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 LCI Furnaces DIVISION OF LOCHABER CORNWALL INC CONTINUOUS BELT IR FURNACE	EQUIPMENT SPECIFICATIONS	DOC NBR: 15-003 - 802-101401 R2		
		MODEL: RTC CU-915		CUSTOMER: GE Fuel Cells
		SERIAL NBR: 850049	SHT 1 OF 1	PRNT 07/16/15

Equipment Model		Application: Fuel Cell Processing (810 C)		
Model	Base Equipment	Control Zones	Furnace Heated Length	Nominal Furnace Belt Width
RTC CU-915	Continuous Belt Controlled Atmosphere Furnace	4	60 in 152 cm	15.0 in 38 cm

Equipment Arrangement					
Phase	Process	Max	Length	Process Gas	Temperature (typ)
Phase 1	IR Furnace, 4 Zones	960 °C	60 in 152 cm	FG	200-960 C
	Transition Tunnel with Stack		20 in 51 cm	FG	600-750 C
Phase 2	Gas Convective Cooling, Exterior Fan Heat Removal		63 in 160 cm	N2	100-400 C
	Exit Baffle		4 in 10 cm	N2	150-250 C

Process Sections					
Function	Name	Location	Length	Process Gas	Avg Temperature (typ)
	Load Station	Entrance load area	12.3 in 31 cm		ambient
IR Furnace	ENTRANCE BAFFLE	Entrance barrier	16.0 in 41 cm	N2	50 °C
	ZONE 1	Heating chamber 1	10.0 in 25 cm	FG	225 °C
	ZONE 2	Heating chamber 1	20.0 in 51 cm	FG	500 °C
	ZONE 3	Heating chamber 2	20.0 in 51 cm	FG	725 °C
	ZONE 4	Heating chamber 2	10.0 in 25 cm	FG	810 °C
Cooling	RAPID COOL TRANSITION	Heat/cool barrier, single ed	10.0 in 25 cm	N2	627 °C
	CACT	Cooling section	63.0 in 160 cm	N2	360 °C
	EXIT BAFFLE W/O EDUCTOR	Exit barrier	4.0 in 10 cm	N2	310 °C
Product Unload	Unload Station	Exit station	12.3 in 31 cm		200 °C
	Frame Adjustment		1.8 in 4 cm		
	Total		189.3 in 481 cm		

Process Gas							
	Actual Condions		Typical, Low O2		Typical, VL O2		Max (all flowmeters open full)
Furnace Replenishment Rate	2.6 rep/min		4.0 rep/min		11.2 rep/min		
	Temp °C	Press psi	Min Flow scfh	Min Flow sL/m	Typical scfh	Typical sL/m	Max Compressor sL/m
N2 Supply	21	70	625	295	669	316	2,985 1 409
FG Supply	21	70	380	179	584	276	983 464
TOTAL PROCESS GAS			1,005	474	1,253	592	3,968 1 873

Exhaust Gas							
	Temp °C	Press in H2O	Min Flow scfh	Min Flow sL/m	Typical scfh	Typical sL/m	Maximum Exhaust sL/m
N2 & FG mix	200	6	764	361	395	186	4,923 4 923

Cabinet Ventilation					
Cabinet Ventilation Fans (vent to room or exhaust system)		Flowrate	2200 cfm 3740 m3/h	(2 x 2 pair 10-inch fans)	
		Temperature	<122°F <50°C		

Transport System					
Belt width	15.0 in 38.1 cm		Belt Edge Heater(s): 60-inch, pair		
Belt type	Balanced spiral weave				
Product height	2 in (5.1 cm) above belt level.		Baffle plate clearance: 0.25" above belt		
Belt speed range	MAIN	7.5 - 75 inches per minute	19.05 - 190.5 cm per minute		
Belt speed range	ALT	0.3 - 4 inches per minute	0.762 - 10.16 cm per minute		
Conveyor height	36.0 in	+/- 1.5 in	adjustable	91.4 cm	+/-3.8 cm adjustable

Electrical System	
Voltage required	480 Vac, 60 Hz, 3 Ph
Maximum power (Connected Pwr)	90.7 kW, 109.1 A
Typical (operating) power required	44.9 kW, 54 A

Materials of Construction					
Heating Chamber	Aluminum, aircraft	Cooling	Aluminum, aircraft	Belt	Nichrome V, 80%Ni,20%Cr, <1% Fe
Baffle & Eductor	Aluminum, aircraft	Belt support	Quartz rod, Quartz tube	Frame	Steel, 2-prt urethane or powder coated
Heating element	Quartz, near infrared	Belt Return	UHMW-PE	Cover Panels	18GA Steel, urethane or powder coated

Furnace Dimensions						
		Length	Width	Height (floor to stack)	Furnace Sect	Weight
Furnace, English	Net	180 in	32.5 in	64.5 in +/- 1.5 in		2600 LB
Furnace, Metric	Net	4.57 m	0.83 m	1.64 m +/- 0.04 mm		1180 kg
Crate, English	Furnace, Gross	188 in	41 in	84 in	Gross Wt:	3000 LB
Crate, Metric	Furnace, Gross	4.78 m	1.03 m	2.13 m	Gross Wt:	590 kg
Standard Conditions		Pressure	14.7 psia 101.3 kPa	Temperature	70 °F 21 °C	

