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February 2023

ELECTROCELL PERFORMANCE REPORT
MAJOR AUTOMOTIVE MANUFACTURING FACILITY

Please review the results of our recently installed system at one of our many large automobile manufacturing applications.

This system was installed in June 2022 on a 6000-ton loop comprised of three 2000-ton chillers. This is just one of five 6000-ton loops. The customer was able to supply us with information to calculate kW per ton. ElectroCell initially estimated a minimum of 10% kw/ton reduction. Sample trending logged all points in one-hour increments (24 per day) throughout each month. We will continue with these calculations throughout the year.

ElectroCell additionally conducted a 3rd party lab test for both before and after particle analysis (see attached).

Any questions on the attached do not hesitate to contact me.

Paul Q. McLaine, President
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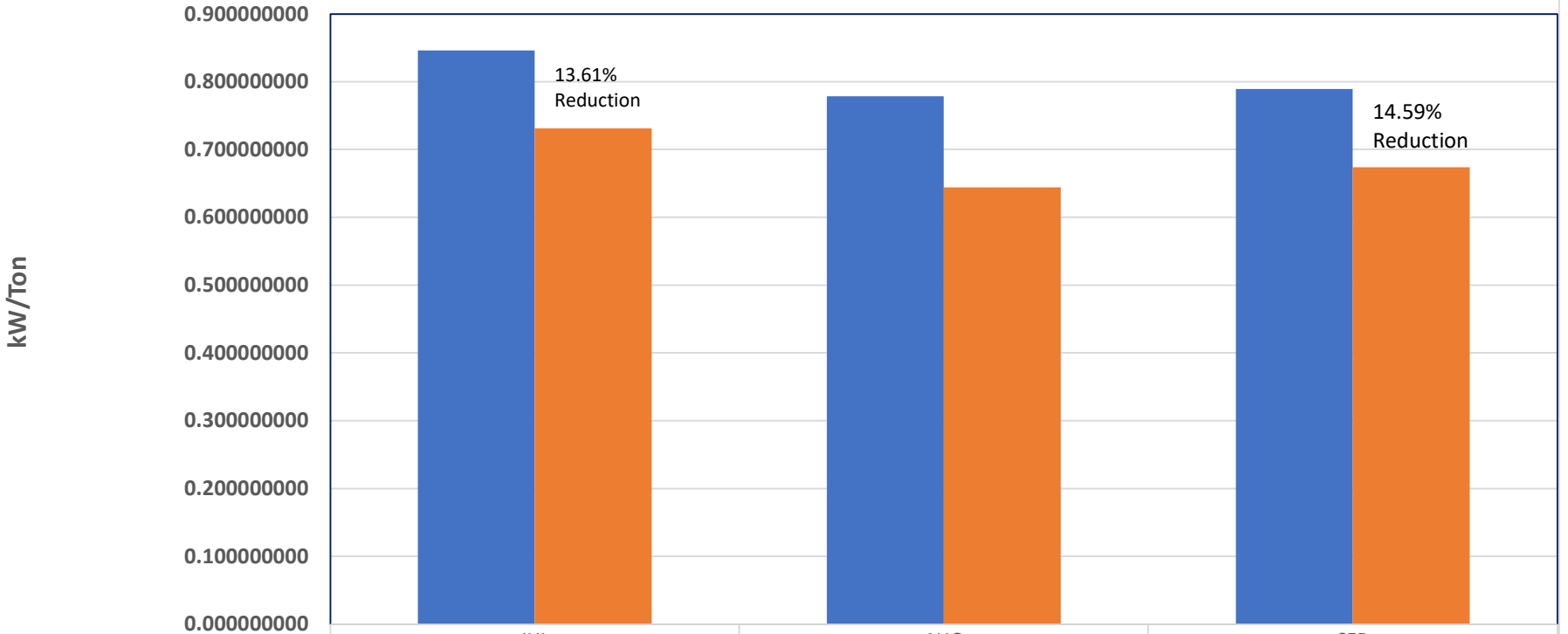
ELECTROCELL SYSTEMS

Major Alabama Automotive Manufacturer
6,000-Ton multi-chiller open loop application (one of five loops)
kW per ton comparison



	JUL	AUG	SEP
2021	0.846080059	0.778475661	0.789148577
2022	0.730910246	0.644331857	0.673996899

EC-6000 System "Before and After" kW/ton results

ElectroCell System Installed June 2022

MAJOR AUTOMOTIVE MANUFACTURER ALABAMA MONTHLY COMPARISON

JUL 2021	Average Entering Chilled Water Temp (deg F)	Average Leaving Chilled Water Temp (deg F)	Average Chiller Evaporator Flow (gpm)	Average Chiller Input Power (kW)	Average Cooling Load (tons)	Average Kw/Ton
Chiller 3	56.80	45.08	2686.98	1026.69	1311.76	0.782680060
Chiller 4	59.00	46.29	2363.92	980.82	1252.25	0.783247305
Chiller 5	57.94	45.78	1673.87	824.55	848.03	0.972312814
AVG	57.91	45.72	2241.59	944.02	1137.35	0.846080059

