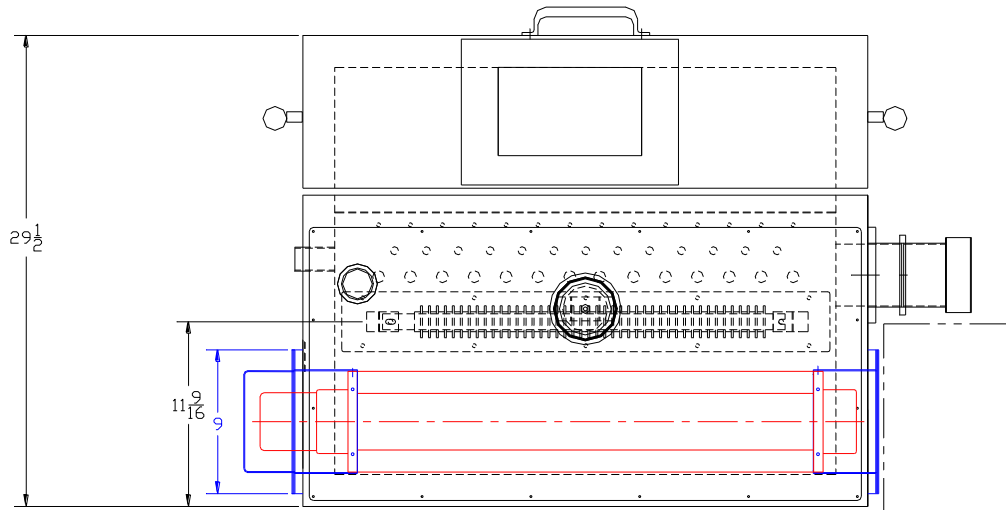




HCH-1 Alternator Test Chamber



HCH-1



HCH-1 Alternator Test Chamber 1

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1. PERFORMANCE

1.1. Temperature:

- 1.1.1. **Range Standard:** Ambient to +150° C
- 1.1.2. **Range LN2:** -40° C to +150° C
- 1.1.3. **Product Change Rate:** 5° C/min (-25° to +100° C).
- 1.1.4. **Stabilization:** ± 1° C after stabilization. (Stabilization < 2 minutes).
- 1.1.5. **Cooling:** Liquid Nitrogen (LN2) direct injection optional.
- 1.1.6. **Heating:** 2KW FireBar Heater.
- 1.1.7. **Thermocouples:** One (1) air, one (1) for specimen.

2. Chamber Construction

2.1. Interior:

- 2.1.1. **Front of Door:** 31.3"W x 21.7"D x 19.9"H
- 2.1.2. **Front of Chamber:** 31.3"W x 13.8"D x 19.9H
- 2.2. **Exterior:** 35.4"W x 29.4"D x 30.4"H
- 2.3. **Doors:** One (1) Pull Up air shock assisted
- 2.4. **Windows:** One (1) Multi-Pane Window 7"x9" Viewable
- 2.5. **Light:** One (1) light 24 VDC
- 2.6. **Ports:** Two (2). One (1) 2" for Ln2 Option, One (1) 1.5" for end user
- 2.7. **Insulation:** Hanse's exclusive multilayer staggered insulation for superior thermal and noise insulation.
- 2.8. **Weight:** Approximately 500 lbs

3. Instrumentation

- 3.1. **Thermocouples:** One (1) for temperature control and one (1) for product response. (Option Electrical Package)
- 3.2. **Serial Ports:** RS232/485 MODBUS (Option Electrical Package)

4. Software

- 4.1. **WatView™:** For temperature programming and control. (Option)

5. Safety

- 5.1. **Door Interlocks:** Door Interlocks shut off system operation. (User Supplied)
- 5.2. **Emergency Power Off (EPO):** EPO activation shuts off system operation (Option Electrical Package)
- 5.3. **Over/Under Limit:** FM approved limit with stand-alone sensor placed in air. (Option)



