



ENERGY EFFICIENCY CASE STUDY SUMMARY:

PROJECT BACKGROUND

CLIENT: Avionics Lake Forest, CA **Unit Tested:** WCD180E400AA

APPLICATION & DATA COLLECTION PROCESS

- Install KWH/Ambient Temp Data Loggers
- Collect Pre-Coat Data
- Clean and coat condenser coils with **OPTY-COIL COATING® - CLEAR**
- Clean and coat exterior cabinet with KWGuard ThemoCote ceramic coating
- Collect Post-Coat Data

CUSTOMER BENEFITS

- KWH reduction - 15-20%. Immediate and dramatic reduction of HVAC energy costs
- Reduced run-time. Reduces maintenance costs and improves unit life
- Longer useful life. Significant Net Present Value (NPV) of deferred capital replacement dollars
- Reduced maintenance costs by 50% or better
- Reduced carbon footprint

PANASONIC AVIONICS FINAL ANALYSIS

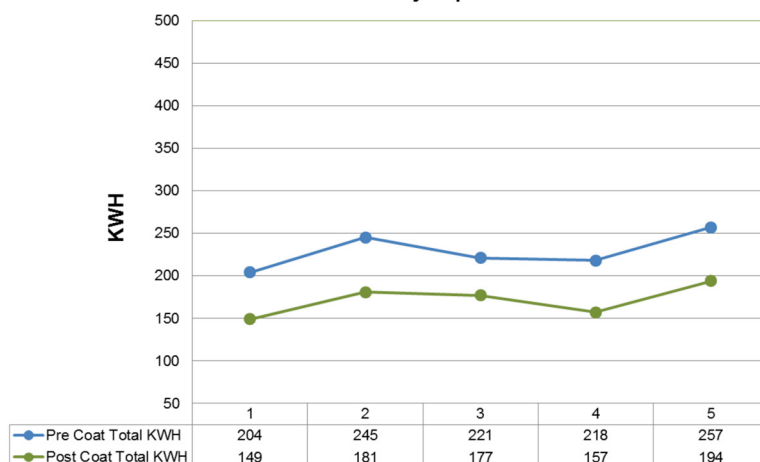
PRE-COAT DATA				POST-COAT DATA				KWH % REDUCTION	AVERAGE KWH % REDUCTION
Date	Avg.Temp	Weather	Total KWH	Date	Avg.Temp	Weather	Total KWH		
04/06	70.5	Sun	204	04/27	71.0	Sun	149	-29.96%	-25.10%
04/07	74.6	Sun	245	05/08	74.4	Sun	181	-26.12%	
04/11	69.1	Sun	221	05/20	65.8	Sun	177	-19.91%	
04/14	69.6	Sun	218	05/07	68.3	Sun	157	-27.98%	
04/09	75.8	Sun	257	05/19	73.2	Sun	194	-24.51%	

RETURN ON INVESTMENT (ROA): 4.3 MONTHS

COMPARATIVE RESULTS

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

Client KWH Efficiency Improvement



CONCLUSION

Utilizing our patent-pending **Dual Process** coating combination reduces energy costs and extends the useful life of the unit by several years.

In addition, we reduce run time, routine maintenance and carbon footprint.

