

ENERGY EFFICIENCY

Small manufacturer drives down energy costs.

Savings Payback

Approximate Building Size: 170,000 sq. ft.	Energy Savings kWh:	591,660
Average kW: 294	Energy Savings:	\$94,025
Average kWh: 68,577	Incentive Awarded:	\$336,443
Project Costs: \$433,192	Payback:	1.04 yr.

Client

KlearVU Corporation is a small business manufacturer of chair pads and rocker sets. The headquarters and factory are located in Fall River, MA. With 120 employees, working 1 shift the factory is in operation 5 days a week.



Opportunity

Assessed the facility for energy efficiency opportunities to lower the business bottom line and operating expenses. Project type: VFD and motor replacements, hot water coil installation, and LED lighting upgrade.

Solution

We identified multiple opportunities for energy savings, including:

- (1) Variable frequency drive (VFD) for (1) 30HP air handler unit (AHU)
- (3) Variable frequency drives (VFDs) for (3) 20HP air handler units (AHU)
- (1) Variable frequency drive (VFD) for (1) 15HP air handler unit (AHU)
- (2) Variable frequency drives (VFDs) for (2) 7.5HP air handler units (AHU)
- Replacement of (1) 30HP standard efficiency motor with (1) VFD rated premium efficiency motor
- Replacement of (3) 20HP standard efficiency motors with (3) VFD rated premium efficiency motors
- Replacement of (2) 7.5HP standard efficiency motors with (2) VFD rated premium efficiency motors
- Replacement of (3) electric duct heater (EDH) units (rated 30kw) with (3) hot water coils
- Replace (725) 32w 4' T8 recessed fixtures with (725) recessed LED fixtures (Lithonia 2FSL4 LP840)

* The project was completed in two phases - phase one 10/30/2014 & phase two 12/23/2014

Benefit

The project resulted in clean, bright light evenly distributed for enhanced visibility, essential for working with fabrics. Employees have commented on the bright light adding to their comfort in their working environment.

The installation of variable frequency drives and new energy efficient motors is largely unnoticed by employees, but important for the business bottom line, as utility electric rates have increased by 30% since the installation.

“ Everyone did a great job. We are really pleased with the installation and anticipate great savings as a result.

— Carl Dansereau, Director of Facility Operations