Cal-Rite Corporation
1665 QUINCY AVENUE #103, NAPERVILLE, IL 60540 PHONE: 630.355.1522 FAX: 630.355.1544

A2LA ACCREDITED
Certificate # 0866.01
Calibration Lab

PREVENTATIVE MAINTENANCE INSPECTION

CUSTOMER	SERVICE DATE	SERVICE CALL	TECHNICIAN
[redacted]	5/15/2025	[redacted]	[redacted]

MANUFACTURE	MODEL	SERIAL NUMBER	DRIVE TYPE
[redacted]	WAW-600KN	[redacted]	HYDRAULIC

INDICATORS / ELECTRONICS	√	CONDITION	COMMENTS
> Inspect all incoming power cables and disconnects	☑	GOOD	>
> Check digital displays and proper illumination	☑	GOOD	>
> Check all power supplies and interconnecting cables	☑	GOOD	>
>	☐		>

WEIGHING SYSTEMS	√	CONDITION	COMMENTS
> Inspect all cables and connectors	☑	GOOD	>
> Check for proper mounting of load cell / transducer	☑	GOOD	>
> Check display for stable readings at zero load	☑	GOOD	>
> Inspect transducer and load cell	☑	GOOD	>
>	☐		>

LOAD FRAMES	√	CONDITION	COMMENTS
> Inspect crosshead for parallelism	☑	GOOD	>
> Ensure all column / x-head nuts are tight	☑	GOOD	>
> Inspect for proper backlash settings	☑	GOOD	>
> Inspect grip pockets for wear / damage	☑	GOOD	>
> Inspect for hydraulic leaks (all hoses and fittings)	☑	GOOD	>
>	☐	SELECT	>

HYDRAULIC SYSTEMS	√	CONDITION	COMMENTS
> Inspect for oil leaks and reservoir oil level	☑	GOOD	>
> Check pump motor drive belt tension / wear	☑	GOOD	>
> Check all inter-connecting cables	☑	GOOD	>
> Check crosshead and pump start contactors	☑	GOOD	>
>	☐	SELECT	>

ELECTRO-MECHANICAL SYSTEMS	√	CONDITION	COMMENTS
> Verify proper motor operation	☐	N/A	>
> Lubricate all chain drive systems and check tension	☐	N/A	>
> Inspect drive belts for wear and proper tension	☐	N/A	>
> Inspect clutch operation and proper voltage	☐	N/A	>
>	☐	SELECT	>

SAFETY AND LIMIT SYSTEMS	√	CONDITION	COMMENTS
> Verify proper operation of limit switch systems	☑	GOOD	>
> Check E-Stop disables drive system	☑	GOOD	>
> Inspect protective enclosure for wear / damage	☑	GOOD	>
>	☐	SELECT	>

SUGGESTED RECOMMENDATIONS
> The machine was recently installed and is in good condition at this time.
>
>

NOTE: Preventative maintenance was performed on the equipment listed above by a Cal-Rite field service technician. Items that have been inspected will be checked and comments will be added if required.

SAMPLE

Cal-Rite Corporation

[redacted]

Certificate Of Calibration

Equipment Calibration was performed at the address below for

[redacted]

Authorized By NH

ACCREDITED

Certificate # 866.01
Calibration

Date of Calibration

Wednesday, May 14, 2025

Issue Date:

05/23/2025

Machine Profile

Manufacturer:	[redacted]	**Capacity:**	*600*	**Next Cal:**	*14-May-2026*
Model:	[redacted]	**Serial #:**	[redacted]	**Customer #:**	*N/A*

Force Calibration Results

Language: kn **ASTM Accuracy +/-: +/-1.0%**

Range Capacity	Verified Range Force	Uncertainty %	Maximum Error %
600	6 - 600	0.25	0.158

Cal-Rite Corporation has calibrated the testing equipment described above in accordance with ISO/IEC 17025:2017, ANSI/NCSL Z540-1-1994 and 10-CFR-21. All elastic verification devices have been calibrated in accordance with ASTM E74 practices and are traceable to the International System of Units (SI) through NIST. Computed forces have been temperature corrected as necessary.
The uncertainty of the calibration process was estimated approximately at the 95% confidence level (k=2).
When a decision rule is stated in the governing specification, the prescribed decision rule was used in the pass/fail determination unless otherwise noted. In all other cases where a statement of conformance is made, the determination of conformance is made solely on the measurements falling in or out of the applied tolerance. Measurement uncertainty is stated, but not used to determine pass/fail status.
This certificate relates only to the item calibrated.
The equipment listed above has met all applicable clauses of the governing specification unless noted below:
- All force verification devices have been calibrated in accordance with ASTM E74 practices and used within the certified Class A range.
- Computed forces have been temperature corrected as necessary

☐ 11.1 Lower Limit below 200X Resolution

☐ 11.3 Less than 5 readings taken below 10% FS

☐ 11.5 Does not return to zero in 30 seconds

☐ 18.4 Does not meet +/- 1 % accuracy requirement.

