



ENGINEERING AND TEST DIVISION
CHURCH STREET, BOHEMIA, LONG ISLAND, NEW YORK 11716 (631) 589-6300

TEST REPORT NO.: DTB04R08-0608


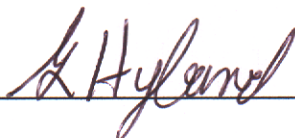
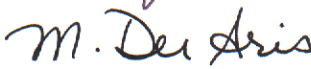
DAYTON T. BROWN, INC. JOB NO.: 410284-00-000

CUSTOMER: MEGA FORTRIS GROUP
P.O. BOX 934
DAYTON, NJ 08810
USA

SUBJECT: FREIGHT CONTAINER MECHANICAL SEAL CLASSIFICATION TESTING
CONDUCTED ON TWENTY FIVE INTERNATIONAL CONTAINER BOLT
SEALS, MODEL NO. KLC_WH, SERIAL NOS. 000001 THROUGH 000025

PURCHASE ORDER NO.: 1049

ATTENTION: MR. ADRIAN NG

PREPARED BY	 J. BENINCASA
TEST ENGINEER	 G. HYLAND
QUALITY DEPARTMENT	 M. De Aris
DATE	12 JUNE 2008

INFORMATION CONTAINED HEREIN MAY BE SUBJECT TO EXPORT CONTROL LAWS. REFER TO INTERNATIONAL TRAFFIC IN ARMS REGULATION (ITAR) OR THE EXPORT ADMINISTRATION REGULATION (EAR) OF 1979

THE DATA CONTAINED IN THIS REPORT WAS OBTAINED BY TESTING IN COMPLIANCE WITH THE APPLICABLE TEST SPECIFICATION AS NOTED





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1.0 ABSTRACT

This test report details the results of Freight Container Mechanical Seal Classification Testing conducted on International Container Bolt Seals model no. KLC_WH under reference (a) to the requirements of reference (c).

Results of the tests are detailed in the following text.

Exceptions/deviations during tests are as follows: None

Test room ambient conditions: 24.2°C and 47.6%RH

Test data pertinent to this program will remain on file at Dayton T. Brown, Inc. for 90 days.

The testing and results contained in this report are in accordance with the testing requirements called out in ISO/PAS 17712 and are only applicable to the specific units identified in the test report and do not address any individual manufacturer's compliance or non-compliance with all the requirements of ISO/PAS 17712, which are the sole responsibility of each manufacturer and not part of the testing performed and recorded in this test report.

Dayton T. Brown, Inc. is not involved in any production quality inspections. All tests are based on the samples that are selected by the manufacturer and provided to Dayton T. Brown, Inc. without any Dayton T. Brown, Inc. involvement in said selection.

Dayton T. Brown, Inc. performs testing to ISO/PAS 17712 under laboratory conditions. These tests do not measure and are not intended to measure all possible applications or installations of the seal assembly or components. In that event, the report will describe the particular application tested in detail. Dayton T. Brown, Inc. is not responsible for actual performance of any seal assembly as installed in any application.

This report shall not be reproduced, except in full, without the written approval of Dayton T. Brown, Inc.

2.0 REFERENCES

- (a) Customer Purchase Order No.: 1049
- (b) Dayton T. Brown, Inc. Job No.: 410284-00-000
- (c) Test Specification: ISO/PAS 17712:2006(E)

3.0 SEAL CLASSIFICATION

ISO/PAS 17712:2006(E): (H)-High Security



4.0 ADMINISTRATIVE INFORMATION

Customer	Mega Fortris GROUP P.O. Box 934 Dayton, NJ 08810 USA
Sample Type	International Container Bolt Seal
Sample Name	The Klicker Seal
Model No.	KLC_WH
Serial Nos.	000001 through 000025
Quantity Received	30
Quantity Tested	25
Date Received	28 May 2008
Dates Tested	29 May through 2 June 2008

5.0 TEST PROGRAM OUTLINE

Test	Test Item Description	Results
Tensile Test	International Container Bolt Seals, Serial Nos. 000001 through 000005	See Page 5
Shear Test	International Container Bolt Seals, Serial Nos. 000006 through 000010	See Page 7
Bending Test	International Container Bolt Seals, Serial Nos. 000011 through 000015	See Page 9
Impact Test	International Container Bolt Seals, Serial Nos. 000016 through 000025	See Page 11
Test Equipment List and Test Item Photo	International Container Bolt Seals	See Page 14

6.0 Test Results

Tensile Test and Results

TEST REQUIREMENT

The Tensile test shall be conducted in accordance with reference (c).

TEST RESULTS

A pretest visual inspection of the test items revealed no anomalies.
 All testing was performed in accordance with the referenced specification.
 A post-test visual inspection of the test items revealed no anomalies due to testing.

