



EC Declaration of Conformity

We

Martel Electronics Corp.

3 Corporate Park Drive
Derry NH 03038 USA

declare under our sole responsibility that the products

BetaGauge PI and BetaGauge PI Reference Class Digital Pressure Test Gauge

to which this declaration relates is in accordance with the provision of the following directives, standard(s) or other normative document(s)

94/9/EC Equipment and protective systems intended for use in the potentially explosive atmospheres

89/336/EEC Electromagnetic compatibility

EN 60079-0:2009 Electrical apparatus for explosive gas atmospheres – Part 0: General requirements (IEC 60079-0:2007)

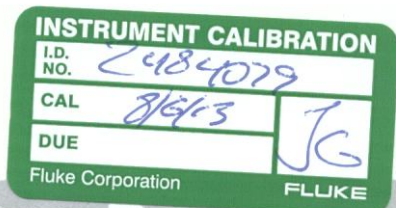
A GAP analysis was performed between the original standard (EN 60079-0:2006) to which the equipment was certified and the revised (now harmonized) standard EN 60079-0:2009. It has been determined for certification purposes that no changes in the "state of the art" apply to the equipment and therefore it is in conformity with the new harmonized standard.

EN60079-15: 2010 Explosive atmospheres – Part 15: Equipment protection by type of protection "n" (IEC 60079-15:2010)

A GAP analysis was performed between the original standard (EN 60079-15:2005) to which the equipment was certified and the revised (now harmonized) standard EN 60079-15:2010. It has been determined for certification purposes that no changes in the "state of the art" apply to the equipment and therefore it is in conformity with the new harmonized standard.

Derry, January 2013

Thomas C. Fatur, President



Report of calibration

This new instrument is calibrated and tested to verify compliance with Fluke's published specifications. The calibration uses measurement standards traceable to the National Institute of Standards and Technology (NIST), or to intrinsic standards of measurement, or derived by the ratio type of self-calibration techniques. This calibration complies with the requirements of ANSI/NCSL Z540-1-1994 part 2. Calibration and verification are performed at an ambient temperature of $23 \pm 5^\circ\text{C}$ and relative humidity of $< 70\%$.

Uncertainties of the measurements for this calibration are based upon 95% confidence limits. Any Test Uncertainty Ratio less than 4:1 appears under the TUR heading on the data record. Where the TUR meets or exceeds 4:1, the TUR field is blank.

Results from this calibration relate only to the unit calibrated. This report may not be reproduced, except in full, without the written approval of the undersigned Corporate Quality Manager.

The calibration interval desired by the customer is dependent on many factors beyond the scope of the manufacturer or calibration laboratory's control. Therefore, the due date that satisfies the technical and quality requirements of the customer can be entered on the calibration label provided. At the time of receipt, if more than 4 months has elapsed since the date of the original calibration, Fluke will provide an initial complimentary calibration at the customer's request. If you elect to utilize this service, please include a copy of your dated proof of purchase and a copy of this Report of Calibration, along with the unit on its return. Within the United States, please call Fluke Customer Support Services at 1-888-99-FLUKE (1-888-993-5853) to arrange for recalibration services. Outside the United States, please www.fluke.com for the location of the service center near you.

Juan E Guzman
Calibration Technician

Jason Shaffer
Quality Manager

Manufacturer: Fluke Corporation
Model: 2700G-G70M
Serial Number: 2484079
Temperature: 22.4°C
Relative Humidity: 52 %
Procedure Name: 2700G-G70M (10K): (1 year) FINAL PG7202, AMH-100
Procedure Revision: 1.0



Cal Date: August 6, 2013
Report Date: August 6, 2013
Calibration Status: PASS
Cal Site: Martel Electronics Corp.
Derry, NH

Standards Used

Asset	Manufacturer	Model Number	Description	Cal. Date	Due Date
949	Fluke Corporation	PG7202 Base	Piston Gauge Base	24-Aug-12	22-Aug-14
2765	Fluke Corporation	MS-AMH-100	Mass Set	24-Aug-12	22-Aug-14
1844	Fluke Corporation	PC-7200-1	Piston-Cylinder	24-Aug-12	22-Aug-14

Test Data

PARAMETER	RESULT	SPECIFICATION LIMITS		TUR
		LOW	HIGH	
0.0 to 10000.0 psi Verification.				
0.0_psi	0.0	-2.0	2.0	PASS
2000.0_psi	1999.9	1998.0	2002.0	PASS
4000.0_psi	4000.0	3998.0	4002.0	PASS
6000.0_psi	6000.1	5998.0	6002.0	PASS
8000.0_psi	8000.1	7998.0	8002.0	PASS
10000.0_psi	10000.0	9998.0	10002.0	PASS
8000.0_psi	8000.1	7998.0	8002.0	PASS
6000.0_psi	6000.2	5998.0	6002.0	PASS
4000.0_psi	4000.0	3998.0	4002.0	PASS

