

# 2014 Governor's Sustainability Award Winner

## THOMASON MACHINE WORKS, INC.



Thomason Machine Works, Inc. (TMW) located in Rockford, Illinois, is a second generation family-owned business that has been in operation since 1978. They specialize in replacement parts for a wide variety of header, roll thread, and general machining products. From prototype runs to mass

production of parts, the company has the ability to meet the ever-changing demands in an industry with especially diverse customer needs.

TMW has also found ways to conserve energy, reduce waste volume, and educate their employees, customers, and community on the importance of environmental responsibility.

In addition to making great strides in energy efficiency and reducing regulated waste volumes from production activities, the company has focused on finding ways to make an impact on solid waste reduction, recycling, and pollution prevention. Their focus has paid off. In 2013, they deployed an integrated automatic Inventory Management System that is now saving them over \$12,000 in paper purchasing and manpower. They have prevented coolant waste, classified by Illinois EPA as non-hazardous special waste, from their metal machining process by installing oil skimming equipment, which extends the life of the coolant bath. This effort has reduced coolant usage by 75%, totaling \$4,800 cost savings annually for materials and waste disposal.

Another success grew from the company increasing its recycling from 500 lbs. per year to 1,250 lbs. of paper, 250 batteries, and 23 lbs. worth of toner cartridges each year. Customer and employee engagement has been a key point of success with regard to TMW's recycling efforts as TMW now encourages them to bring material to TMW to be recycled.



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*"We are excited to announce that our 'green' efforts are paying off."*

David Thomas, Owner  
Thomason Machine Works, Inc.

### KEY STATISTICS

 <b>22.6 mtCO<sub>2</sub>e</b> of emissions avoided per year
 <b>\$2,150</b> raised and donated for breast cancer awareness
 <b>\$26,900</b> per year saved via energy and resource efficiency

### ABOUT THOMASON MACHINE WORKS, INC.

Established: **1978**

Location: **5459 11th Street, Rockford, IL**

# of employees: **23**

Produces: **Replacement parts for machining products**

NAICS code: **332710**

Website: **[www.thomasonmachine.com](http://www.thomasonmachine.com)**

### ABOUT THE ILLINOIS GOVERNOR'S SUSTAINABILITY AWARD

Since 1987, ISTC has presented Governor's Sustainability Awards to organizations in Illinois that have demonstrated a commitment to sustaining our environmental and economic health.

Any Illinois public or private organization is eligible to apply.

Find out more at:

[istc.illinois.edu/govsawards](http://istc.illinois.edu/govsawards)

or email [istc-info@illinois.edu](mailto:istc-info@illinois.edu)



## TOOLS FOR SUCCESS

A breakdown of strategies and technologies that help Thomason Machine Works, Inc. pursue social, environmental, and economic stewardship.

### People

- ✓ Helped the Fairdale community with clean-up after tornado damage
- ✓ Held a 'Manufacturing A Cure' fundraising event for breast cancer awareness
- ✓ Collects select recyclable materials from customers and employees

### Planet

- ✓ Created a natural habitat and resting area for owls and raptors
- ✓ Paperless order management system
- ✓ Oil skimming also reduced the overall amount of hazardous regulated wastes generated in the facility

### Prosperity

- ✓ Lucrative energy efficiency upgrades
- ✓ Smart inventory management system
- ✓ Making the most of utility rebates to help pay for equipment upgrades

## ABOUT ISTC

The Illinois Sustainable Technology Center is a division of the Prairie Research Institute at the University of Illinois at Urbana-Champaign.

ISTC's mission is to encourage and assist citizens, businesses and government agencies to prevent pollution, conserve natural resources and reduce waste to protect human health and the environment of Illinois and beyond.

Visit our website at: [istc.illinois.edu](http://istc.illinois.edu)

## Energy Efficiency Powering Big Savings



With energy savings at the top of their sustainability agenda, Thomason Machine Works, Inc. consulted their local utility provider for guidance on potential efficiency gains and improvements. In doing so, they were able to determine that replacing outdated T12 lighting fixtures with new, energy efficient T8 fixtures was the ideal place to start – resulting in the replacement of over 90 inefficient lighting fixtures in their offices and shop floor. This has resulted in reducing the amount of energy consumed by over 32,000 kWh per year, using 73% less electricity, and saving the company over \$5,100 annually.

Additionally, new occupancy sensors have been installed in all entryways, hallways, and most offices. Specifically, they have added them to all areas in the facility that are considered low traffic areas, where lights do not need to be on throughout the day. These sensors reduced energy consumption by using an automated shut off feature if any given room is unoccupied for a set amount of time. In fact, these sensors are now allowing them to control over 11,000 kWh of their electrical load for lighting, adding substantially to their overall energy savings totals.

The desire for energy efficiency improvements also translated into the need for upgrading existing air compressors to newer, energy-saving models. The new compressors, installed in 2014, use control logic to manage and monitor internal temperatures and pressures to ensure they extract the maximum performance and energy efficiency from every kilowatt used. This will save them approximately 40% on energy costs (approximately \$1,700 annually) compared to traditional fixed speed compressors they were using in the past.