TEST DATA

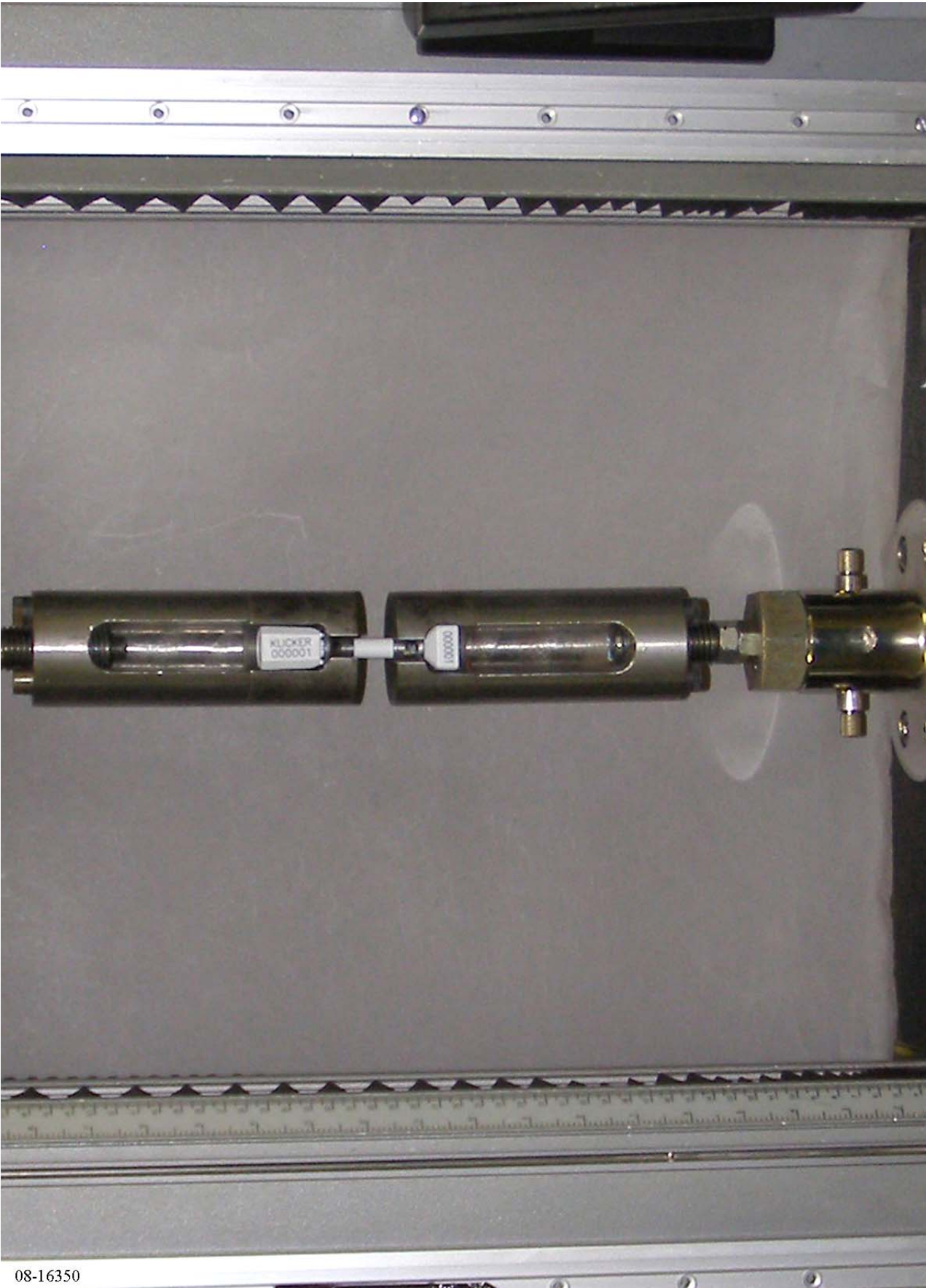
Date: 2 June 2008

Tensile Test @ Room Temperature			
Specimen Number	Load kN	Classification Rating	Remarks
000001	13.10	H	N/A
000002	19.14	H	N/A
000003	14.95	H	N/A
000004	16.64	H	N/A
000005	13.63	H	N/A

Tech: AP

Classification Key

Rating	Load to Failure
High Security (H):	10.0 kN
Security (S):	2.27 kN
Indicative (I):	<2.27 kN



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TYPICAL PHOTO OF THE TENSILE TEST SET UP

2 JUNE 2008

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Shear Test and Results

TEST REQUIREMENT

Shear test shall be conducted in accordance with reference (c).

TEST RESULTS

A pretest visual inspection of the test items revealed no anomalies.
 All testing was performed in accordance with the referenced specification.
 A post-test visual inspection of the test items revealed no anomalies due to testing.