MEI/CAL RunTime Report: Calibration Results

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Calibration Report Number: 011427248407908062013

Fluke Calibration

PO Box 9090 Everett WA 98206.9090 USA

Telephone

877.355.3225

Fax

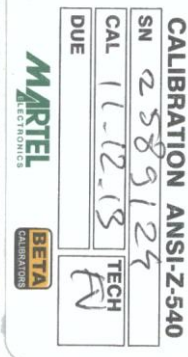
425.446.5716

Internet

www.flukecal.com

Report of calibration

PARAMETER	RESULT	SPECIFICATION LIMITS		TUR
		LOW	HIGH	
2000.0_psi	1999.9	1998.0	2002.0	PASS
0.0_psi	0.1	-2.0	2.0	PASS



REPORT OF CALIBRATION

This instrument is calibrated and tested to verify compliance with Martel's test specifications for all ranges and parameters required to meet 1 year performance specifications. The calibration uses measurement standards traceable to the National Institute of Standards and Technology (NIST). This calibration complies with the requirements of ANSI/NCSL Z540-1-1994 part 2. Calibration and verification are performed at an ambient temperature of $23 \pm 5^{\circ}\text{C}$ and relative humidity of $> 20\%$ to $< 70\%$.

Any test uncertainty (TUR) less than 4:1 appears under the TUR heading on the data record. Where the TUR meets or exceeds 4:1, the TUR field is blank.

Tom Fatur

Tom Fatur
President

Florin Visuian

Calibrated By
Florin Visuian

Manufacturer: Martel Corporation
Model: BETAGAUGE-PI-PRO-001C
Serial Number: 2589124

Cal Date: November 12, 2013
Report Date: November 12, 2013
Temperature: 21.6°C
Relative Humidity: 36 %

Calibration Procedure: Beta 1CV psi Gauge: (1 year) CAL/FIN VER AUTO/600 C 4+
Procedure Revision: 2.1

Standards Used

Asset	Manufacturer	Model Number	Description	Cal. Date	Due Date
610179	Mensor	600	Pressure Standard	12-Apr-13	12-Nov-13

Test Data

PARAMETER	RESULT	ACCEPTANCE LIMITS		TUR
		LOW	HIGH	
-1.0000 to 1.0000 psi Verification.				
1.0000_psi	0.9998	0.9990	1.0010	PASS
0.9000_psi	0.9000	0.8990	0.9010	PASS
0.8000_psi	0.7999	0.7990	0.8010	PASS
0.7000_psi	0.7001	0.6990	0.7010	PASS
0.6000_psi	0.5999	0.5990	0.6010	PASS
0.5000_psi	0.5001	0.4990	0.5010	PASS
0.4000_psi	0.4000	0.3990	0.4010	PASS
0.3000_psi	0.3001	0.2990	0.3010	PASS
0.2000_psi	0.1999	0.1990	0.2010	PASS
0.1000_psi	0.1000	0.0990	0.1010	PASS
0.0000_psi	0.0000	-0.0010	0.0010	PASS
-1.0000_psi	-1.0000	-1.0010	-0.9990	PASS
-0.0700 to 0.0700 Bar Verification.				
0.0689"Bar"	0.0689	0.0688	0.0690	PASS
0.0621"Bar"	0.0621	0.0620	0.0622	PASS
0.0552"Bar"	0.0552	0.0551	0.0553	PASS
0.0483"Bar"	0.0483	0.0482	0.0484	PASS
0.0414"Bar"	0.0414	0.0413	0.0415	PASS
0.0345"Bar"	0.0345	0.0344	0.0346	PASS
0.0276"Bar"	0.0276	0.0275	0.0277	PASS
0.0207"Bar"	0.0207	0.0206	0.0208	PASS
0.0138"Bar"	0.0138	0.0137	0.0139	PASS
0.0069"Bar"	0.0069	0.0068	0.0070	PASS

MET/CAL RunTime Report: Calibration Results

Calibration Report Number: 01412711122013 2589124

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PARAMETER	RESULT	ACCEPTANCE LIMITS		TUR
		LOW	HIGH	
0.0000"Bar"	0.0000	-0.0001	0.0001	PASS
-0.0689"Bar"	-0.0689	-0.0690	-0.0688	PASS
-7.0000 to 7.0000 kPa Verification.				
6.8948_kPa	6.8934	6.8878	6.9018	PASS
6.2053_kPa	6.2053	6.1983	6.2123	PASS
5.5158_kPa	5.5151	5.5088	5.5228	PASS
4.8263_kPa	4.8270	4.8193	4.8333	PASS
4.1369_kPa	4.1362	4.1299	4.1439	PASS
3.4474_kPa	3.4481	3.4404	3.4544	PASS
2.7579_kPa	2.7579	2.7509	2.7649	PASS
2.0684_kPa	2.0691	2.0614	2.0754	PASS
1.3790_kPa	1.3783	1.3720	1.3860	PASS
0.6895_kPa	0.6895	0.6825	0.6965	PASS
0.0000_kPa	0.0000	-0.0070	0.0070	PASS
-6.8948_kPa	-6.8948	-6.9018	-6.8878	PASS



