

#### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

### DYNISCO, LLC 38 Forge Parkway Franklin, MA 02038

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#### **CALIBRATION**

Valid To: January 31, 2020 Certificate Number: 3910.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations<sup>1</sup>:

#### I. Dimensional

Parameter/Equipment	Range	CMC <sup>2</sup> (±)	Comments
Bore Diameter <sup>3</sup>	Up to 12.7 mm	0.0025 mm	ASTM D5099, D1238, D3835 with borescope
Orifice <sup>3</sup> –  Bore Length	(0.254 to 3.175) mm Up to 50.8 mm	0.0016 mm 0.0082 mm	ASTM D1238, D3835, D5099 with pin gage and micrometer
Piston Tip <sup>3</sup> –  Outside Diameter Linear Length	Up to 12.7 mm Up to 19 mm	0.0024 mm 0.0024 mm	ASTM D1238, D3835 with micrometers

#### II. Mechanical

Parameter/Equipment	Range	CMC <sup>2</sup> (±)	Comments
Mass <sup>3</sup>	Up to 8 kg	0.31 g	ASTM D1238

(A2LA Cert. No. 3910.01) 09/20/2018

Parameter/Equipment	Range	$CMC^{2}(\pm)$	Comments
Force <sup>3</sup>	Up to 5000 lbf	0.31 % of indication	ASTM E4 using loadcell
Time – Cross Head Dwell Time <sup>3</sup>	Up to 10 minutes	0.40 seconds	Stopwatch

#### III. Thermodynamics

Parameter/Equipment	Range	CMC <sup>2</sup> (±)	Comments
Temperature – Barrel Temperature <sup>3</sup>	(15 to 425) °C	0.081 °C	ASTM D1238, D3835, with Hart digital PRT

<sup>&</sup>lt;sup>1</sup> This laboratory does not offer commercial calibration service.

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<sup>&</sup>lt;sup>2</sup> Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of k = 2. The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

<sup>&</sup>lt;sup>3</sup> Field calibration service is available for this calibration and this laboratory meets A2LA *R104 – General Requirements: Accreditation of Field Testing and Field Calibration Laboratories* for these calibrations. Please note the actual measurement uncertainties achievable on a customer's site can normally be expected to be larger than the CMC found on the A2LA Scope. Allowance must be made for aspects such as the environment at the place of calibration and for other possible adverse effects such as those caused by transportation of the calibration equipment. The usual allowance for the actual uncertainty introduced by the item being calibrated, (e.g. resolution) must also be considered and this, on its own, could result in the actual measurement uncertainty achievable on a customer's site being larger than the CMC.



# Accredited Laboratory

A2LA has accredited

DYNISCO, LLC

Franklin, MA

for technical competence in the field of

## Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005

General requirements for the competence of testing and calibration laboratories. This laboratory also meets R205 – Specific Requirements: Calibration Laboratory Accreditation Program. 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).



Presented this 20th day of September 2018.

President and CEO For the Accreditation Council Certificate Number 3910.01

Valid to January 31, 2020