



CERTIFICATE OF ACCREDITATION

ANSI-ASQ National Accreditation Board

500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

Encore Systems, Inc.
90 Mosier Parkway
Brookville, OH 45309

has been assessed by ANAB
and meets the requirements of international standard

ISO/IEC 17025:2005

and national standard

ANSI/NCSL Z540-1-1994 (R2002)

while demonstrating technical competence in the field of

CALIBRATION

Refer to the accompanying Scope of Accreditation for information regarding the types of calibrations to which this accreditation applies.

AC-1140

Certificate Number


ANAB Approval

Certificate Valid: 08/23/2018-09/08/2020
Version No. 006 Issued: 08/23/2018



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005 AND
ANSI/NCSL Z540-1-1994 (R2002)**

Encore Systems, Inc.

90 Mosier Parkway
Brookville, Ohio 45309
Steve Childers
937-833-4469

CALIBRATION

Valid to: **September 8, 2020**

Certificate Number: **AC-1140**

Length – Dimensional Metrology

| Parameter / Equipment | Range | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method and/or Equipment |
|------------------------------|--------------|--|--|
| Height Gages | Up to 24 in | 209 μin | Gage Blocks, Length Standards |
| Micrometers | Up to 12 in | 205 μin | Gage Blocks, Length Standards, Optical Flats |
| Calipers | Up to 12 in | 851 μin | Gage Blocks, Length Standards |
| Indicators | Up to 6 in | 137 μin | Gage Blocks, Length Standards |
| Depth Gages | Up to 12 in | 199 μin | Gage Blocks, Length Standards |
| Gap Gages | Up to 12 in | 199 μin | Gage Blocks |
| Rulers | Up to 48 ft | 0.012 in | Calipers |

Mass and Mass Related

| Parameter / Equipment | Range | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method and/or Equipment |
|---|---|---|---|
| Hand Torque Wrench ¹ | (0 to 250) lbf·in (0.2 to 1 000) lbf·ft | 0.48 lbf·in 1.5 lbf·ft | Signal Conditioner, Precision Transducer, Dead Weight Fixture, Multimeter, Precision Power Supply |
| Torque Transducers | (0 to 250) lbf·in (0.2 to 1 100) lbf·ft | 0.05 lbf·in 0.33 lbf·ft | Multimeter, Precision Power Supply, Dead Weight Fixture |
| Air Tools-Transducer ¹ | (0.05 to 1 000) lbf·ft | 0.9 lbf·ft | Signal Conditioner, Precision Transducer |
| DC Power Tools DC Power Tools ¹ | (0.05 to 1 000) lbf·ft (0.05 to 300) lbf·ft | 1.4 lbf·ft 0.42 lbf·ft | Signal Conditioner, Precision Transducer |
| Controllers and Signal Conditioners | (0.05 to 1 000) lbf·ft (Up to 100 % full scale) | 0.4 lbf·ft | Multimeter, Precision Power Supply, Precision Transducer, Dead Weight fixture |
| Pressure | (0 to 900) mm HgA (0 to 36) psig (0 to 300) psig (50 to 100) psig (100 to 1 000) psig | 0.18 mm Hg 0.02 psi 0.17 psi 0.03 psi 0.03 % of reading | Manometer, Pressure Calibrator, Pressure Calibrator, Dead Weight Calibrator |

Time and Frequency

| Parameter / Equipment | Range | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method and/or Equipment |
|-----------------------|----------------|---|---|
| Time | (0 to 7 200) s | 0.3 s | NIST Standard Clock |

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ($k=2$), corresponding to a confidence level of approximately 95%.

Notes:

1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.
2. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-1140.



Vice President