TEST DATA

Date: 2 June 2008

Shear Test @ Room Temperature			
Specimen Number	Load (kg-f)	Classification Rating	Remarks
000006	>341	H	N/A
000007	>341	H	N/A
000008	>341	H	N/A
000009	>341	H	N/A
000010	>341	H	N/A

Tech: JB

Classification Key

Rating	Load to Failure
High Security: (H):	341 kg-f
Security (S):	227 kg-f
Indicative (I):	<227 kg-f



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TYPICAL PHOTO OF THE SHEAR TEST SET UP

2 JUNE 2008
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Bending Test and Results

TEST REQUIREMENT

Bending test shall be conducted in accordance with reference (c).

TEST RESULTS

A pretest visual inspection of the test items revealed no anomalies.
 All testing was performed in accordance with the referenced specification.
 A post-test visual inspection of the test items revealed no anomalies due to testing.

TEST DATA

Date: 2 June 2008

Bending Test @ Room Temperature			
Specimen Number	Load Force (Nm)	Classification Rating	Remarks
000011	64.32	H	N/A
000012	59.26	H	N/A
000013	59.94	H	N/A
000014	70.51	H	N/A
000015	50.73	H	N/A

Tech: JB

Classification Key

Rigid Seals

Rating Moment to Failure

High Security (H): 50 Nm
 Security (S): 22 Nm
 Indicative (I): <22 Nm



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TYPICAL PHOTO OF THE BENDING TEST SET UP

2 JUNE 2008

FILE NO. 08-16352





Impact Test and Results

TEST REQUIREMENT

Impact test shall be conducted in accordance with reference (c).

TEST RESULTS

A pretest visual inspection of the test items revealed no anomalies.
 All testing was performed in accordance with the referenced specification.
 A post-test visual inspection of the test items revealed no anomalies due to testing.

TEST DATA

Date: 29 May 2008

Impact Test @ 18°C					
Specimen Number	Number of successful Impacts per load (J)			Classification	Remarks
	13.56	27.12	40.68	Rating	
000016	5	5	5	H	N/A
000017	5	5	5	H	N/A
000018	5	5	5	H	N/A
000019	5	5	5	H	N/A
000020	5	5	5	H	N/A

Tech: MM

Classification Key

Rating Load to Failure
 (5 impacts at each load)

High Security (H): 40.68 J
 Security (S): 27.12 J
 Indicative (I): <27.12 J



Impact Test and Results

TEST DATA – (Continued)