6. Utilities

- 5.4. **Electric:** 240V 1 Ph 20 FLA Max (Motor, Heater, Fans)
- 5.5. **Liquid Nitrogen:** 3/8" (25mm) Supply 40/50 psig (Option)
- 5.6. **Compressed Air:** 3/8" Supply 100 psig, 10 SCFM (Option)
- 5.7. **Exhaust Ports:** One (2) 4" Dia. vented to outside with Ln2 Option)

6. Installation

- 6.1. The customer is responsible for unloading system and rigging into place.
- 6.2. Utilities and services necessary for system operation, electrical, LN2, compressed air, exhausts, etc. shall be provided by customer and connected to the system.
- 6.3. Any leasehold improvements or building alterations are the responsibility of the customer.

7. Options

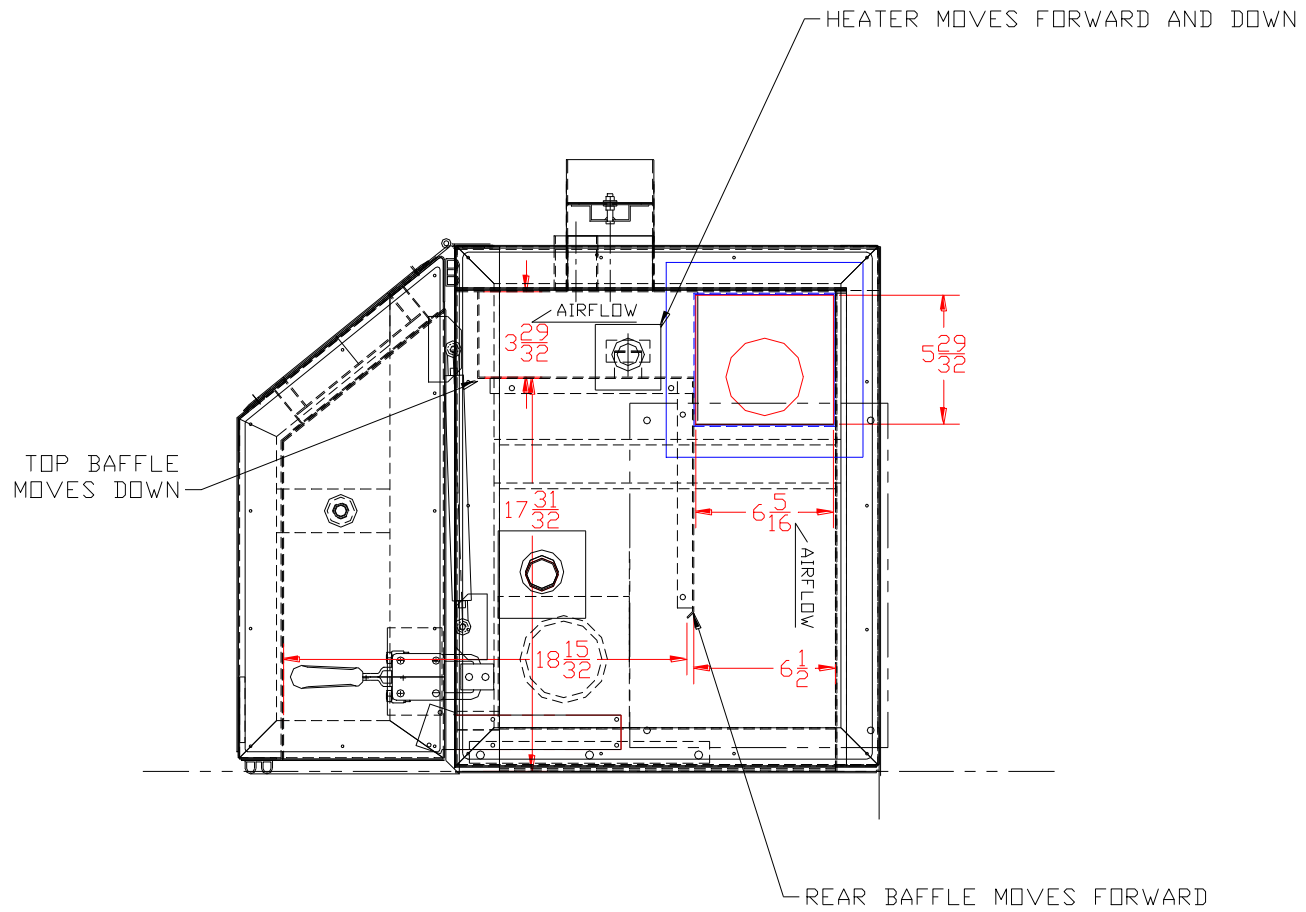
- 7.1. **Electrical Panel:** Full Electrical Panel with Watlow F4 and all power relays to run chamber
- 7.2. **LN2 Cooling:** All Liquid Nitrogen Valves, Over Pressures, and Nozzles and pipe

