



Customer:

Biotech Facility **Location:**

Washington, USA

Boiler Type:

Hurst Boiler

Burner Model:

LCNO36

Fuel Fired:

Natural Gas

Diesel Oil

Tech Centre:

MacDonald-Miller

Limpsfield High Performance Burner Exceeds Customers Expectations!!

A large Biotech facility in Everett Washington had a catastrophic failure of one of their critical steam boilers that serves the facility. MacDonald- Miller chose to use the Limpsfield burner due to the excellent combustion characteristics, superior engineering, and ease of installation.

The burner mounted control panel significantly reduced installation time and overall footprint. The boiler room is situated next to the offices so by supplying a noise attenuator with the Burner we helped to significantly reduce the noise to sub 80dB, which is an added benefit that the client did not expect.

Project Achievement:

- 1. Sub 3% O2 across the whole turndown modulating range (as high as 10:1 turndown)
- 2. Significantly reduced cycling time
- 3. A reduction in stack losses
- 4. The whole package which included a Boiler and Burner was completed within 3 days.

BURNER DIAGNOSTICS CHECK SHEET																	
Burner Model:	LCNO36/200																
Fuel type:	NATURAL GAS							Fuel CV:							. 1111		
	CH1	CH2	CH3	CH4	CH5	CH6	CH7	02	CO2	CO	Stack Temp.	P1	P2	P3	P4	P5	P6
	Deg	Deg	Deg	Deg			Deg	%Vol	%VoI								
Open	90	90			10												
High	65	45			10			3	10	0	299	5psi	35.9	33.5	24.6	23.4	14.4
1	60	43.5			10			3	10	0	302	5psi	36.5	33.7	24.6	23	14.1
2	55	42.5			9.9			2.9	10.1	0	303	5psi	36.7	34.1	24.7	22.3	13.6
3	50	42			9.7			2.7	10.2	0	304	5psi	37	34.9	24.7	21.3	13
4	45	40			9.7			3	10	0	304	5psi	37.2	35.8	24.7	19.9	12.5
5	40	38			9.4			2.9	10.1	0	304	5psi	37.4	35.6	24.6	17.8	12.3
6	35	36			8.9			2.9	10.1	0	301	5psi	37.6	35.9	24.7	15	11.1
7	30	32.5			8.1			2.9	10.1	0	295	5psi	38	36.7	24.8	10.7	9.3
8	25	28.5			7.3			3	10	0	285	5psi	38.6	37.9	24.8	6.6	6.6
9	20	24.5			6.5			3	10	0	274	5psi	39.2	38.9	24.8	3.7	4
10	15	20			6			3	10	0	262	5psi	39.7	39.7	24.4	1.8	2.3
11	10	15.5			5.5			3	10	0	248	5psi	39.7	40.1	25.6	0.5	0.9
12																	
FGR Start																	
Golden Start																	
Low	2	10.5			5			3.7	9.6	0	234	5psi	41.8	41.8	24.8	0	0
Close	0	0			0												



The customer is extremely happy with the installation and is planning on further upgrades to other boilers on their campus.







For more information on Limpsfield burner range, please do not hesitate to contact us.