09-06-18

OPTYMIZE™ COATINGS

ENERGY EFFICIENCY CASE STUDY SUMMARY:

CLIENT: **Red Hawk Casino** Placerville, CA

PROJECT BACKGROUND

Red Hawk Casino, in Placerville, California, has typical summer temperatures of 110 to 115° F. They run 100% fresh air make up to satisfy the indoor air requirements of the casino, and were looking for a way to reduce their overall cooling cost and to boost their cooling ability during peak times.

SOLUTION

Red Hawk contracted with Optymize to have us install our **KW Guard** dual coating solution to provide the best heat transfer efficiency and remove solar load from the units, allowing them to meet the cooling loads of a casino that operates 24/7.

DATA COLLECTION PROCESS

- Install KWH /Ambient Temp Data Loggers, 3-31-16
- Collect Pre-Coat Data Clean and coat condenser coils with **OPTY-Coil Coating**, 5-3-16
- Clean and coat exterior cabinet with **KWGuard Solar Shield Ceramic Coating** (Energy Star Rated), 5-3-16
- Collect Post-Coat Data through 5-31-16

BENEFITS

- KWH reduction – 15 or better. Immediate and dramatic reduction of HVAC energy costs
- Reduced run-time. Reduces maintenance costs and improves unit life
- Corrosion protection
- Longer useful life. Significant Net Present Value (NPV) of deferred capital replacement dollars
- 50% or better reduced routine maintenance costs (coil cleaning)
- Reduced carbon footprint

FINAL ANALYSIS

Pre-Coat Data			
Date	Roof Temp	Sky	Total KWH
04/07	66.7	Sun	986
04/06	73.0	Sun	1203
04/03	64.2	Sun	988.6
04/25	53.7	Sun	977.3
04/02	63.8	Sun	977

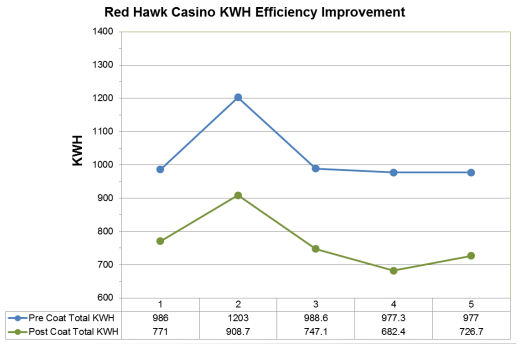
Post-Coat Data			
Date	Roof Temp	Sky	Total KWH
05/19	67.4	Sun	771
05/11	73.3	Sun	908.7
05/15	63.7	Sun	747.1
05/25	61.6	Sun	682.4
05/14	60.9	Sun	726.7

KWH % Reduction	Average KWH % Reduction
21.8%	25.26%
24.5%	
24..4%	
30.2%	
25.6%	

Return On Investment (ROI): 9 months

COMPARATIVE RESULTS

This chart illustrates the daily results for the 5-day comparative results in graph format.



CONCLUSION

Utilizing our patent-pending "Dual Process" coating combination reduces energy costs and extends the useful life of the unit by several years. Our unique "Performance Guarantee" provides a totally risk-free opportunity to save energy and significant energy dollars.