

## **FUEL SAVINGS REPORT**

for

# Manufacturing Facility

LOGANSPORT, INDIANA

#### **PROJECT HISTORY**

Based on recommendations prepared by Thermo-Cycler Industries, (12) Thermo-Cyclers<sup>®</sup>, (3) Energy-Jet<sup>®</sup> makeup air systems, (15) unit heaters and (1) steam boiler for the 75,000 gal water tower replaced the existing steam boiler plant and direct fired makeup air systems in a large, old manufacturing facility for this major manufacturer of electrical control devices.

#### **BUILDING DATA**

- ◆ Total Area: 185,000 sq. Ft. (Appx. 135,000 Sf heated by Thermo-Cycler, 20,000 Sf by unit htrs)
- ♦ AVERAGE HEIGHT: 16 FT.
- ♦ OVERHEAD DOORS: 7 OVERHEAD DOORS
- ♦ WALL CONSTRUCTION: 8" AND 12" BRICK NO INSULATION
- ROOF CONSTRUCTION: App. 75% WOOD DECK WITH 4" INSULATION; 25% UNINSULATED GYPSUM PANELS
- ◆ GLASS AREAS: APP. 14,000 SF SINGLE GLASS IN ROOF MONITORS AND WALLS
- ◆ DEGREE DAYS: SEASON 1 6011 DEGREE DAYS; SEASON 2 5814 DEGREE DAYS
- ◆ Building usage: Manufacturing (Electric control devices)

Season 1 - Gas Usage & Cost			
Steam Boiler & Gas Fired Makeup			
Month	Mcf Used	Cost	
October	2341	\$ 9,437	
November	3430	\$18,692	
December	5236	\$26,671	
January	5294	\$24,847	
February	5625	\$23,631	
March	3093	\$13,545	
April	1944	\$ 8,691	
Annual Total	26,963 Mcf	\$125,514 (@ \$ 4.65 per Mcf)	

Season 2 - Gas Usage & Cost			
Thermo-Cycler Retrofit			
Month	Mcf Used	Cost	
October	1112	\$ 4,979	
November	2179	\$10,631	
December	3460	\$16,782	
January	2088	\$10,241	
February	1945	\$ 8304	
March	1559	\$ 6741	
April	1075	\$ 4773	
Annual Total	13,427 Mcf	\$62,451 (@ \$4.65 per Mcf)	

### **BOTTOM LINE**

In addition to improving employee comfort and reducing maintenance costs, energy saving recommendations by **THERMO-CYCLER**® reduced gas consumption approximately **50%** and saved this manufacturer over **\$63,000** during the first season of operation.