Note: Specifications are subject to change without notice.

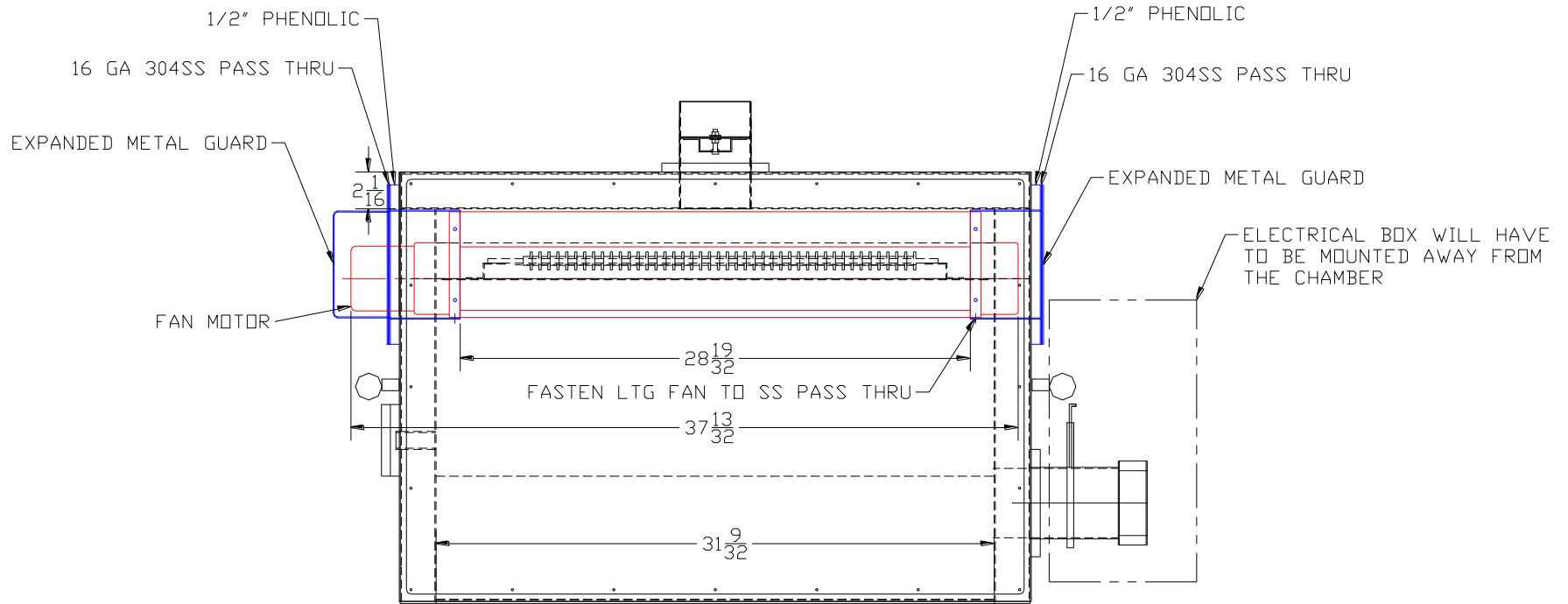


45			ALUM TAPE FOR INSULATION (6'/CHAMBER)
44	3336-00	1	CENTER SHAFT SUPPORT BRACKET
43	3335-00	1	CENTER SHAAFT SUPPORT BEARING
42		8	1/2" PHENOLIC (4" x 4")
41		2	1/2" PHENOLIC (6" x 6")
40	3331-00	1	BRACKET FOR MOTOR GUARD
39	3282-01	1	GUARD FOR FLANGE BEARING
38		1	ø4" SS TUBE x .06" WALL x 2-1/2" LONG
37	DUCTFL		1"x48"x120 DUCT BOARD (30 SQ. FT.)
36	CERA18		1"x24"x50' 8# CERABLANKET (30 SQ. FT.)
35		1	WATLOW CONTROL PANEL
34	3163-01	1	BACK BAFFLE
33	3162-01	1	TOP BAFFLE
32	3173-00	1	MOUNTING PLATE FOR MUFFIN FAN
31		1	1/8" x 2" SILICONE STRIP
30	3180-01	1	MOTOR MOUNTING PLATE
29		1	TEMPERED 1" GLASS (7-1/2" x 9-1/2")
28	1582A59	1	STAINLESS HINGE 35-1/4" LONG
27	19155K63	1	QD POWER CORD WITH 36" WIRE LEADS
26	19155K96	1	STEEL FAN GUARD
