



SOUTHWEST RESEARCH INSTITUTE®

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Institute Quality Systems
Institute Calibration Laboratory
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Calibration Laboratory
Certificate #0972-01

Certificate of Calibration

Submitted By: DIV20

Address: B51

Contact: DON BANNON

Manufacturer / Model: OHAUS / TS400D

Description: BALANCE

Serial No: 2883

Asset No: 002345

Procedure: BALANCES & SCALES - 1 DEC 06

Work Order: 303082139

Date Issued: Jul 3, 2008

Calibration Date: Jul 3, 2008

***Calibration Due:** Jan 3, 2009

Calibration Location: B57

Environment: Temp. 72.0°F Hum. 45 %RH

****Data Type:** FOUND-LEFT

DivID/Location: N/A

This certificate documents traceability to the National Institute of Standards and Technology (NIST) and the International System of Units (SI). The Laboratory quality system conforms to ISO/IEC 17025, 2005, ANSI/NCSL Z540-1-1994 and relevant requirements of the ISO 9000-2000 standard. This certificate shall not be reproduced, except in full, without the written approval of the Southwest Research Institute Calibration Laboratory. This certificate shall not be used to claim product endorsement by Southwest Research Institute, American Association for Laboratory Accreditation (A2LA) or any agency of the U. S. Government. Results of this calibration relate only to the instrument described above at the time of calibration and does not imply any long term stability of the instrument.

*Determined by the customer, does not imply the instrument will remain within tolerance as any number of factors may cause an out-of-tolerance condition before this date. **Found/Left = adjustment and/or repair was not required, As Left = adjusted and/or repaired was required. The client has sole responsibility for determination of in-/out-of-tolerance or compliance/noncompliance. See Remarks or attached Measurement Report with the same Work Order number for data.

Reported uncertainty calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM) and represents an expanded uncertainty with a coverage factor of k=2 to approximate a 95% confidence level.

Remarks: None

Standards Used

Asset No.	Serial No.	Manufacturer	Model	Description	Cal Due
001708	C863	RICE LAKE	10G	WEIGHT, CLASS S	Aug 09, 08
001709	C864	RICE LAKE	20G	WEIGHT, CLASS 1	Aug 09, 08
001710	C865	RICE LAKE	20G	WEIGHT, CLASS 1	Aug 09, 08
001711	C866	RICE LAKE	50G	WEIGHT, CLASS 1	Aug 09, 08
001712	C867	RICE LAKE	100G	WEIGHT, CLASS S	Aug 09, 08
001713	C868	RICE LAKE	200G	WEIGHT, CLASS S	Aug 09, 08
001714	C869	RICE LAKE	200G	WEIGHT, CLASS S	Aug 09, 08

Reviewed by: () srk () mar (x) wgh

Measurements by: Mark Romero
Metrology Technician

Southwest Research Institute
Calibration Laboratory
Measurement Report

Work Order:	303082139	Mfr:	Ohaus	Technician:	Mark Romero
Asset No:	002345	Model:	TS400D	Cal Date:	03-Jul-08
Serial No:	2883	Type:	Balance		

Remarks:

Ambient Conditions 72 °F 45 % RH 14.30 PSIA

Function/Range	Applied	TI Reading	Difference	+/-Limit	+/-Uncertainty	Found/Left
	grams	grams	grams	grams	grams	Result
Corner Load						
Reference	400.00					
Front	0.00	0.00	0.00	0.02		Pass
Rear	0.00	0.00	0.00	0.02		Pass
Left	0.00	0.00	0.00	0.02		Pass
Right	0.00	0.00	0.00	0.02		Pass
Repeatability						
1	200.00	200.00				
2	200.00	200.00				
3	200.00	200.00				
4	200.00	200.00				
5	200.00	200.00				
6	200.00	200.00				
7	200.00	200.00				
8	200.00	200.00				
9	200.00	200.00				
10	200.00	200.00				
Std Deviation		0.000		0.020		Pass
Linearity	0.00	0.00	0.00	0.02	0.013	Pass
	40.00	40.00	0.00	0.02	0.013	Pass
	80.00	80.00	0.00	0.02	0.013	Pass
	120.00	120.00	0.00	0.02	0.013	Pass
	160.00	160.00	0.00	0.02	0.013	Pass
	200.00	200.00	0.00	0.02	0.013	Pass
	240.00	240.00	0.00	0.02	0.013	Pass
	280.00	280.00	0.00	0.02	0.013	Pass
	320.00	320.00	0.00	0.02	0.013	Pass
	360.00	360.00	0.00	0.02	0.013	Pass
	400.00	400.00	0.00	0.02	0.013	Pass

End of Report