94	39.76	40.16	0.02	inlb
8 lbs. Applied	79.914 inlb	79.70	79.70	79.51	80.31	0.05	inlb
16 lbs. Applied	159.828 inlb	159.5	159.5	159.03	160.63	0.10	inlb
24 lbs. Applied	239.742 inlb	239.4	239.4	238.54	240.94	0.14	inlb
32 lbs. Applied	319.657 inlb	319.0	319.0	318.06	321.26	0.19	inlb
40 lbs. Applied	399.571 inlb	399.2	399.2	397.57	401.57	0.24	inlb

**Manufacturer Stated Accuracy:**  
**±0.5% of Reading from 10% to 100% of Rated Capacity**

Measurement results that are greater than limits of error are indicated by an "!"

The above measurement uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2