Calibration Report

No : 13-C111402

Customer Name:	Qtech Technologies Co Ltd	Ambient Temp in °C:	24
Equipment Type:	Pressure Calibrator	Ambient Humidity in %:	57
Manufacturer:	TIS Instruments(S) Pte Ltd	Calibration Date :	1-Nov-13
Model:	EPC-350	Due Date:	31-Oct-14
Serial Number:	13-040836		

Approved By: Gwee Cheng Yong

Calibrated By: Toh Wee Hong
Calibration Officer

Standards Used

Asset	Manufacturer	Model Number	Description	Cal Date	Due Date
610010	Mensor	APC600	Calibrator	8-Aug-13	7-Aug-14
9571142	Martel	3001	Precision Calibrator	22-Feb-13	21-Feb-14

The described instrument has been calibrated at TIS Laboratory under the ambient conditions stated above. Calibration and verification are performed at an ambient temperature of 23 +/- 5 Degree C and relative humidity of >30% to <70%.

Method of Calibration

The method was carried out by comparison against the Reference Standards Traceable to National or International Standards.

Results of Calibration

The results of calibration are given on the attached calibration data sheet(s). The user should determine the suitability of the instrument for the intended use.

Range in bar: 0 ~ 30 bar

Accuracy: 0.015%FS

Test Data for 0 to 30 bar (Ascending & Decending)

Test Data	As Received			As Left			Acceptance Limits	
	Reading	Error	Status	Reading	Error	Status	Low	High
0.0000	0.0000	0.0000	Pass	0.0000	0.0000	Pass	-0.0047	0.0047
6.0000	5.9999	-0.0001	Pass	5.9999	-0.0001	Pass	5.9954	6.0047
12.0000	12.0001	0.0001	Pass	12.0001	0.0001	Pass	11.9954	12.0047
18.0000	18.0004	0.0004	Pass	18.0004	0.0004	Pass	17.9954	18.0047
24.0000	24.0007	0.0007	Pass	24.0007	0.0007	Pass	23.9954	24.0047
30.0000	30.0011	0.0011	Pass	30.0011	0.0011	Pass	29.9954	30.0047
24.0000	24.0009	0.0009	Pass	24.0009	0.0009	Pass	23.9954	24.0047
18.0000	18.0006	0.0006	Pass	18.0006	0.0006	Pass	17.9954	18.0047
12.0000	12.0003	0.0003	Pass	12.0003	0.0003	Pass	11.9954	12.0047
6.0000	6.0001	0.0001	Pass	6.0001	0.0001	Pass	5.9954	6.0047
0.0000	0.0000	0.0000	Pass	0.0000	0.0000	Pass	-0.0047	0.0047

Continued on next page...



Calibration Report

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Calibration Report continued...

Report No : 13-C111402

Serial Number: 13-040836

Range in BAR: 0 ~ -0.95 BAR

Accuracy: 0.015%FS Where FS = 31 (BAR)

Test Data for 0 to -0.95 BAR (Decending & Ascending)

Test Data	As Received				As Left			Acceptance Limits	
	Reading	Error	Status		Reading	Error	Status	Low	High
0.0000	0.0000	0.0000	Pass		0.0000	0.0000	Pass	-0.0047	0.0047
-0.2000	-0.2000	0.0000	Pass		-0.2000	0.0000	Pass	-0.2047	-0.1954
-0.4000	-0.4001	-0.0001	Pass		-0.4001	-0.0001	Pass	-0.4047	-0.3954
-0.6000	-0.6001	-0.0001	Pass		-0.6001	-0.0001	Pass	-0.6047	-0.5954
-0.8000	-0.8001	-0.0001	Pass		-0.8001	-0.0001	Pass	-0.8047	-0.7954
-0.9500	-0.9501	-0.0001	Pass		-0.9501	-0.0001	Pass	-0.9547	-0.9454
-0.8000	-0.8001	-0.0001	Pass		-0.8001	-0.0001	Pass	-0.8047	-0.7954
-0.6000	-0.6001	-0.0001	Pass		-0.6001	-0.0001	Pass	-0.6047	-0.5954
-0.4000	-0.4001	-0.0001	Pass		-0.4001	-0.0001	Pass	-0.4047	-0.3954
-0.2000	-0.2000	0.0000	Pass		-0.2000	0.0000	Pass	-0.2047	-0.1954
0.0000	0.0000	0.0000	Pass		0.0000	0.0000	Pass	-0.0047	0.0047

