ANSI National Accreditation Board

## CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board<br>Hereby attests that<br>Houston Precision Incorporation<br>6633 Polk Street<br>Houston, TX 77011

Fulfills the requirements of

## ISO/IEC 17025:2017

and
ANSI/NCSL Z540-1-1994 (R2002)
In the field of
CALIBRATION
This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.


Expiry Date: 28 April 2025
Certificate Number: AC-3202

ANSI National Accreditation Board

# SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017 

## AND

ANSI/NCSL Z540-1-1994 (R2002)
Houston Precision Incorporation
6633 Polk Street
Houston, TX 77011
John Christodoulou 713-943-2721

## CALIBRATION

Valid to: April 28, 2025
Certificate Number: AC-3202

Length - Dimensional Metrology

| Parameter/Equipment | Range | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method, and/or Equipment |
| :---: | :---: | :---: | :---: |
| Calipers ${ }^{1,2}$ | $\begin{aligned} & \text { Up to } 6 \text { in } \\ & (6 \text { to } 80) \text { in } \\ & \hline \end{aligned}$ | $\begin{gathered} 840 \mu \text { in } \\ (740+17 L) \mu \text { in } \\ \hline \end{gathered}$ | Gage Blocks |
| Height Gages 1,2 | Up to 6 in ( 6 to 80) in | $\begin{gathered} 840 \mu \mathrm{in} \\ (740+17 L) \mu \mathrm{in} \\ \hline \end{gathered}$ | Gage Blocks |
| Outside Micrometers ${ }^{1}$ | Up to 1 in (6 to 80) in | $\begin{gathered} \hline 73 \mu \mathrm{in} \\ 860 \mu \mathrm{in} \\ \hline \end{gathered}$ | Gage Blocks |
| Optical Comparators ${ }^{1,2}$ X-Y Linearity <br> Angle <br> Magnification | Up to 6 in (6 to 30) in Up to $90^{\circ}$ 10X, 20X, 30X | $\begin{gathered} 150 \mu \mathrm{in} \\ (87+9.4 L) \mu \mathrm{in} \\ 1.3 " \\ 0.0023 \mathrm{in} \\ \hline \end{gathered}$ | Glass Grid <br> Glass Grid <br> Magnification Scale |
| Surface Plates ${ }^{1,2}$ <br> Overall Flatness <br> Local Area Flatness (Repeat Readings) | Up to $170 \mathrm{in} D L$ <br> Up to 0.04 in | $\begin{gathered} (18+1.1 D L) \mu \mathrm{in} \\ 7 \mu \mathrm{in} \\ \hline \end{gathered}$ | In accordance with ASME B89.3.7 using Electronic Level System <br> Repeat-O-Meter |
| MIC-TRAC ${ }^{1,2}$ | Up to 12 in (12 to 24) in ( 24 to 36 ) in | $\begin{aligned} & (44+3.8 L) \mu \mathrm{in} \\ & (39+4.2 L) \mu \mathrm{in} \\ & (91+2.1 L) \mu \mathrm{in} \\ & \hline \end{aligned}$ | Renishaw XL-80 <br> Laser Measurement System |
| Micrometer Standards ${ }^{2}$ | Up to 6 in ( 6 to 24) in ( 24 to 36 ) in | $\begin{gathered} 930 \mu \mathrm{in} \\ (920+1.1 L) \mu \mathrm{in} \\ (910+1.7 L) \mu \mathrm{in} \\ \hline \end{gathered}$ | Gagemaker MIC TRAC <br> Measurement System |

Length - Dimensional Metrology

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| :---: | :---: | :---: | :---: |
| Micrometer Standards ${ }^{2}$ | $(36$ to 80$)$ in | $(830+3.4 L) \mu \mathrm{in}$ | Gagemaker MIC TRAC <br> Measurement System, <br> Renishaw XL-80 <br> Laser Measurement System |

Thermodynamic

| Parameter/Equipment | Range | Expanded Uncertainty of <br> Measurement (+/-) | Reference Standard, <br> Method, and/or <br> Equipment |
| :---: | :---: | :---: | :---: |
| ${\text { Pyrometers }{ }^{1}}$ | $(50 \text { to } 700)^{\circ} \mathrm{C}$ | $2.7^{\circ} \mathrm{C}$ | Presys T1200PIR <br> Blackbody Source <br> (flat plate) |
| $\varepsilon=0.99, \lambda=(8$ to 14) Mm |  |  |  |

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. $L=$ length in inches.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-3202.


Jason Stine, Vice President