FURNACE CONFIGURATION

CUSTOMER	GE Fuel Cells	Date	8-Jul-15
FURNACE MODEL	☒ RTC CU-915 (refurbished) ☐ LCI LA-306 ☐ LCI LA-309P		
Serial Number	850049	Job / Order Nbr	15-003

BASE EQUIPMENT

Power	☒ Standard	☐ High Power	☐ Half Power (SCR's)
Voltage	☐ 208 Vac, 1 Ø ☐ 208 Vac, 3 Ø	☐ 220 Vac, 1 Ø ☐ 220 Vac, 3 Ø	☐ 230 Vac, 1 Ø ☐ 380 Vac, 3 Ø ☒ 240 Vac, 1 Ø ☒ 480 Vac, 3 Ø
Belt Speed, Units	☒ 0.4-4 inches/min ☐ 1-20 inches/min ☒ 2-75 inches/min	☐ 1-20 inches/min ☐ 3-50 cm/min ☐ 5-100 cm/min	☐ 13-250 mm/min ☐ 25-500 mm/min ☐ 50-1000 mm/min
(Optional Speed)			
Product Clearance (height)	☒ 50 mm (2 in.), std	☐ 25 mm (1 in.)	☐ 100 mm (4 in.)
Process Gas Arrangement			
Single Gas	☐ CDA	☐ Nitrogen	☐ Other
Dual Gas, AUX (Gas 1)	☒ CDA	☒ Nitrogen	☐ Other
Dual Gas, FURNACE (Gas 2)	☒ Forming Gas	☐ Nitrogen	☐ Other

CONFIGURATION AND OPTIONAL EQUIPMENT

<table style="width: 100%; border-collapse: collapse;"> <tr><td>☐</td><td>AFR</td><td>Air Filter / Trap / Regulator</td></tr> <tr><td>☒</td><td>BNV</td><td>Belt, HiTemp Nichrome-V</td></tr> <tr><td>☐</td><td>BSS</td><td>Belt, 316 Stainless Steel</td></tr> <tr><td>☐</td><td>CB-1</td><td>Circuit Breaker Switch</td></tr> <tr><td>☐</td><td>CB-3</td><td>Circuit Breaker, 3-Phase</td></tr> <tr><td>☐</td><td>CE</td><td>European Certification</td></tr> <tr><td>☐</td><td>CXE</td><td>Load Extension (15 inches)</td></tr> <tr><td>☐</td><td>CXX</td><td>Unload Extension (15 inches)</td></tr> <tr><td>☒</td><td>EH</td><td>Edge Heaters (LA-309P only)</td></tr> <tr><td>☒</td><td>EM</td><td>Element Monitor system</td></tr> <tr><td>☐</td><td>GSM</td><td>Supply Gas Mixing System</td></tr> <tr><td>☒</td><td>HC</td><td>Hermetic Chamber</td></tr> <tr><td>☒</td><td>HT</td><td>High Temperature (<600C operation)</td></tr> </table>	☐	AFR	Air Filter / Trap / Regulator	☒	BNV	Belt, HiTemp Nichrome-V	☐	BSS	Belt, 316 Stainless Steel	☐	CB-1	Circuit Breaker Switch	☐	CB-3	Circuit Breaker, 3-Phase	☐	CE	European Certification	☐	CXE	Load Extension (15 inches)	☐	CXX	Unload Extension (15 inches)	☒	EH	Edge Heaters (LA-309P only)	☒	EM	Element Monitor system	☐	GSM	Supply Gas Mixing System	☒	HC	Hermetic Chamber	☒	HT	High Temperature (<600C operation)	<table style="width: 100%; border-collapse: collapse;"> <tr><td>☐</td><td>LFI</td><td>Line Interference Filter</td></tr> <tr><td>☒</td><td>LTR</td><td>Left to Right Belt Travel (standard)</td></tr> <tr><td>☐</td><td>MA</td><td>Moisture Analyzer</td></tr> <tr><td>☒</td><td>OA</td><td>Oxygen Analyzer</td></tr> <tr><td>☒</td><td>OSS</td><td>Sampling System</td></tr> <tr><td>☒</td><td>RCT10</td><td>Rapid Cool Transition</td></tr> <tr><td>☐</td><td>RTL</td><td>Right to Left Belt Travel</td></tr> <tr><td>☐</td><td>SENSLAS</td><td>Product Alert, CMOS Laser</td></tr> <tr><td>☐</td><td>SSP</td><td>Sample Port(s)</td></tr> <tr><td>☐</td><td>TT</td><td>Transition Tunnel, No Eductor</td></tr> <tr><td>☒</td><td>TTSE</td><td>Transition Tunnel, Single Eductor</td></tr> <tr><td>☐</td><td>UCD</td><td>Ultrasonic Cleaner/Dryer</td></tr> <tr><td>☒</td><td></td><td>Rapid Cool Transition</td></tr> </table>	☐	LFI	Line Interference Filter	☒	LTR	Left to Right Belt Travel (standard)	☐	MA	Moisture Analyzer	☒	OA	Oxygen Analyzer	☒	OSS	Sampling System	☒	RCT10	Rapid Cool Transition	☐	RTL	Right to Left Belt Travel	☐	SENSLAS	Product Alert, CMOS Laser	☐	SSP	Sample Port(s)	☐	TT	Transition Tunnel, No Eductor	☒	TTSE	Transition Tunnel, Single Eductor	☐	UCD	Ultrasonic Cleaner/Dryer	☒		Rapid Cool Transition
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FLOWMETER SETTINGS

