

Gauge model - 3450 A

Gauge serial number - 000042

Reference Density standard counts: System 1 = 07607 System 2 = 01764

Reference Moisture standard count: 1135

Calibration Date: 04-25-2006 Print Date: 04-25-2006 Bay = 059

*** Density calibration count data ***

Depth (in)	Magnes 1782	Mag/Al 2214	Alumin 2700
BS	03496	02472	01842
02	06771	04360	02866
04	34330	26491	19378
06	24577	17327	11462
08	15770	10120	06123
10	09500	05666	03373
12	05729	03372	02152

*** Density performance parameters ***

Pos	A	B*1000	C	'Y'	Slope	Prec
BS	3.205	1.44772	-0.12255	2214	2.4	7.81
02	7.386	1.43049	-0.12744	2214	5.6	4.49
04	11.233	0.51731	0.85438	2214	19.3	3.13
06	11.589	0.79147	0.25388	2214	17.6	2.83
08	12.002	1.11252	0.00983	2214	13.5	2.88
10	13.077	1.51575	-0.10693	2214	8.9	3.29
12	12.828	1.86375	-0.12932	2214	5.4	4.21

*** Moisture calibration count data ***

Mag	Mag/Poly	S R
0	604	
0037	0700	0687

*** Moisture performance parameters ***

E	F*1000	Rat	Prec	S R	Exerr
0.03260	0.96712	3.11	5.68	-11.8	14.0

***** Density Standard Decay Sheet *****

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Ref. std. cnt., System 1 = 7607 System 2 = 1764

Range of projected density standard counts at future dates, System 1

Date	Lower Limit of Projected density Standard Count	Upper Limit of Projected density Standard Count
-----	-----	-----
05-01-2006	7528	7680
06-01-2006	7513	7665
07-01-2006	7499	7651
08-01-2006	7485	7636
09-01-2006	7470	7621
10-01-2006	7456	7607
11-01-2006	7442	7592
12-01-2006	7428	7578
01-01-2007	7413	7563
02-01-2007	7399	7548
03-01-2007	7386	7535
04-01-2007	7371	7520
05-01-2007	7357	7506

Range of projected density standard counts at future dates, System 2

Date	Lower Limit of Projected density Standard Count	Upper Limit of Projected density Standard Count
-----	-----	-----
05-01-2006	1746	1781
06-01-2006	1742	1778
07-01-2006	1739	1774
08-01-2006	1736	1771
09-01-2006	1732	1767
10-01-2006	1729	1764
11-01-2006	1726	1760
12-01-2006	1722	1757
01-01-2007	1719	1754
02-01-2007	1716	1750
03-01-2007	1713	1747
04-01-2007	1709	1744
05-01-2007	1706	1741

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*** Thin layer calibration count data ***

	Mag 1782 -----	Mg/Al 2214 -----	Alum 2700 -----	Std. count -----	BG ---
System 1	18374	16123	13782	07607	000
System 2	03496	02472	01842	01764	000

*** Gauge Parameters ***

	A -----	B*1000 -----	C -----	Prec -----
System 1:	-0.62865	-0.450206	-3.80423	7.52
System 2:	8.53083	0.856935	-0.09492	9.12

** K Factor Parameters **

System 1 -----	Average -----
P1	1.34047
Q1	0.07730
R1	0.00351
System 2 -----	Average -----
P2	1.09001
Q2	0.04050
R2	0.00274

Thickness (mm) -----	DT Precision -----
25.4	16.6
38.1	11.3
50.8	9.2
63.5	8.2
76.2	7.6
88.9	7.0
101.6	6.5

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*** Factory Calibration Re-Entry Constants ***

The factory calibration constants can be re-entered into the gauge if the need arises. This capability is accessed through the Extended Functions menu. When re-entering the calibration constants, enter the values exactly as shown below:

E = 0.032599

F = 0.967121

Depth	A	B	C
BS	3.2048	1.447716	-0.122547
02	7.3856	1.430489	-0.127441
04	11.2326	0.517314	0.854384
06	11.5892	0.791474	0.253881
08	12.0016	1.112521	0.009831
10	13.0770	1.515750	-0.106933
12	12.8278	1.863755	-0.129323

A1 = -0.62865

B1 = -.0072114

C1 = -3.80423

A2 = 8.53083

B2 = .0137264

C2 = -0.09492

P1 = 1.340470

Q1 = 1.963530

R1 = 0.003512

P2 = 1.090012

Q2 = 1.028667

R2 = 0.002742

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The true gravimetric densities of the metallic blocks used in this calibration are listed on Page 1 of this document. To account for the influence of the chemical composition of these blocks on instrument response (as prescribed in ASTM D2922, Section A1), these gravimetric densities are multiplied by chemical correction factors prior to the calculation of the density calibration parameters likewise shown on Page 1 of this document. These correction factors are 0.988 for magnesium, 0.974 for magnesium/aluminum, and 0.964 for aluminum.

To account for the influence of the chemical composition of these blocks on instrument response (as prescribed in ASTM D2922, Section A1), these gravimetric densities are multiplied by chemical correction factors prior to the calculation of the thin layer calibration parameters shown on Page 3 of this report. These correction factors are 0.988 for magnesium, 0.989 for magnesium/aluminum, and 0.949 for aluminum.

Statement of Traceability:

"The above referenced equipment has been calibrated by the manufacturer to established and documented procedures. Density values for the standards used in the calibration of this equipment were established using instruments whose measurements are traceable to the National Institute of Standards and Technology. Test procedures and supporting documentation are available upon request."

This instrument was found to be mechanically sound and electronically stable both prior to and after its calibration. All data listed in the preceding four pages of this report are applicable to this instrument only. This instrument was calibrated by PM on 04-25-2006 using the 3-Block Re-calibration. This calibration was performed at:

Troxler Electronic Laboratories
2000 East Randol Mill Road
Suite 611
Arlington, TX 76011

Special considerations and limitations of use for this device and its calibration are described in the Manual of Operation and Instruction provided with this instrument.

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