JUL 2022	Average Entering Chilled Water Temp (deg F)	Average Leaving Chilled Water Temp (deg F)	Average Chiller Evaporator Flow (gpm)	Average Chiller Input Power (kW)	Average Cooling Load (tons)	Average Kw/Ton
Chiller 3	58.48	43.26	1717.14	595.66	1088.88	0.547038334
Chiller 4	60.19	46.32	2645.48	1162.42	1529.05	0.760223071
Chiller 5	57.25	45.03	2398.26	1081.26	1221.11	0.885469334
AVERAGE	58.64	44.87	2253.63	946.45	1279.68	0.730910246

JULY 2022 kW Reduction %:	13.61%

MAJOR AUTOMOTIVE MANUFACTURER ALABAMA MONTHLY COMPARISON

AUG 2021	Average Entering Chilled Water Temp (deg F)	Average Leaving Chilled Water Temp (deg F)	Average Chiller Evaporator Flow (gpm)	Average Chiller Input Power (kW)	Average Cooling Load (tons)	Average Kw/Ton
Chiller 3	56.71	44.85	2862.21	1019.01	1414.78	0.720259192
Chiller 4	58.25	45.23	2837.91	1103.24	1539.63	0.716562511
Chiller 5	56.30	44.72	2494.21	1081.76	1203.82	0.898605281
AVERAGE	57.09	44.93	2731.45	1068.00	1386.08	0.778475661

AUG 2022	Average Entering Chilled Water Temp (deg F)	Average Leaving Chilled Water Temp (deg F)	Average Chiller Evaporator Flow (gpm)	Average Chiller Input Power (kW)	Average Cooling Load (tons)	Average Kw/Ton
Chiller 3	60.71	44.97	1365.39	554.98	895.93	0.619450226
Chiller 4	67.35	49.80	1808.94	783.72	1322.57	0.592571816
Chiller 5	60.43	45.66	2144.47	951.35	1319.53	0.720973529
AVERAGE	62.83	46.81	1772.93	763.35	1179.34	0.644331857

AUGUST 2022 kW Reduction %:	17.23%

MAJOR AUTOMOTIVE MANUFACTURER ALABAMA MONTHLY COMPARISON

SEP 2021	Average Entering Chilled Water Temp (deg F)	Average Leaving Chilled Water Temp (deg F)	Average Chiller Evaporator Flow (gpm)	Average Chiller Input Power (kW)	Average Cooling Load (tons)	Average Kw/Ton
Chiller 3	54.69	44.58	2805.86	841.91	1181.92	0.712319578
Chiller 4	56.84	46.02	2479.07	846.65	1117.29	0.757769537
Chiller 5	60.36	46.64	625.21	320.77	357.46	0.897356614
AVERAGE	57.30	45.75	1970.05	669.77	885.56	0.789148577

SEP 2022	Average Entering Chilled Water Temp (deg F)	Average Leaving Chilled Water Temp (deg F)	Average Chiller Evaporator Flow (gpm)	Average Chiller Input Power (kW)	Average Cooling Load (tons)	Average Kw/Ton
Chiller 3	59.33	45.20	2223.76	727.41	1308.90	0.555743857
Chiller 4	72.38	52.48	948.52	491.16	786.61	0.624399192
Chiller 5	55.66	44.69	2693.60	1036.65	1231.40	0.841847648
AVERAGE	62.46	47.46	1955.29	751.74	1108.97	0.673996899

SEPTEMBER 2022 kW Reduction %:	14.59%

ELECTROCELL SYSTEMS

PARTICLE ANALYSIS

99.5% Particle Reduction after 32 Days

MAJOR AUTOMOTIVE MANUFACTURING FACILITY
Lincoln, AL

Source: Central Plant Chiller Open Loop

Electro Cell System: ***XCell-6000 Particle Precipitator***

TEST METHOD: All tests completed by independent third-party laboratory. Samples analyzed by electro-optical particle analyzer employing the light scattering principle of operation with filtered water and particle data corrected Stirring was continuous.

BASELINE SAMPLE - 07-Jun-2022 Prior to ElectroCell Start-up			POST INSTALL SAMPLE - 09-Jul-2022 with ElectroCell System		
PARTICLE COUNTS PER 100mL TEST PORTION			**PARTICLE COUNTS PER 100mL TEST PORTION**		
1 - 3 micron:	5,765,160		1 - 3 micron:	12,771	
3 - 5 micron:	1,085,480		3 - 5 micron:	4,843	
5 - 10 micron:	855,080		5 - 10 micron:	3,812	
10 - 15 micron:	152,720		10 - 15 micron:	874	
15 - 25 micron:	116,440		15 - 25 micron:	1,153	
Over 25 micron:	168,800		Over 25 micron:	849	
TOTAL / 100mL:	**8,143,680**		**TOTAL / 100mL:**	**24,302**	
SOLIDS PER 100 LITERS OF SYSTEM VOLUME (mm^3)			**SOLIDS PER 100 LITERS OF SYSTEM VOLUME (mm^3)**		
1 - 5 micron:	115.59		1 - 5 micron:	0.41	
5 - 10 micron:	360.84		5 - 10 micron:	1.61	
Over 10 micron:	114,044.18		Over 10 micron:	578.16	
TOTAL / 100 Liters:	**114,520.61**	**1145 ppm**	**TOTAL / 100 Liters:**	**580.18**	**6 ppm**

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