	Installed	Gas	Settings	Low Oxygen
Entrance Baffle	0-400 SCFH	1 AUX	50	50
Zone 1	0-400 SCFH	2 FURNACE	190	360
Zones 2 - 4	0-600 SCFH	2 FURNACE	190	500
Transition Tunnel-Top	0-600 SCFH	2 FURNACE	180	180
Transition Tunnel-Bottom	0-600 SCFH	1 FURNACE	90	90
Lamp Plenums	0-400 SCFH	1 AUX	80	100
Cooling	0-600 SCFH	1 AUX	224	225
TOTAL INFLOW			1073	1548
SUBTRACT EXCESS FLOW* =			400	1200
DIVIDE BY EDUCTOR MULTIPLIER =			15	15
Stack, Entrance	0-100 SCFH	= AUX	25.0	12.9
Stack, Transition	0-200 SCFH	= AUX	22.7	11.8

* POSITIVE FURNACE: Vent excess gas flow through entrance and exit to produce a low moisture / O2 atmosphere.

NEGATIVE FURNACE: To assure volatiles do not escape into the room, enter ADD excess flow (pulls room air into furnace).

 LCI Furnaces DIVISION OF LOCHABER CORNWALL INC Customer: GE Fuel Cells	DATA SHEET					DOC NBR: 15-003	802-101410	R0	SHT 1 of 1
	MOTOR GEAR RATIOS					MODEL: RTC CU-915	DWN: JCLARK	06/30/15	
						SERIAL NBR: 850049	APVL: CROODE	07/06/15	
						PRINT: 15Jul15	PM: JCLARK	07/08/15	

PRIMARY MOTOR

Bison 011-336-3062 5/8" Shaft 1/8 HP 90 Vdc, 0.82a 13 RPM 143 :1 1800 RPM

Motor RPM	Roller Shaft dia	Circumference	Motor Spocket N1	Int Driven Sprkt N2	Int Drive Spocket N3	Belt Shaft N4	Gear Ratio	Belt Speed @ 1 RPM	Belt Speed ipm cm/m	
13	6	18.850	15	1	1	48	0.3125	5.890 ipm	76.58	194.50

20:1 ipm	Minumum Belt Spd (10:1) ipm cm/m	Maximum Belt Speed ipm cm/m
3.8	7.7	19.5
		76.6
		194.5

SECONDARY MOTOR

Minarik/Bison 507-01-416 3/4" Shaft 1/20 HP 90 Vdc, 0.23a 0.9 RPM 2206 :1 1985 RPM

Motor RPM	Roller Shaft dia	Circumference	Motor Spocket N1	Int Driven Sprkt N2	Int Drive Spocket N3	Belt Shaft N4	Gear Ratio	Belt Speed @ 1 RPM	Belt Speed ipm cm/m	
0.9	6	18.850	12	1	1	48	0.2500	4.712 ipm	4.24	10.77

20:1 ipm	Minumum Belt Spd (10:1) ipm cm/m	Maximum Belt Speed ipm cm/m
0.21	0.42	1.1
		4.2
		10.8

Job: 15-003

Profile: Fuel Cell Processing (810 C)

DATE: 8-Jul-15

Model RTC CU-915

SN: 850049

Values with white fill are new.

Zone 1 Controller Settings

	Group 0		Group 1		Group 2		Group 3		COMMENT
Label	PiD0	250	PiD1	450	PiD2	650	PiD3	850	
Set point Target	SU0	250	SU1	450	SU2	650	SU3	850	
P	P0	50	P1	110	P2	95	P3	95	
I	i0	8	i1	6	i2	10	i3	10	
D	d0	1	d1	2	d2	2	d3	3	
Initial Offset	iOF0	10	iOF1	9	iOF2	50	iOF3	70	

Zone 2 Controller Settings

	Group 0		Group 1		Group 2		Group 3		COMMENT
Label	PiD0	250	PiD1	450	PiD2	650	PiD3	850	
Set point Target	SU0	250	SU1	450	SU2	650	SU3	850	
P	P0	50	P1	50	P2	75	P3	70	
I	i0	8	i1	8	i2	8	i3	8	
D	d0	3	d1	2	d2	2	d3	3	
Initial Offset	iOF0	8	iOF1	35	iOF2	50	iOF3	70	

Zone 3 Controller Settings

	Group 0		Group 1		Group 2		Group 3		COMMENT
Label	PiD0	250	PiD1	450	PiD2	650	PiD3	850	
Set point Target	SU0	250	SU1	450	SU2	650	SU3	850	
P	P0	50	P1	50	P2	75	P3	85	
I	i0	8	i1	8	i2	8	i3	8	
D	d0	3	d1	2	d2	2	d3	3	
Initial Offset	iOF0	8	iOF1	35	iOF2	50	iOF3	70	

Zone 4 Controller Settings

	Group 0		Group 1		Group 2		Group 3		COMMENT
Label	PiD0	250	PiD1	450	PiD2	650	PiD3	850	
Set point Target	SU0	250	SU1	450	SU2	650	SU3	850	
P	P0	110	P1	125	P2	100	P3	85	
I	i0	8	i1	10	i2	12	i3	10	
D	d0	2	d1	3	d2	3	d3	3	
Initial Offset	iOF0	4.5	iOF1	20	iOF2	50	iOF3	70	