Specification: **ASTM E 4-24**

QMS Revision: **3.01**

Service Comments: Verified proper operation of machine. Calibrated force in accordance with ASTM standards. All readings found and left within tolerance and repeatable. No adjustments made. The machine is in good condition and functioning properly at this time.

As Found Condition: Initial Calibration

Calibration Procedure: CR100 Rev 17

Calibration Method: Follow the Force

Software Version: MaxTest 7.48

Service Order #: [redacted]

[redacted]

SERVICE ENGINEER

As a mutual protection to the purchaser, the public, and ourselves, all Cal-Rite calibration reports are submitted as the confidential property of the purchaser, and any authorization for publication of statements, conclusions, or extractions from or regarding our reports is reserved pending our prior written approval.

SAMPLE

Cal-Rite Corporation

[redacted]

ACCREDITED
Certificate # 866.01
Calibration

[redacted]

Calibration Date: 14-May-2025
Next Calibration: 14-May-2026
Customer #: N/A
Temp/Humidity: 68.9 F/68.5 %

Manufacture: [redacted]
Model: [redacted]
Indicator: PC

Capacity: 600
Serial #: [redacted]
Shunt #: N/A

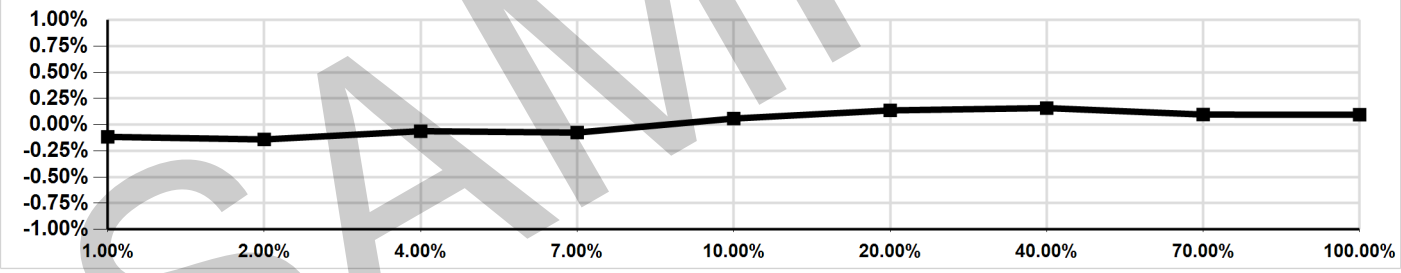
Test Direction: Universal
External Cell: N/A
Temp Variance: 0.5

ASTM REPORT

Range: 600.00 kn **Resolution 0.01 kn** **Accuracy: +/-: +/-1.0%** **Uncertainty: 0.25%**

Readout UUT	As Found	As Adjusted	As Left	Repeat %	Max Error	Error %
0	0.000	0.000	0.000	0.000	0.000	0.000
6.00	6.001	0.000	6.007	-0.100	-0.007	-0.117
12.00	11.985	0.000	12.017	-0.267	-0.017	-0.142
24.00	23.996	0.000	24.015	-0.079	-0.015	-0.063
42.00	42.015	0.000	42.032	-0.040	-0.032	-0.076
60.00	59.965	0.000	60.019	-0.090	0.035	0.058
120.00	119.837	0.000	119.875	-0.032	0.163	0.136
240.00	239.622	0.000	239.689	-0.028	0.378	0.158
420.00	419.757	0.000	419.599	0.038	0.401	0.096
600.00	599.754	0.000	599.436	0.053	0.564	0.094
Zero Return:	**0.000%**	**0.000%**	**0.000%**			

Linearity Profile (Percent Full Scale)



Calibrating Apparatus Used

Manufacture	Serial Number	Capacity	Class A	Cal Date	Cal Due	Calibrated By
TOVEY	125891A	135,000	4963	4/22/2024	4/22/2026	TOVEY
TOVEY	128634A	10,000	200	1/20/2024	1/20/2026	TOVEY
MANTRACOURT	17062451	4	0	2/26/2025	6/26/2025	CAL-RITE

SAMPLE

☑ SPECIFICATION COMPLIANT ☐ REPAIRED ☐ ADJUSTED CONDITION: Good

☐ 7.3 Interchangeability Established

Service Order #: [redacted]

[redacted]
SERVICE ENGINEER