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CERTIFICATION TEST REPORT

WICHITECH
8980 Route 108, Bay L
Columbia, MD 21045

REPORT NO. 44986-01
CUSTOMER P.O. NO. 002923
CONTRACT N/A
NUMBER OF PAGES 5
DATE October 11, 1995

1.0 SPECIMEN: Heat Bonding System

2.0 MODEL NUMBER: HB-1

3.0 SERIAL NUMBER: HB10005

4.0 REQUIREMENTS

The Heat Bonding System shall be subjected to an Explosive Atmosphere Test in accordance with MIL-STD-810E, Method 511.3, Procedure I. The test shall be conducted at site ambient altitude and temperature.

5.0 TEST PROCEDURES AND RESULTS

The Heat Bonding System was placed in the Explosive Atmosphere Test Chamber and connected to a 120 VAC, 60 Hz, 30 Ampere power source.

STATE OF ALABAMA }
COUNTY OF MADISON }SS

R. L. Porter, Department Manager, being duly sworn, deposes and says: The information contained in this report is the result of complete and carefully conducted testing and is to the best of his knowledge true and correct in all respects.

R. L. Porter

SUBSCRIBED and sworn to before me this 16th day of Oct, 1995

Susan A. Kosuba SEAL
Notary Public in and for the State of Alabama at Large

My Commission expires September 1, 1997

Wyle shall have no liability for damages of any kind to person or property, including special or consequential damages, resulting from Wyle's providing the services covered by this report.

PREPARED BY J. H. Powell 10-13-95
J. H. Powell, Project Engineer

APPROVED BY B. Sandlin 10-13-95
B. Sandlin, Engineering Supervisor

WYLE Q. A. R. G. Thomas 10-16-95
R. G. Thomas, Q. A. Manager

5.0 TEST PROCEDURES AND RESULTS (Continued)

Following completion of the pre-test functional check, the chamber was sealed. An air-fuel (N-Hexane) mixture ratio of 13 to 1 was vaporized within the chamber for three minutes. While maintaining these conditions, the Heat Bonding System was exercised as follows.

- Step 1: Ascertained that the "main power" switch was in the "Off" position.
- Step 2: Ascertained that the thermocouple cable was plugged into the position I-J receptacle at the top of the unit.
- Step 3: Turned the unit "On" by moving the "Main Power" switch to the "On" position. The unit took approximately 10 seconds to self test and then displayed the word "test" on the screen.
- Step 4: Pressed "ENTER" = Screen showed "Tcl = Temp".
- Step 5: Pressed "ENTER" = Screen showed "ASSIGN".
- Step 6: Pressed "ENTER" = Screen showed "AcTc = 1 → 1".
- Step 7: Pressed "ENTER" = Screen showed "PROGRAM".
- Step 8: Pressed "ENTER" = Screen showed "123".
- Step 9: Pressed "ENTER" = Screen showed "START".
- Step 10: Pressed "ENTER" = Cure started.
- Step 11: Observed "No Heat" alarm.
- Step 12: Pressed "ENTER" to override "No Heat" alarm.
- Step 13: Stopped cure by pressing Down Arrow key and then the "ENTER" button twice.
- Step 14: Repeated Steps 3 through 13.

Following completion of the test, and prior to opening the chamber door, the potential explosiveness of the air-vapor mixture was verified by igniting a sample of the mixture with a spark plug.

The Heat Bonding System successfully completed the Explosive Atmosphere Test with no anomalies noted.

Photograph 1 on Page 4 shows the test setup.

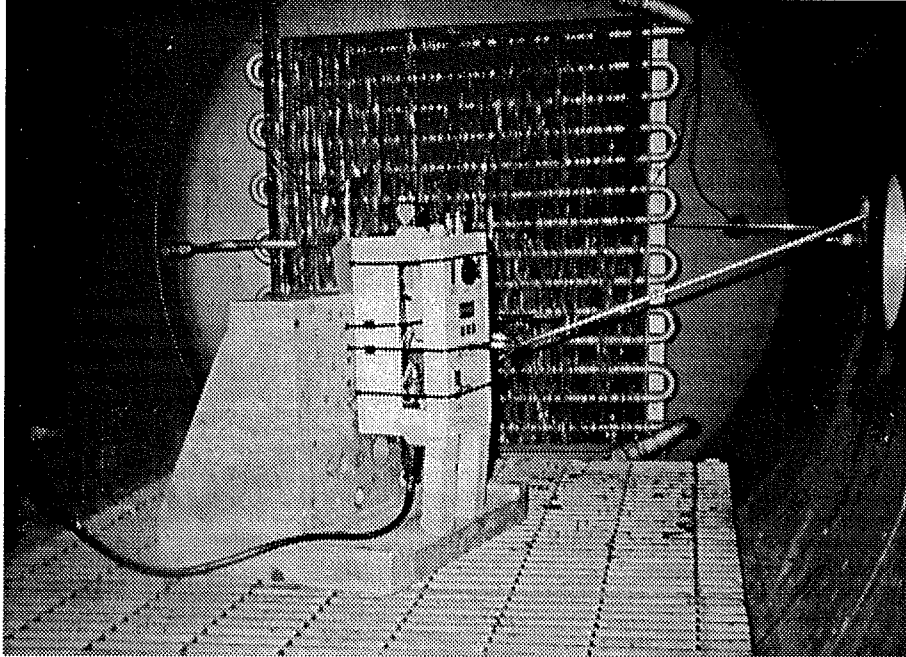
The Instrumentation Equipment Sheet is presented on Page 5.

6.0 INSTRUMENTATION

All instrumentation, measuring, and test equipment used in the performance of this test program were calibrated in accordance with Wyle Laboratories' Quality Assurance Program, which complies with the requirements of ANSI/NCSL Z540-1, ISO 10012-1 and Military Specification MIL-STD-45662A. Standards used in performing all calibrations are traceable to the National Institute of Standards and Technology (NIST) by report number and date. When no national standards exist, the standards are traceable to international standards or the basis for calibration is otherwise documented.

7.0 QUALITY ASSURANCE

All work performed on this program was completed in accordance with Wyle Laboratories' Quality Assurance Program.



Photograph 1. Test Setup

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INSTRUMENTATION EQUIPMENT SHEET

F 1

DATE: 10/04/95
 TECHNICIAN: J. LAXSON

JOB NUMBER: 44986-00
 CUSTOMER: WICHITECH

TEST AREA: ENV CH 40
 TYPE TEST: EXP-AT

NO.	INSTRUMENT	MANUFACTURER	MODEL#	SERIAL #	WYLE #	RANGE 1	ACCURACY 1	CALDATE	CALDUE
1	RECORD TEMP	HONEYWELL	DR45AT	447Y418973300001	112289	MULTI	1°F	08/04/95	11/02/95
2	PRESS IND/COND	SENSOTEC	GM	45118	112349	5 VOLTS	.03%	04/26/95	10/23/95
3	PRESS XDUCER	SENSOTEC	TJE/713	445166	112347	50 PSIA	.1% FS	04/26/95	10/23/95

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION

J. Laxson 10-4-95

CHECKED & RECEIVED BY

J. Powell 10-4-95

Q.A.

T. Hamilton 10-4-95