RATE METER PARAMETERS

Job: 15-003

Model: RTC CU-915SN: 850049DATE: 8-Jul-15

RATE METER SETTINGS

	min	max	min	max	min	max	min	max	COMMENT
Belt Speed Range	4	75	4	75	0.3	4	0.3	4	
		initial		final		initial		final	
Decimal Position	dEC.Pt	0.0	dEC.Pt	0.0	dEC.Pt	0.00	dEC.Pt	0.00	
Low Update Time	LO-Udt	1.0	LO_Udt	1.0	LO_Udt	1.0	LO_Udt	1.0	typ range: 1-2
High Update Time	HI-Udt	2.0	HI.Udt	2.0	HI.Udt	2.0	HI.Udt	2.0	typ range: 2-5
Rate Scaling Display Value	RTt-dSP	10000.0	RTt-dSP	85.71	RTt-dSP	1000.00	RTt-dSP		max belt speed
Rate Scaling Input Value	Rt-inP	10000.0	Rt-inP	1041.80	Rt-inP	1000.00	Rt-inP		pulses per second

CALIBRATION

SETPOINT

MEASURED

		ipm		
	max	10	max	
	85.71	10.02		

ENTERING NUMERICAL VALUES ON THE RATE METER

- Press PAR to scroll through and select a parameter.
- Press DWN to select next digit to the right.
- Press UP to increment the flashing value.
- Press DWN to set and move to next digit to the right.
- Press PAR to save the displayed value for the displayed parameter.

TO CALIBRATE FURNACE BELT SPEED

The Red Lion PAXLR is a accurate linear rate meter that can be calibrated to display units of choice. To calibrate to selected motor, set rate meter to display number of counts at max speed. Then enter counts and max speed as described below:

- Set decimal so max speed shows 3 significant digits (0.0 for 40 ipm; 0.00 for 4 ipm).
- Enter "1" for LO-Udt (min time in seconds between updates; 1.0 provides a steady, but accurate value for most furnace speeds).
- Enter "2" for HI-Udt (max time in seconds before the display is forced to zero; 2.0 forces zero display for speeds below 0.5 Hz). Must be greater than LO-Udt.
- Enter 10,000 for rt-DSP
- Enter 10,000 for rt-INP (same number as rt-DSP for rate scaling factor)
- Turn SPEED ADJUST knob full CW to max speed.
- Measure actual max belt speed (run an object through furnace and divide length of furnace by time traveled in minutes&10ths) Ex. $85.71 = (153 \text{ inches} / 1.78 \text{ minutes})$
- Enter number of counts displayed at max speed for RT-INP (Ex. = 1041.8)
- Enter max measured speed for rt-DSP (Ex. = 85.71 ipm)
- Adjust decimal point on rt-INP or rt-DSP to correct for decimal point order of magnitude errors.



Illinois Instruments, Inc.
2401 Hiller Ridge Road
Johnsburg, IL 60050 USA
TEL: (815) 344-6212
FAX: (815) 344-6332

CERTIFICATION AND CALIBRATION REPORT

NUMBER 070815-01

ISSUE DATE 07/08/15

MODEL EC913

SERIAL EC913FD0790115

Sensor(s)

Part Number	900 057 (H2 Trace)	0715-0286	Serial Number
	900 168 (Percent)	0715-0376	

OXYGEN CALIBRATION

CERTIFIED GAS (O2) CONTENT

BATCH NUMBER

INSTRUMENT READING

N2 (< 2 ppm)

< 2 ppm

1.29 ppm

102.0 ppm

54-124471099-5

102 ppm

AIR (20.9 %)

20.9 %

20.9 %

* All gases are N.I.S.T. traceable mixtures of oxygen in nitrogen.

* This certificate expires 12 months from the issue date.

This Analyzer is equipped with the following option(s):

- | | | | |
|---|--|---|--|
| ☐ 1/4" Bulkheads | ☐ Analog Output 3 Channel | ☐ Flow Alarm | ☐ Solenoid Shutoffs |
| ☐ 24VDC Input | ☐ Auto Calibration | ☒ Hydrogen Sensor | ☐ Special Configuration |
| ☒ Alarms | ☐ Bypass Flow | ☐ Pressure Regulator | ☐ Stainless Steel Bulkheads |
| ☒ Analog Output 1 Channel | ☐ Female NPT Bulkheads | ☒ Pump | ☐ Stainless Steel Plumbing |

☐ Remote Sensor with 50'-100' Cable(s) and Explosion-Proof Enclosure

CALIBRATED BY : Mark Rice

SIGNATURE :

Mark Rice

 LCI Furnaces DIVISION OF LOCHABER CORNWALL INC	OXYGEN ANALYZER SETUP	DOC NBR: 15-003 802-101543 R1	
		MODEL NBR: RTC CU-915	
		SERIAL NBR: 850049	
FACTORY SETTINGS	SIZE: A	PRNT 16Jul15	APVL JCLARK 16Jul15
		SHT 1 of 1	

O2 ANALYZER, ILLINOIS INSTRUMENTS MODEL EC913

COMMENT

1 PAGE		1
2 AL1	NO	100
3 AL2	NC	n/a
4 SET PAGE0 to either RANGE0 or RANGE1	SCALE	RANGE0
4a OPH1 = 0.1%. Sets upper limit of analog output	pct	0.10%
OPH1 = 0.1%. Sets upper limit of analog output (ppmv)	ppmv	1,000
4b OPL1 = 0%. Sets lower limit of analog output	pct	0.00%
OPL1 = 0%. Sets lower limit of analog output (ppmv)	ppmv	0
OPH2		
OPL2		
OPH3		
OPL3		
7 LIFEL		Read Only
8 LIFEH		Read Only
8 GO TO PAGE1 (Password is 1234)		1234

PAGE 0 functions (no password required).

