Performance Data

36x24 AJ Criti-Clean: Sound

Exp 700 TST 0429
LTO 2012-1211 Rev. 2

5/30/2013
AJ 36x24 fan filter
Mic location: 30" perpendicular distance from center of perforated face

Velocity	LAeq	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz
70	43.1	44	47	43	43	42	42	42	41	39	40	38	39	31	25	23	22	22	20	19	15	12	11	11	11
80	45.0	47	47	46	45	43	45	44	43	41	42	40	40	34	27	25	25	24	22	22	18	15	13	12	12
90	47.0	49	48	48	47	46	47	46	44	42	44	42	42	37	30	28	27	27	25	24	21	18	15	14	13
100	49.0	50	50	50	50	48	49	49	47	44	46	43	44	41	32	31	30	29	27	26	23	20	18	16	14
110	50.2	51	51	51	51	49	51	50	48	45	47	44	45	42	34	33	32	31	29	28	25	22	20	17	16
			49.887519			47.180476			45.52627			44.012722			32.632405			26.152432			20.984282			15.777683	
			51.445269			48.959251			47.59183			45.667597			35.333186			28.585245			23.994689			16.946353	
			53.107211			51.482478			49.479029			47.465552			38.280833			31.185856			26.331972			18.788419	
			54.482934			53.779359			51.871059			49.139629			41.766287			33.659048			28.659622			20.852509	
			56.068134			55.271916			53.213988			50.039212			42.886473			35.3888			30.621545			22.82978	

		Octave Band Frequency							
Velocity	dBA	1	2	3	4	5	6	7	8
70	43.1	50	47	46	44	33	26	21	16
80	45.0	51	49	48	46	35	29	24	17
90	47.0	53	51	49	47	38	31	26	19
100	49.0	54	54	52	49	42	34	29	21
110	50.2	56	55	53	50	43	35	31	23

Energistics Laboratory

*for information on 240V and 277V, please consult factory

April 2013

Performance Data

36x24 AJ Criti-Clean: 120V Electrical

Exp 700 TST 0429
LTO 2012-1211 Rev. 1

Psychometric Data

Dry Bulb	%RH	Pb	W	v	V/v
67	51	30.2	50.3	13.30176786	1.003

8" ADC Nozzle

A	B
458.5	0.4907

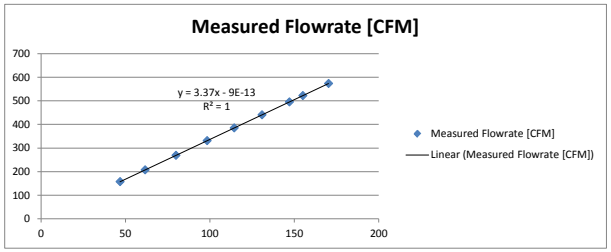
Filter Area
3.37

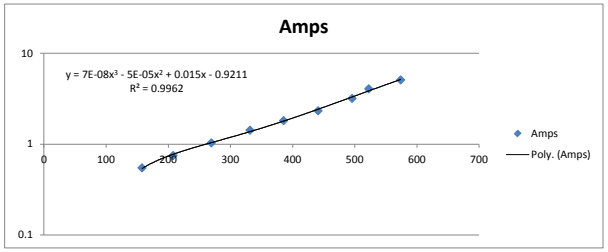
36x24 Criti-Clean Electrical and Airflow Data @ 120V

