



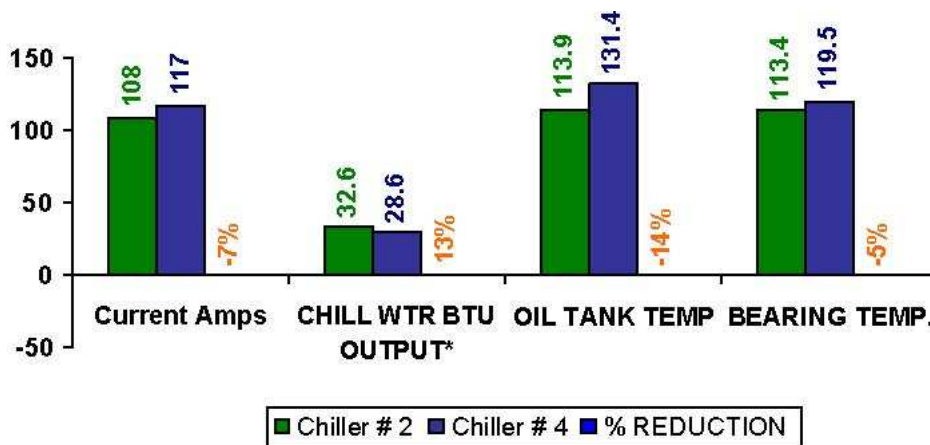
Universal Studios

On November 1, 2002, Compress Shield was installed at Universal Studios in Orlando, FL and measured by and in accordance with the State of Florida Energy Office. (ENERGY CONSERVATION ASSISTANCE PROGRAMS Designation: ECAP-CUL-1-99 Test Method for Comparing Utility Loads in Standard Constructed Buildings).

The objective of this procedure is to determine the impact of the "As Built Conditions and As Installed Additives, Components and or Equipment" on the utility loads in occupied residential, commercial and government buildings. The focus of this procedure is to provide a comparison to known standards for all parties interested in using alternative or conventional energy devices to displaced utility loads. This procedure addresses the possible energy reduction properties of the additive tested and has no relationship to the Equipment Manufacturers Recommended Lubricating Requirements.

The survey indicated that the Compress Shield Polarized Lubrication Enhancement significantly reduced the treated Equipments Operational Loads. The results would qualify the product as a Energy Conservation Measure (ECM) that could be approved for funding with State or Federal Energy Conservation Grants were applicable. The chart below shows a synopsis of the test results (Chiller # 2 has the Compress Shield treatment);

UNIVERSAL ORLANDO BLD.124 CHILLER TEST



AVERAGE OVERALL ANTICIPATED INCREASED EFFICIENCY = 12.63%

Weather conditions during the test period were as follows:



High Temperature 77.5 Deg. F. Low Temperature 72.8 Deg. F Average Wind Speed 4 MPH
 Average UV intensity 99 A+B Outside Humidity 87 % Mostly cloudy conditions with light morning rain activity.

Table # 1

The loads being produced at the time of the survey were are as follows:

TYPE OF SYSTEM	K/BTU PER HOUR PER GAL. @ CW\FLOW OF 55 GPM	KWH PER K/BTU	LOAD AMPS A+B+C AVERAGE	OIL TANK TEMP. DEG/F BEARING TEMP. DEG/F	AVERAGE OUTPUT PERCENT OF INCREASED OUTPUT ₁
CHILLER NUMBER 4	294,331	2.55	117	131.4 119.3	73,675 NON TREATED UNIT 0%
CHILLER NUMBER 2	405,420 + 27.3%	1.75 - 32%	108 - 7%	113.9 113.4 - 9.5%	101,439 12.63%

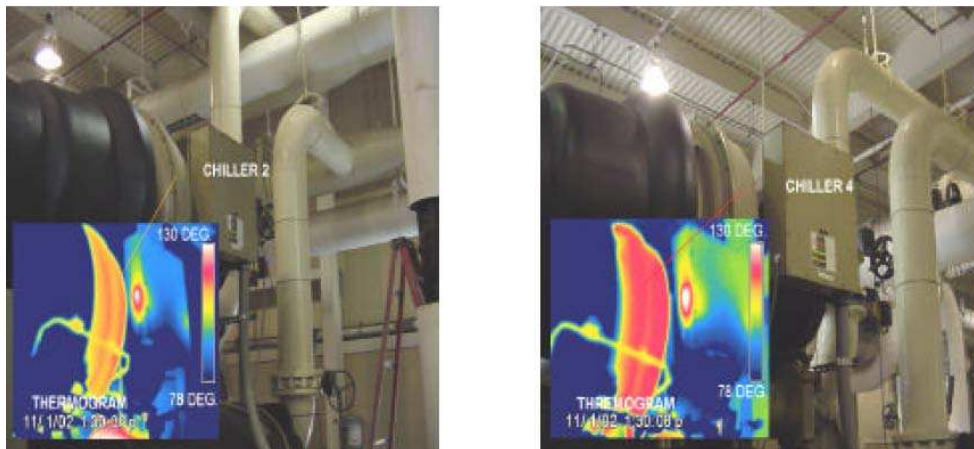
Due to the extremely low Chill Water Thermal Delta's during the test period (+/-- 10 Deg. F.) being caused by the weather conditions listed above, we would anticipate these numbers to be conservative. The plant Engineer and the computer records show that Chill Water Thermal Delta's (Discharge vs. Return) can be as high as 21 Degrees during normal Summer Operating Hours. The photo below shows some of the actual recorded data during the test period with the anticipated possible savings calculated on reported a blended energy rate of \$0.0577 kWh.

2 TRANE 1,280 TON HEU IN BLD. 124



Thermographic Analysis concurred with the other data collected, the Thermograms and Photos below show that the Treated Equipment is showing a Cooler Thermal Footprint:

TREATED UNIT STANDARD UNIT



The precision and bias of this test cannot be stated quantitatively, despite an attempt to obtain an ultrasonic path through the existing 12 inch Chill Water Pipes. Failure to obtain this was attributed to internal coatings on the pipes or possible turbulence in the water flow. To overcome this condition a Calibrated Standard Flow Device that produces a known flow rate was used. The thermal readings were taken at the ACTUAL discharge

and return Chill Water Lines of each unit, the resulting Thermal Differences were then multiplied by each units ACTUAL FLOW RATE (55 GPM at the time of the test). The sample time for each test was 15 minutes.

The Flow Data contained in Table # 1 of this report reflects the above assumptions and is expressed in Percentile of Differences between the 2 systems tested, both of which were reportedly at the same load factors during this survey.

These test results, using the above method, seem to concur with other recent tests preformed by the manufacturer. As tested the Compress Shield Polarized Lubrication Enhancement would qualify as an Energy Conservation Enhancement for ECAP Program Department of Energy Funded Projects including FEMP, Rebuild America, Energy Smart Schools, Front Porch Florida and Weatherization Projects were enhancing the performance of existing HVAC equipment is a concern. The product would also qualify as a Energy Conservation product for the Small Business Community under State Funded Programs such as the Florida Energy Loan Program (FELP) if such programs were once again made available.