See PAGE1 for latch configuration.

See PAGE1 for latch configuration.

Note: Analog Card not factory configured.

For GE datalogging use

For GE datalogging use

not installed

not installed

not installed

not installed

Remaining life of cell (ppm)

Remaining life of cell (%)

PAGE 1 functions (password required)

9 OL ALARM CONFIGURATION 30

DIGIT 1	ALARM 1	ALARM 2	DIGIT 2	ALARM 1	ALARM 2
0	Low	Low	0	Unlatched	Unlatched
1	High	Low	1	Latched	Unlatched
2	Low	High	2	Unlatched	Latched
3	High	High	3	Latched	Latched

Sets alarm level and latch conditions.

self-clearing.

latched requires pressing enter button to clear.

9a ALARM CONTACTS	Contacts	Type	Setting
Alarm 1	9-10	NC	100
Alarm 1	11-10	NO	100
Alarm 2	12-13	NC	n/a
Alarm 2	14-13	NO	n/a

SPARE, not connected to furnace

To Furnace Alarm system

SPARE, not connected to furnace

SPARE, not connected to furnace

10 ANCH1 SET ANALOG OUTPUT TYPE

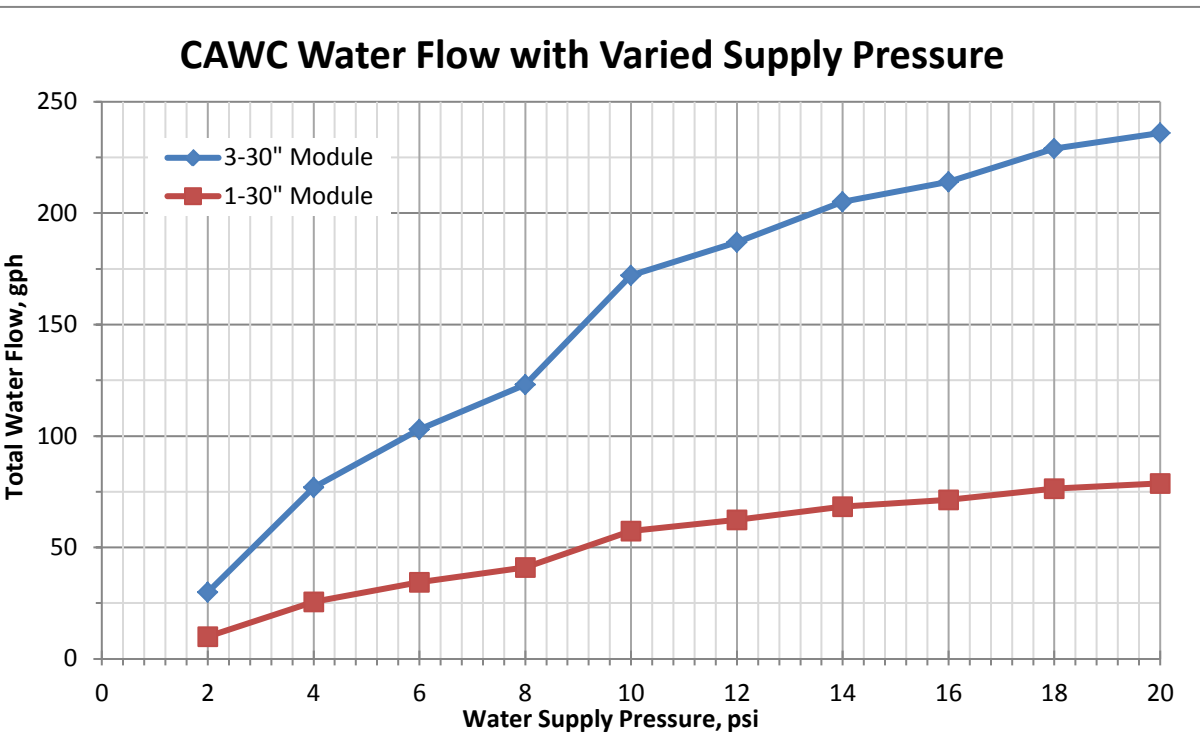
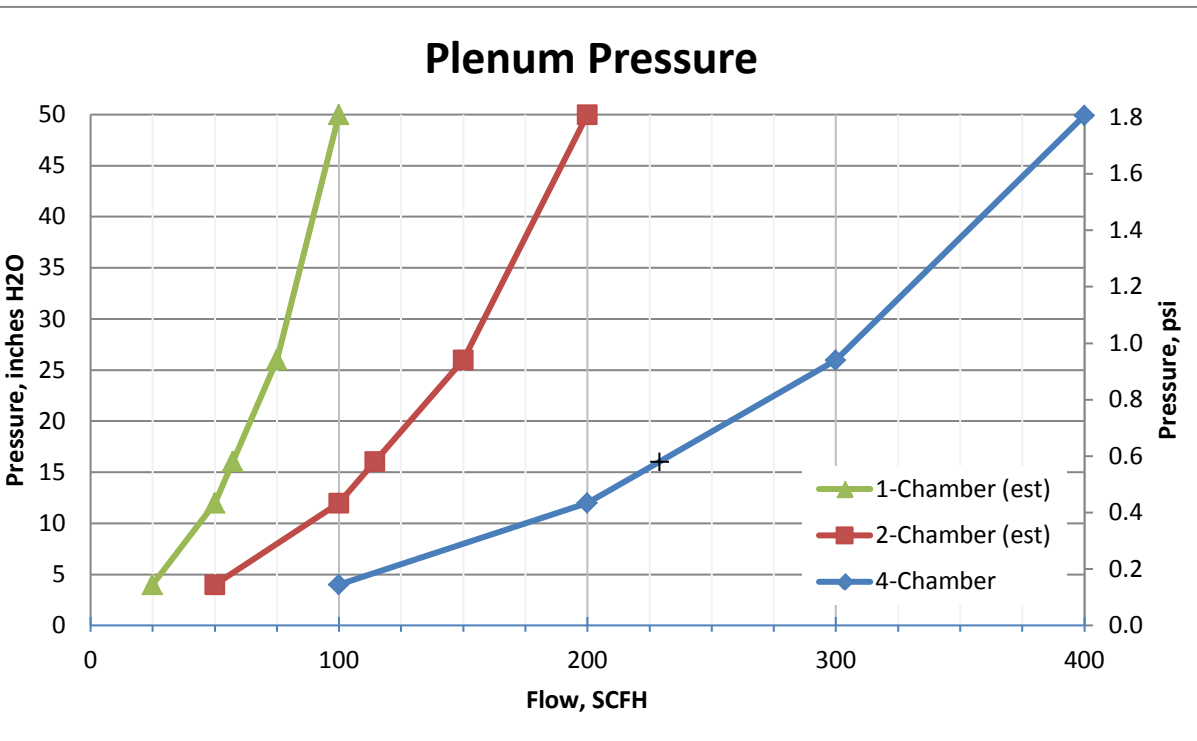
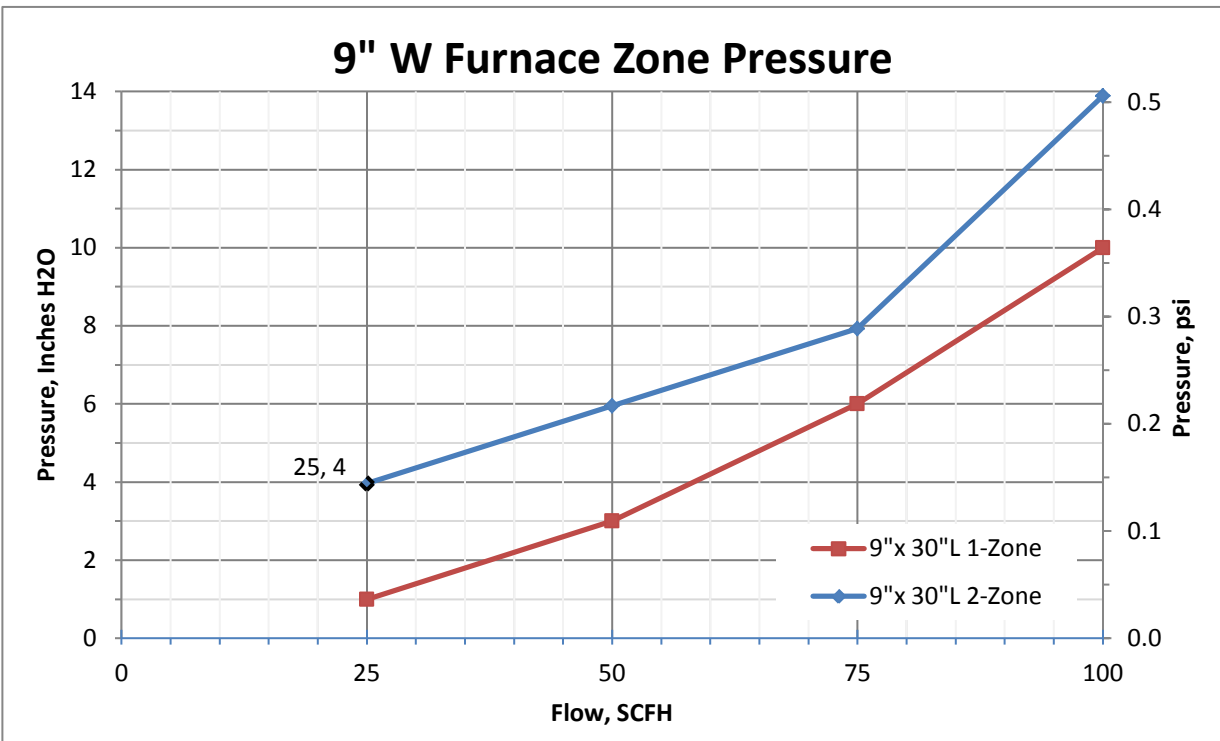
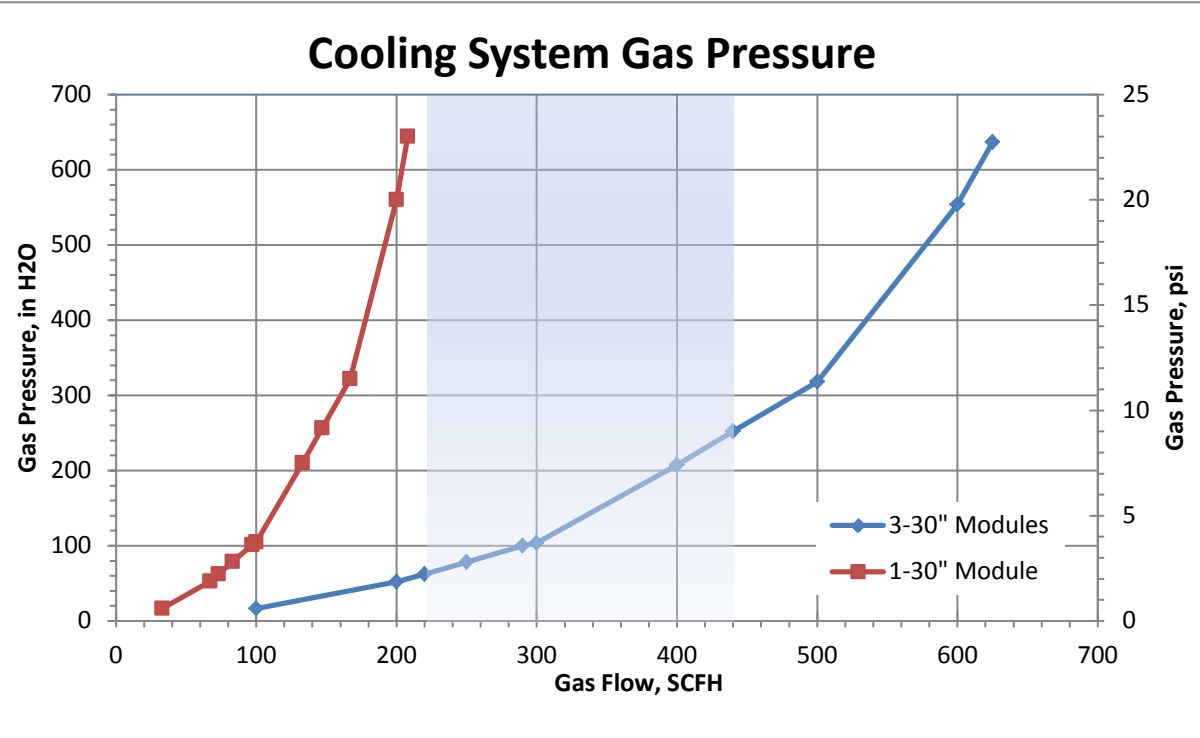
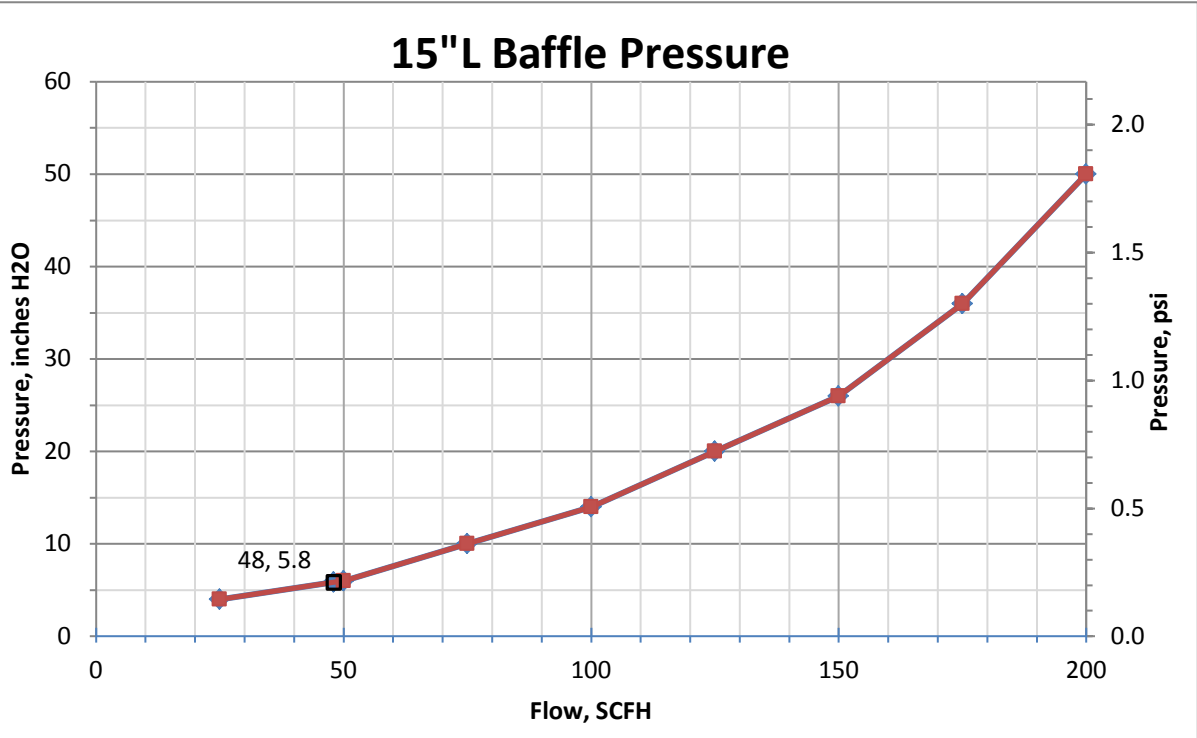
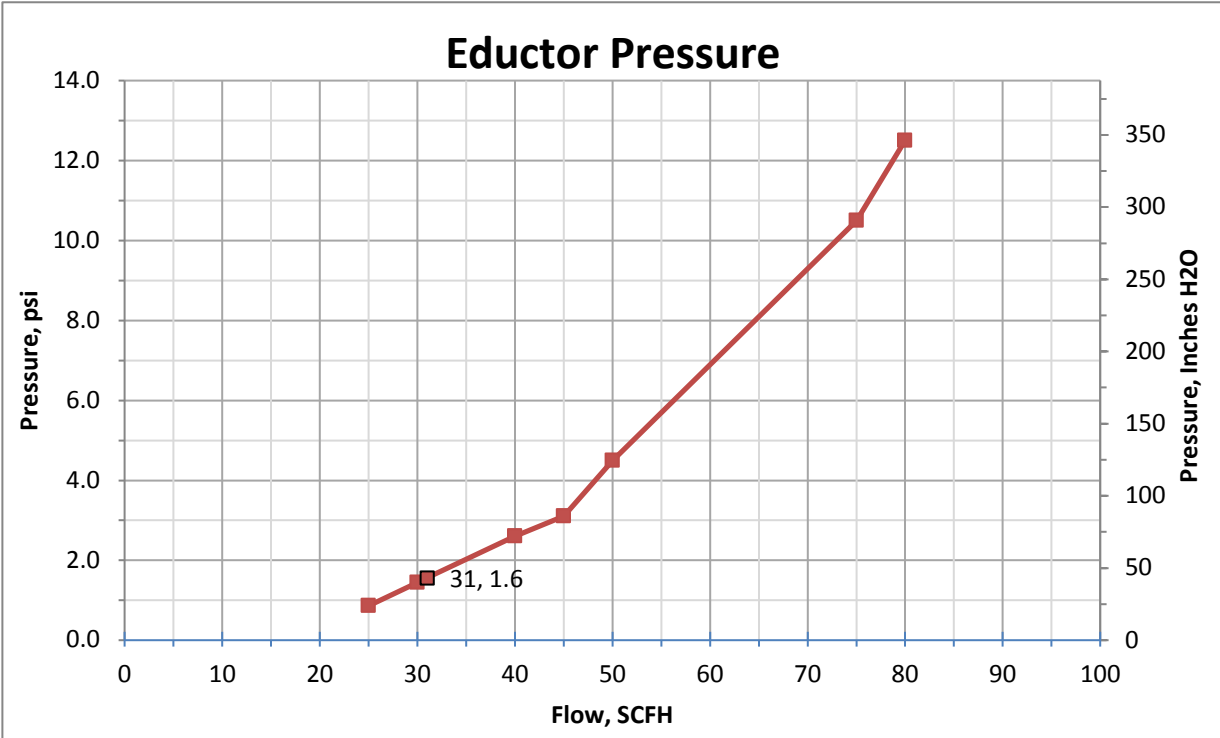
10a ANCH1 Sets channel 1 output to 0=4-20mA; 1=0-20mA; 2=0-10V.	SPARE
ANCH2. Sets channel 2 output to 0=4-20mA; 1=0-20mA; 2=0-10V.	not installed
ANCH3 Sets channel 3 output to 0=4-20mA; 1=0-20mA; 2=0-10V.	not installed