25	1939K26	1	MUFFIN FAN WITH STEEL BLADES, 24 VDC
24	3185-01	1	SLIDE GATE ASSEMBLY
21	070-050	1	EUCHNER 4121 ACTUATOR
20	TP4-4121	1	EUCHNER 4121 SAFTY INTERLOCK
19	9512K83	2	ø13mm BALL STUD, 5/16-18
18	9416K75	2	ø13mm BALL SOCKET FOR GAS SPRING
17	9416K145	2	GAS SPRING (7.87" STROKE) 125#
16	3095-00	1	HEATER ASSEMBLY
15	3289-00	2	BLOWER WHEEL ASSEMBLY
14		1	1/2" DIA SS SHAFT x 42.5" LONG
13	6186K118	1	V-BELT, A-21
12	6568K1	1	V-BELT ADJUSTABLE PULLEY 1/2" DIA BORE
11	6204K13	1	V-BELT PULLEY 1/2" DIA BORE
10	6665K21	2	FLANGE BEARING 1/2" DIA BORE
8	5990K41	1	BLOWER MOTOR 1/4 HP 1725 RPM
7	3188-01	1	4" DIA DAMPER
6	TC-341-R	2	DESTACO CLAMP W/ CLASP
5	3263-00	4	MOUNTING PLATE FOR GAS SPRING
4	92320A182	4	SPACER, DRILL HOLE OUT TO ø11/32"
3	3090-01	1	BELT GUARD ASSEMBLY
2	3089-02	1	CHAMBER DOOR ASSEMBLY
1	3088-01	1	CHAMBER BODY ASSEMBLY