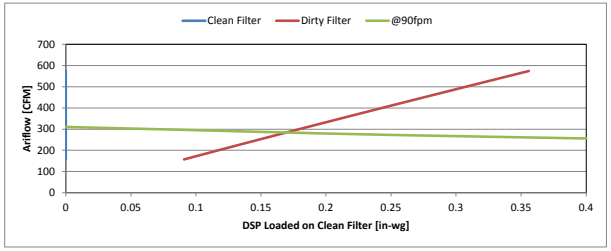
Evolution Command %	ADC Nozzle ΔP [in.-wg]	Measured Flowrate [CFM]	Calc'd Face Velocity [FPM]	Discharge Ps [in.-wg.]	Volts	Amps	VA	PF (meter)	Watts	Watts / VA	RPM	THD%	Phase Angle φ	Calc'd Motor Heat Gain	Watts/ CFM	AVG ΔP Across Filter	Dirty Filter ΔP [in-wg]	Dirty-AVG Resulting DSP
100	1.57	574	170	0	120	5.1	600	0.61	370	0.62	1493	77.8	0	1262.4	0.6449	0.7117	1.0676	0.3559
90	1.297	522	155	0	120	4.07	490	0.6	290	0.59	1364	79.5	-1	989.5	0.5551	0.6446	0.9669	0.3223
80	1.165	496	147	0	120	3.19	390	0.57	220	0.56	1148	81.9	-4	750.6	0.4439	0.6097	0.9146	0.3049
70	0.918	441	131	0	120	2.33	280	0.55	150	0.54	1056	83	-6	511.8	0.3402	0.5389	0.8083	0.2694
60	0.698	385	114	0	120	1.817	219	0.53	117	0.53	971	83.9	-7	399.2	0.3035	0.4675	0.7012	0.2337
50	0.513	331	98	0	120	1.424	171	0.52	88	0.51	879	84.9	-9	300.3	0.2655	0.3985	0.5978	0.1993
40	0.336	269	80	0	120	1.033	124	0.49	62	0.50	778	85.9	-12	211.5	0.2303	0.3200	0.4800	0.1600
30	0.198	208	62	0	120	0.748	90	0.47	42	0.47	675	86.8	-16	143.3	0.2022	0.2433	0.3649	0.1216
20	0.113	158	47	0	120	0.548	66	0.45	30	0.45	588	87.2	-21	102.4	0.1902	0.1819	0.2728	0.0909

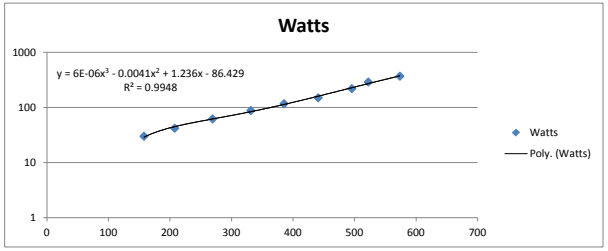
36x24 Criti-Clean Electrical and Airflow Data @ 90 FPM

Evolution Command %	ADC Nozzle ΔP [in.-wg]	Measured Flowrate [CFM]	Calc'd Face Velocity [FPM]	Discharge Ps [in.-wg.]	Volts	Amps	VA	PF (meter)	Watts	Watts / VA	RPM	THD%	Phase Angle φ	Calc'd Motor Heat Gain	Watts/ CFM	AVG ΔP Across Filter	Dirty Filter ΔP [in-wg]	Dirty-AVG Resulting DSP
47	0.45	311	92	0	120	1.287	156	0.51	80	0.51	860	85.1	-10	273.0	0.2574	0.3723	0.5585	0.1862
47	0.407	296	88	0.1	120	1.42	169	0.53	90	0.53	932	83.9	-8	307.1	0.3042	0.4534		
47	0.364	280	83	0.2	120	1.631	193	0.53	102	0.53	1022	83.9	-7	348.0	0.3642	0.5336		
47	0.332	268	79	0.3	120	1.801	215	0.53	115	0.53	1105	84	-6	392.4	0.4296	0.6180		
47	0.305	257	76	0.4	120	1.962	235	0.54	127	0.54	1176	83.2	-5	433.3	0.4946	0.7043		









Energistics Laboratory

*for information on 240V and 277V, please consult factory

April 2013

Performance Data

Observer	Date
BWJ	5/29/2013

Filter Area
3.37

Note: Data collected @ 120V.