For GE datalogging use.

11 GAS = 28.02 Set molecular weight for Nitrogen	28.02
12 PUMP = 1. Enables sample pump. (=0 Disables pump)	1

Factory setting

Factory setting



NOTES:

PROCESS GAS TO PLENUMS, EDUCTORS, CHAMBERS, BAFFLES & CAWC

For each gas element tested, the flow was varied and the pressure drop determined by temporary installation of a test pressure gage. Pressures were recorded at each flow.

CAWC COOLING WATER

For the water cooling section, all 6 water flowmeters were opened full and the pressure varied from 2-20 psig.

Flows were recorded for each flow meter at each pressure setting and then summed for total water flow through the CAWC as a function of inlet pressure.

Tests on the CAWC were run as follows:

- 1) Furnace operating with last zone at approx. 450-460C. CAWC COOLING AIR turned off. Cooling water set to 8 psig. CAWC cooling water varied from 0 to 60 gph (1 gpm). Temperature profiles of the furnace were run at each of 5 Total Water Flow settings. Inlet & outlet water temp recorded
- 2) Furnace operating with last zone at approx. 450-460C. Cooling water set to 8 psig, Total Water Flow set to 48 gph (8 gph in each of 6 CAWC chambers). CAWC COOLING AIR increased from 0 to 400 scfh. Temperature profiles of the furnace were run at each of 6 water flow settings.

Data suggests the furnace cooling system be operated with 40 to 60 gph Total Water Flow through the CAWC and improve cooling performance by running the CAWC cooling gas at 200-300 SCFH.

			APPROVALS	DATE	 LCI Furnaces DIVISION OF LOCHABER CORNWALL INC 675 N ECKHOFF STREET STE D ORANGE, CALIFORNIA 92868 USA (714) 935-0302 www.furnacepros.com	TITLE IR FURNACE PRESSURE AND FLOW CHARACTERISTICS			
			DWN	JMC	6/11/11	JOB	DOCUMENT NUMBER		REV
			CHKD	SBARBER	6/15/11	STD	802-101470		0
			ENGR	JMC	6/22/11	SIZE: B	PRNT: 11/28/12	SN: ALL	SHEET 1 OF 1
REV	DESCRIPTION		BY	DATE					