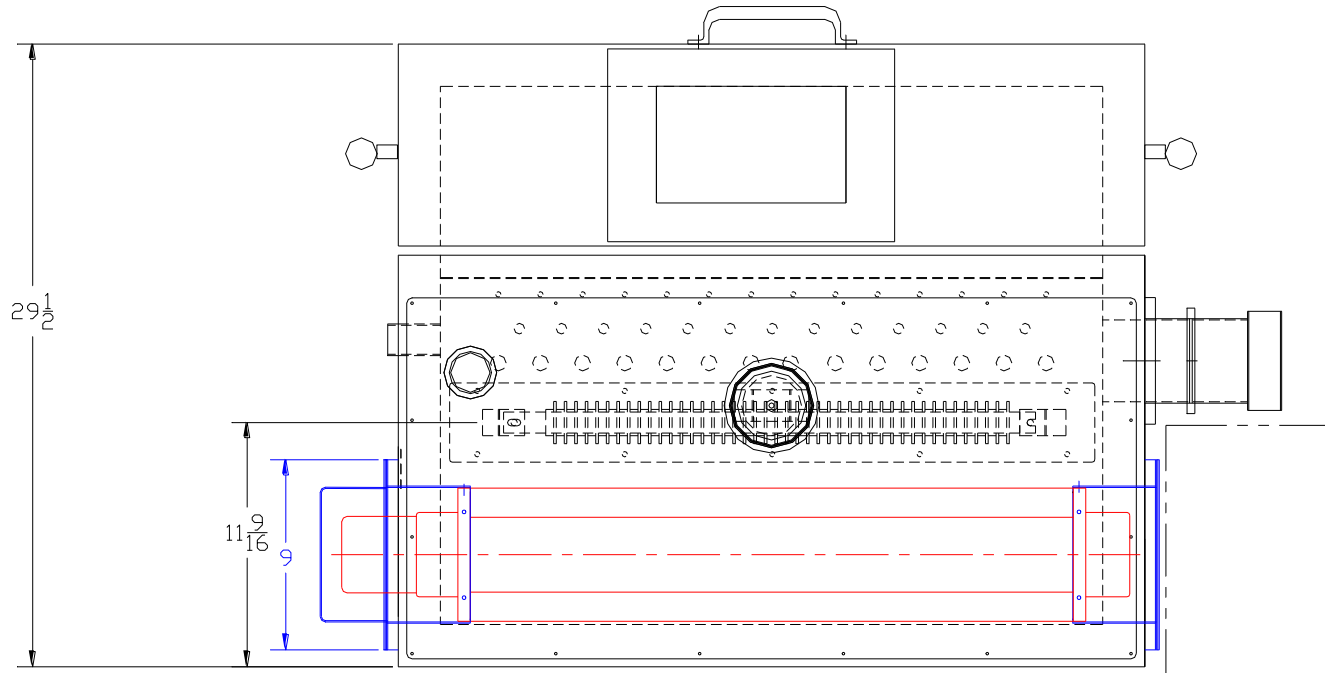
Parts List



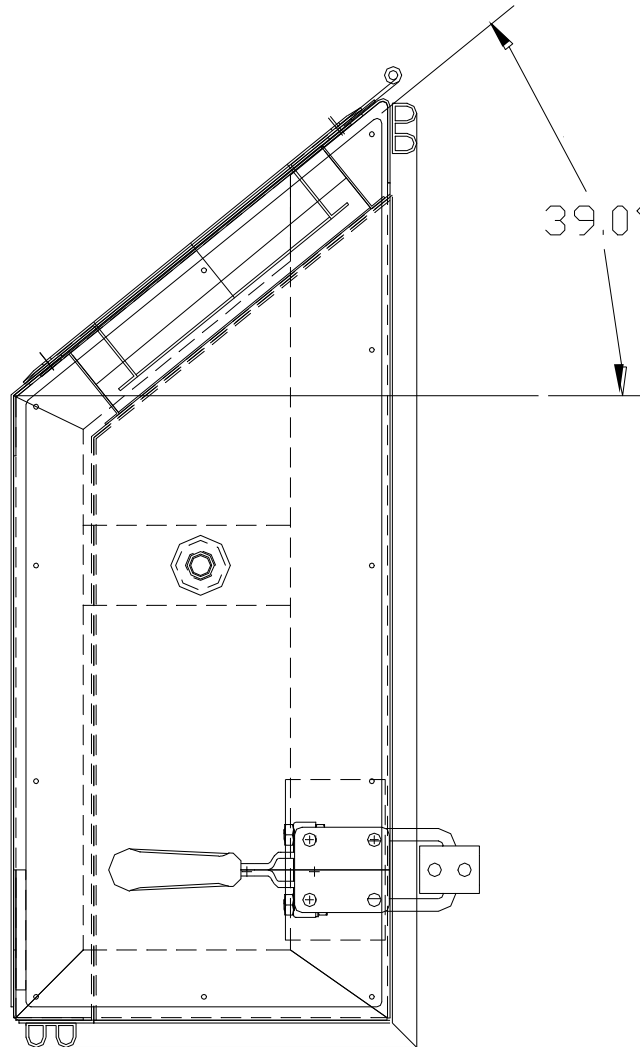
Side View



Back View



Top View



Side Door View