36x24 AJ Criti-Clean: Velocity

IEST 2.3 - Typically MAX 15% Relative Std Dev

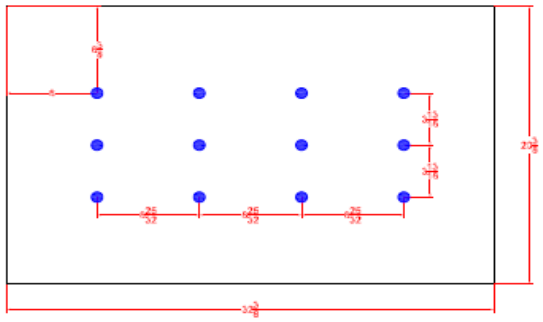
Exp 700 TST 0429
LTO 2012-1211 Rev. 1

36x24 Criti-Clean Velocity Profile

Evolution Command %	V0	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	Velocity AVG	SDEV	RSDEV	Measured Flowrate [CFM]	Calc'd Face Velocity [FPM]
100	77	65	93	94	99	70	93	106	97	78	75	96							87.0	13	15	574	170
90	74	62	88	90	96	69	88	101	94	76	71	93							83.4	12	14	522	155
80	72	58	86	87	95	63	86	97	92	74	70	91							80.9	13	16	496	147
70	66	54	78	78	87	58	80	87	85	69	65	83							74.1	11	15	441	131
60	62	52	71	72	80	56	73	80	78	65	60	76							68.7	9	14	385	114
50	57	48	64	63	71	52	65	70	69	59	54	69							61.8	7	12	331	98
40	51	45	57	56	63	47	57	60	61	54	48	60							54.8	6	10	269	80
30	42	39	46	46	52	41	45	50	52	45	41	52							45.9	4	9	208	62
20	34	32	34	36	40	33	34	39	40	35	31	40							35.7	3	9	158	47

36x24 Criti-Clean Velocity Profile @ 90 FPM

Evolution Command %	V0	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	Velocity AVG	SDEV	RSDEV
47	55	47	61	60	69	51	62	66	66	58	52	66							59	7	11



Energistics Labor tion on 240V and 277V, please consult factory

April 2013

Performance Data

Observer	Date
BWJ	5/29/2013

36x24 AJ Criti-Clean: Static Pressure

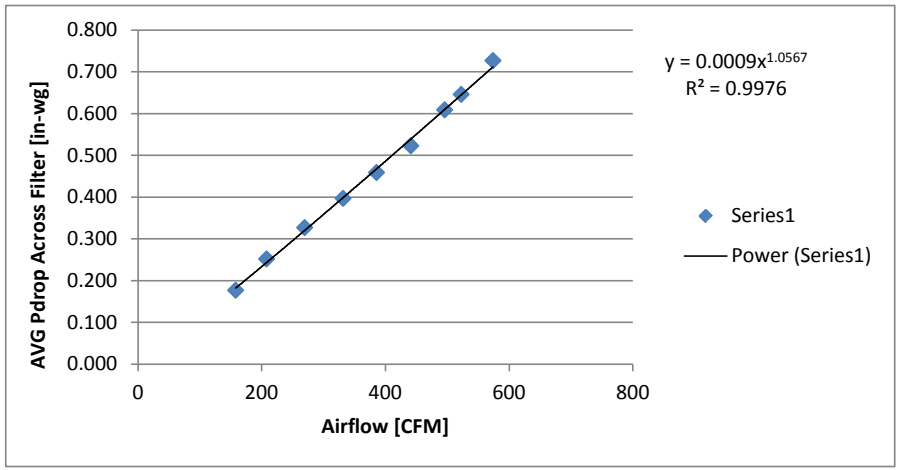
Exp 700 TST 0429
LTO 2012-1211 Rev. 1

Filter Area
3.37

Note: Data collected @ 120V.

36x24 Criti-Clean Static Pressure

Evolution Command %	Upstream AVG Plenum Ps [in. wg.]	Dwnstream AVG Plenum Ps [in.-wg.]	AVG ΔP Across Filter	Measured Flowrate [CFM]	Calc'd Face Velocity [FPM]
100	0.729	0.002	0.727	574	170
90	0.656	0.010	0.646	522	155
80	0.619	0.010	0.609	496	147
70	0.533	0.010	0.523	441	131
60	0.468	0.009	0.459	385	114
50	0.406	0.009	0.397	331	98
40	0.337	0.010	0.327	269	80
30	0.261	0.009	0.252	208	62
20	0.186	0.009	0.177	158	47



36x24 Criti-Clean Electrical and Airflow Data @ 90 FPM

Evolution Command %	Upstream AVG Plenum Ps [in. wg.]	Dwnstream AVG Plenum Ps [in.-wg.]	AVG ΔP Across Filter
47	0.381	0.010	0.371

Airflow vs. ΔP Power Fx'n		ΔP vs. Airflow Power Fx'n	
C:	0.00086556	C:	790.008663
b:	1.05665942	b:	0.94413795

Dirty Filter is suggested @ 1.5 times clean filter initial resistance:
0.5565
Equivalent to DSP of:
0.186

Energistics Laboratory

*for information on 240V and 277V, please consult factory

April 2013

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