

# *Ryerson*

## *New, Energy Efficient Lighting Significantly Reduces Operating Costs*

---

### **Problem:**

#### ***Poorly Lit Work Areas, Need for Operating Cost Reduction***

As Ryerson embarked on a plant consolidation in Milwaukee, the company identified areas in which they could reduce operating costs, update the facility and improve the work environment for employees. A specific part of the consolidation called for lighting upgrades.

The company was using poorly designed, inefficient lighting rack lighting lined with metal halide lights which provide dim work areas and require costly maintenance. "There were aisles of our facility that literally had no light," said Ryerson operations manager, Jeff Pipiras.

In addition to poorly lit work areas, rising energy costs were becoming an increasing concern for Ryerson. Although the company had previously implemented various strategies like HVAC controls and monitors to reduce and conserve energy, the company was looking for additional ways to cut costs and conserve energy.

### **The Process:**

The facility's plan was to upgrade the rack lighting only throughout the plant. After learning more about the benefits of energy efficient lighting and lighting strategies, Ryerson engaged in a full energy audit with EMS.

"After meeting with Energy Management Systems (EMS), we realized what our potential savings and rebates would be. If we did more lighting upgrades, we'd have more savings and more of a rebate corporately," said Pipiras.

Over the course of 90 days, the company analyzed current lighting and completed installation of energy efficient lighting and motion sensors throughout the entire plant and corporate offices. The energy audit uncovered problems with in the current lighting including:

- The discovery of older-style lights that used too much energy.
- The inefficient lights also were outputting approximately 30% of the light as when they were new. Ryerson was paying twice as much for half the light.
- EMS analyzed the daily tasks in the facility and discovered several low traffic areas in the plant that were constantly lit, wasting energy when not in use. More importantly, EMS discovered very dark areas that were occasionally used, posing a safety issue for employees entering those areas.

### **A Solution:**

With little effort and minimal investment, Ryerson quickly saved significant amounts of energy and enjoyed a cost savings each month by upgrading older, dimmer lights to energy efficient lights and installing motion sensors and foot lighting to control lights throughout the plant.

"It's brighter in here and our employees like it. The light is a natural light and we are illuminating areas that were never lit," said Pipiras.

Prior to the upgrades, Ryerson was using 1,000 watts metal halide lights that ran all day every day. The company now has natural and optimal light from 266 watt energy efficient lights that are connected to motion sensors, turning lights on when needed and off when not in use.

### **Cost Savings**

Ryerson immediately began saving money on monthly energy bills.

- The company enjoyed an annual savings of more than \$20,800
- EPACT 2005 Federal deduction added another \$43,310 in savings through a one time tax deduction.

“My job is to reduce operating expenses and this will save me money,” said Pipiras.

***Environmental Impact***

By using energy efficient lighting and motion sensor controls Ryerson has significantly reduced air pollution by more than a thousand tons a year or the equivalence of 1.3 million gallons of gasoline over the next 20 years. The company will save more than 15 million KWH in the next 20 years.

***Improved Workplace Environment***

The most advantageous environment is one that provides optimum comfort to avoid fatigue, stress or injury. Newer energy efficient lighting provides optimal lighting with an ultimate result of a safer, happier, better performing workforce that brings higher profits to the bottom line, through superior productivity. Ryerson’s workforce will be operating under more reliable, more durable, longer-lasting lighting products that reduce downtime, and lower repair costs.

For more information visit Energy Management Systems at [www.energymanagement.com](http://www.energymanagement.com), or call Dave Riggle at 317/341-5968.