



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

**Horiba Instruments Incorporated – Contract Testing Services**

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**TESTING**

Valid to: February 24, 2010

Certificate Number: AT-1312

**I. Mechanical**

<b>FIELD OF TEST</b>	<b>ITEMS, MATERIALS OR PRODUCTS TESTED</b>	<b>SPECIFIC TESTS OR PROPERTIES MEASURED</b>	<b>SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED</b>	<b>*DETECTION LIMIT/ RANGE/ EQUIPMENT</b>
Radial Loading (force / strain)	Customer Supplied	Fatigue and/or durability	Customer Supplied and/or F12-LMS-Test-Acceptance-Document	Hydraulic Actuator up to 100 000 pounds-force / 2 500 µε (micro-strain)
Axial Loading (force / strain)	Customer Supplied	Fatigue and/or durability	Customer Supplied and/or F12-LMS-Test-Acceptance-Document	Hydraulic Actuator up to 100 000 pounds-force / 2 500 µε (micro-strain)
Torsional Loading	Customer Supplied	Fatigue and/or durability	Customer Supplied and/or F12-LMS-Test-Acceptance-Document	Rotary Hydraulic Actuation up to 5 000 pound-feet; Dynamometer up to 5 000 pound-feet
Dynamic Loading (Force/Acceleration/ Strain)	Customer Supplied	Fatigue and/or durability	Customer Supplied and/or F12-LMS-Test-Acceptance-Document	Hydraulic Actuator up to 100 G's/measure up to 500 G's / 2 500 µε (micro-strain)
Dynamic Torsional Loading	Customer Supplied	Fatigue and/or durability	Customer Supplied and/or F12-LMS-Test-Acceptance-Document	Rotary Hydraulic Actuator up to 2 500 pound-feet; Dynamometer up to 5 000 pound-feet
Static Pressure	Customer Supplied	Fatigue and/or durability	Customer Supplied and/or F12-LMS-Test-Acceptance-Document	Hydraulic Pressure up to 20 000 psi
Dynamic Pressure	Customer Supplied	Fatigue and/or durability	Customer Supplied and/or F12-LMS-Test-Acceptance-Document	Hydraulic Pressure up to 10 000 psi



## II. Dimensional Inspection / Measurement

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	*DETECTION LIMIT/ RANGE/ EQUIPMENT
Linear Displacement	Customer Supplied	Fatigue and/or durability	Customer Supplied and/or F12-LMS-Test-Acceptance-Document	Hydraulic Actuator – up to 20 in / measure –up to 20 in
Angular/Rotary Displacement	Customer Supplied	Fatigue and/or durability	Customer Supplied and/or F12-LMS-Test-Acceptance-Document	Encoder: +/- 2 880 ° Inclinometer: +/- 90 ° (Digital Gage)

## III. Thermodynamic / Environmental

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	*DETECTION LIMIT/ RANGE/ EQUIPMENT
Temperature (Static and Dynamic)	Customer Supplied	Fatigue and/or durability	Customer Supplied and/or F12-LMS-Test-Acceptance-Document	Thermal Chambers (- 100 to 250) °F Natural Gas Burners up to 2 000 °F
Relative Humidity (Static and Dynamic)	Customer Supplied	Fatigue and/or durability	Customer Supplied and/or F12-LMS-Test-Acceptance-Document	Thermal Chamber Humidifier/Steam Generator (25 to 95) %RH

**Notes:**

1. \* = As Applicable
2. This scope is part of and must be included with the Certificate of Accreditation No. AT - 1312




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Vice President

