

International Accreditation Service

# CERTIFICATE OF ACCREDITATION


*This is to signify that*

**DMTE CALIBRATION LLC**

5916 FRANCES AVENUE NORTHEAST  
TACOMA, WASHINGTON 98422

Calibration Laboratory CL-129  
(Revised June 12, 2009)

has demonstrated compliance with the ANS/ISO/IEC Standard 17025:2005, *General criteria for the competence of testing and calibration laboratories*, and has been accredited commencing June 1, 2009, for the calibration discipline(s) listed in the approved scope of accreditation. The laboratory meets the IAS program requirements in the field of calibration.



Patrick V. McCullen  
Vice President



C. P. Ramani, P.E.  
President

*(see attached scope of accreditation for fields of testing and accredited test methods)*

Print Date: 06/12/2009 (page 1 only)

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This accreditation certificate supersedes any IAS accreditation certificate bearing an earlier date. The certificate becomes invalid upon suspension, cancellation, revocation, or expiration of accreditation. See the IAS Accreditation Listings on the web at [www.iasonline.org](http://www.iasonline.org) for current accreditation information, or contact IAS directly at (562) 699-0541.

International Accreditation Service

# SCOPE OF ACCREDITATION

DMTE Calibration LLC CL-129

DMTE Calibration LLC  
5916 Frances Ave NE  
Tacoma, WA 98422

Glenn D. Miller  
Quality Manager  
253-678-7676

MEASUREMENT AREA	RANGE & RESOLUTION	BEST MEASUREMENT CAPABILITY <sup>1</sup> (BMC) (±)	TECHNIQUE, REFERENCE STANDARD, EQUIPMENT
<i>Mechanical</i>			
Length Extensometer travel	0-2 in/0.00002 in 0-10 in/0.00028 in	(20 + 40L)µin (47 + 200L) µin	Heidenhain MT 60K, ASTM E 83 String pot, ASTM E 83
Gage length	0-6 in/0.0005 in	0.0003 in	Digital caliper, ASTM E 83
Crosshead distance	0-30 in/0.00028 in	(830 + 200L) µin	String pot, ASTM E 2309
Angle – Mechanical rotation	0°-180°	0.015°	Digital angle encoder, ASTM E 2309

June 1, 2009  
Commencement Date

  
C. P. Ramani, P.E.  
President

Print Date: 06/09/2009

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MEASUREMENT AREA	RANGE & RESOLUTION	BEST MEASUREMENT CAPABILITY <sup>1</sup> (BMC) (±)	TECHNIQUE, REFERENCE STANDARD, EQUIPMENT
<i>Mechanical (continued)</i>			
Force Compression and tension	Up to 220,000lbf (0-55lbf)	0.1% of indicated value 0.01% of indicated value	Load cell, digital readout, ASTM E 4 Class F weights, ASTM E 4
Crosshead speed	0.0004 to 40 in/min	(830 + 200L) µin	String pot, ASTM WK9983
Torque	0.02 to 1500 in-lbf	0.06% of indicated value	Torque arm, digital protractor, Class F weights, ASTM WK6364
Scales	0 to 25kg	See NOTE	Class 1 and Class F weights, ASTM E 4

June 1, 2009

Commencement Date



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DMTE Calibration LLC CL-129

MEASUREMENT AREA	RANGE & RESOLUTION	BEST MEASUREMENT CAPABILITY <sup>1</sup> (BMC) (±)	TECHNIQUE, REFERENCE STANDARD, EQUIPMENT
<i>Thermal</i> Temperature	-50 to 260°C	0.6°C	VWR temperature meter, ASTM E 145

<sup>1</sup> "Best Measurement Capability" 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 of nearly ideal measuring instruments. Best Measurement Capabilities are expressed as uncertainties at approximately the 95% level of confidence, usually using a coverage factor of  $k=2$ . The measurement uncertainty of a specific calibration performed by the laboratory may be greater than the least uncertainty due to the behavior of the customer's device, to the environment (if the calibration is performed in the field), and to influences from the circumstances of the specific calibration.

**NOTE:** Calibration parameters are performed primarily on-site at customer locations. The uncertainty of scale/balance calibration is highly dependent on local conditions, such as scale resolution and sensitivity, scale cleanliness, local gravity, temperature and humidity, dust, vibration, etc.; therefore, any statement of uncertainty is misleading. The class of the best weights used by the laboratory is shown in the Technique column. Use of weights in combination, whether in the same class or different classes, will increase measurement uncertainty resulting from the additive effect of weight tolerances, as defined in ASTM E 617.

June 1, 2009  
Commencement Date

  
C. P. Ramani, P.E.  
President

Print Date: 06/09/2009

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