Range in DC mA: 0 ~ 24 mA

Accuracy: 0.025%FS

Test Data for 0 to 24 mA

Test Data	As Received				As Left			Acceptance Limits	
	Reading	Error	Status		Reading	Error	Status	Low	High
0.000	0.000	0.000	Pass		0.000	0.000	Pass	-0.004	0.004
4.000	3.999	-0.001	Pass		3.999	-0.001	Pass	3.996	4.004
8.000	7.999	-0.001	Pass		7.999	-0.001	Pass	7.996	8.004
12.000	11.999	-0.001	Pass		11.999	-0.001	Pass	11.996	12.004
16.000	15.999	-0.001	Pass		15.999	-0.001	Pass	15.996	16.004
20.000	20.001	0.001	Pass		20.001	0.001	Pass	19.996	20.004
24.000	24.000	0.000	Pass		24.000	0.000	Pass	23.996	24.004

Range in DC V: 0 ~ 30 V

Accuracy: 0.05%FS

Test Data for 0 to 30 V

Test Data	As Received				As Left			Acceptance Limits	
	Reading	Error	Status		Reading	Error	Status	Low	High
0.000	0.000	0.000	Pass		0.000	0.000	Pass	-0.015	0.015
5.000	5.000	0.000	Pass		5.000	0.000	Pass	4.985	5.015
10.000	10.000	0.000	Pass		10.000	0.000	Pass	9.985	10.015
15.000	15.000	0.000	Pass		15.000	0.000	Pass	14.985	15.015
20.000	20.000	0.000	Pass		20.000	0.000	Pass	19.985	20.015
25.000	25.000	0.000	Pass		25.000	0.000	Pass	24.985	25.015
30.000	30.000	0.000	Pass		30.000	0.000	Pass	29.985	30.015

*** End of Calibration Report ***



量測科技股份有限公司
Measurement Technology Co., Ltd.

CALIBRATION REPORT

儀器校正報告書

NO. F02-07-211-05

Issue Date

發佈日期 2013/7/29

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Applicant 申請者 台康生技股份有限公司			
Address 地址 新北市汐止區康寧街 169 巷 101 號			
Manufacturer 製造廠商 THOMMEN	Model No. 型號 HM28D0B20000	Serial No. 序號 1012963	
Description 儀器名稱 數字微差壓計		Received Date 收件日期 2013/7/19	
Procedure used 校正程序 MT-C-95-074	Calibration Date 校正日期 2013/7/26	Recommended Recal Date 建議再校日期 2014/7/25	
Condition of calibration 校正時之環境條件	Temp 溫度 22 °C ~ 24 °C	R.H. 相對濕度 47 % ~ 58 %	
Standards Employed 校正時使用之標準器			
Equipment 儀器名稱	Manufacturer 製造廠商	Model 型號	Serial Number 序號
DIFFERENTIAL PRESSURE CALIBRATOR	DHI	PPC3	130
Traceability 追溯機構	Report No. 報告號碼	Calibration Date 校正日期	Due Date 有效日期
NML	P130024A	2013/2/21	2014/2/20

MTC hereby certifies that the equipment noted herein has been compared with the above listed standards. The standards used to perform this calibration are traceable to the national measurement laboratory (NML) of ROC. The MTC laboratories are in compliance with ISO/IEC 17025.

量測科技股份有限公司特此證明本受校儀器已與上列標準器實施比較校正，上述之標準器均可追溯至中華民國國家度量衡標準實驗室。本公司所屬實驗室之運作與管理均符合 ISO/IEC 17025 之要求。



Dept. Manager
經理





一、校正結果：

	標準值(Pa)	器示值(Pa)	誤 差(Pa)
升壓	0.00	0.0	0.0
	625.00	627.2	2.2
	1250.00	1253.8	3.8
	1875.00	1880.6	5.6
	2450.00	2457.4	7.4

	標準值(Pa)	器示值(Pa)	誤 差(Pa)
降壓	2450.00	2457.2	7.2
	1250.00	1253.4	3.4

二、說 明：

(一) 本校正報告書僅對此校正件有效，且未獲得實驗室同意，此校正報告書不得摘錄複製，但全文複製除外。

(二) 誤 差 = 器示值 - 標準值

(三) 擴充不確定度：

0 Pa ~ 2450 Pa : 4.5 Pa

信賴水準為 95 %，涵蓋因子等於 2

(以 下 空 白)