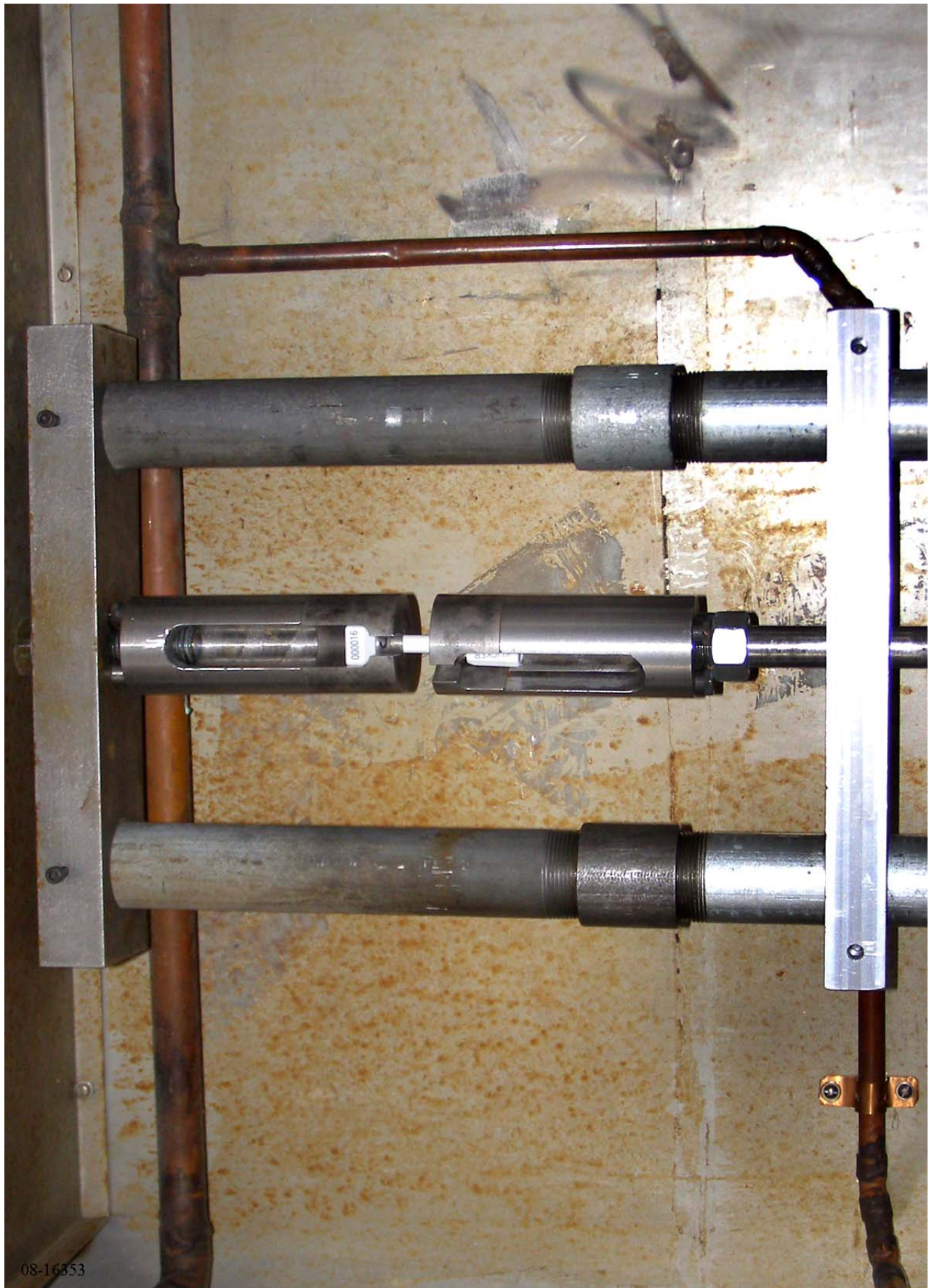
Date: 29 May 2008

Impact Test @ -27°C					
Specimen Number	Number of successful Impacts per load (J)			Classification	Remarks
	13.56	27.12	40.68	Rating	
000021	5	5	5	H	N/A
000022	5	5	5	H	N/A
000023	5	5	5	H	N/A
000024	5	5	5	H	N/A
000025	5	5	5	H	N/A

Tech: AS

Classification Key

Rating	Load to Failure (5 impacts at each load)
High Security (H):	40.68 J
Security (S):	27.12 J
Indicative (I):	<27.12 J



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TYPICAL PHOTO OF THE IMPACT TEST SET UP

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Test equipment utilized for the program reported herein was within its assigned interval of calibration. Details are on file at Dayton T. Brown, Inc. and will be made available upon request.



TEST: FREIGHT CONTAINER MECHANICAL SEAL CLASSIFICATION TESTING						
Item	Manufacturer	Model	DTB No.	Accuracy	Last Cal Date	Cal Due Date
THERMOTRON, 275	THERMOTRON	FX-82-CHV-25-25	04E-006	N/A	06/10/1997	N.C.R.
CONDITIONING ROOM	DAYTON T. BROWN	N/A	04S-001	N/A	-	N.C.R.
RECORDER, CHART TRULINE	HONEYWELL	DR4500	12-12	TYPE T \pm 0.7°F, RH \pm 0.2 RH	09/21/2007	09/21/2008
LOGGER, RH AND TEMPERATURE	VERITEQ	5000A-RH/T	12-31	\pm 5% RH 11 TO 80%, \pm 1°F 40 TO 80°F	10/04/2007	09/28/2008
CONTROLLER, ENVIRONMENT SYSTEM	JC SYSTEMS	620	25-55	RTD \pm 1.08°F, RH \pm 1% RH	03/18/2008	09/14/2008
TESTER, UNIVERSAL TENSILE	INSTRON	4201	29-1	\pm 0.5%	10/17/2007	10/12/2008
TESTER, UNIVERSAL TENSILE	INSTRON	5569	29-2	\pm 1% OF READING	10/17/2007	10/12/2008
WEIGHT, DEAD BLOW	DAYTON T. BROWN	JB-1	38-55	0.01 KGRAMS	05/06/2008	05/02/2010
GAUGE, DIGITAL FORCE 50 LBS. FULL SCALE	CHATILLON	DFS-050	61-8	VENDOR	05/01/2008	10/26/2008
TAPE MEASURE, 10'	STANLEY	33-328	68-271	\pm 1 DIV	04/16/2008	N.P.C.R.
CALIPER, DIGIMATIC 4"	MITUTOYO	CD-4" CS	68-273	\pm .0005"	06/05/2007	06/01/2008
PROTRACTOR, DIGITAL	PRO PRODUCTS	PRO 3600	68-279	\pm 0.2° OF RANGE	04/23/2008	04/19/2009
FIXTURE, SHACKLE CUTTING AND BLADES	DAYTON T. BROWN	ISO TC 104	68-318	MFR	12/21/2007	12/21/2008



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INTERNATIONAL CONTAINER BOLT SEAL MODEL KLC_WH

2 JUNE 2008

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