

ISTC Fact Sheet: Eaton B-Line and ISTC



ILLINOIS SUSTAINABLE
TECHNOLOGY CENTER
PRAIRIE RESEARCH INSTITUTE

AN EVOLUTION LEADING TO SUCCESS

B-Line by EATON

B-Line manufactures metal supports and channels for cabling as well as racks and enclosures for cabling and telecommunications systems. Their production processes include milling, machining, welding, painting and electroplating metal as part of their production

process. In 1994 ISTC Technical Assistance Program (TAP) engineers visited the facility and met Matt Bochantin, the plant's new facilities engineer.

That initial meeting led to the implementation of an ultrafiltration membrane system to recover resources and recycle water so that it could be reused in the painting process. Before making this change, B-Line discharged the paint-laced water from the paint line about nine times a year. By implementing ultrafiltration technology, they have been able to recover the paint and recycle the water, reducing the discharge of the paint line water to less than once a year.

B-Line and ISTC TAP engineers have worked together on many projects through the years. "We've worked hand-in-hand on projects with lots of brainstorming back and forth to share technologies and best practices. It's a 20 year relationship that has made a difference in B-Line being a good neighbor in our communities and a good steward to help the environment," said Bochantin.

Initially B-Line was skeptical of efficiency and environmental innovations identified by their facilities engineer. The partnership with ISTC/TAP and the execution of successful projects has helped B-Line develop confidence that recommended projects will result in significant improvements to the company's bottom line and its environmental footprint in their community.



Ultrafiltration (UF) System



Conductivity Controller

"We've worked hand-in-hand on projects, with lots of brainstorming back and forth to share technologies and best practices."

Matt Bochantin, Eaton's B-Line
Facilities Engineer

"The guys from TAP provided me with the third party validation I needed to get approvals," said Bochantin.

EATON B-LINE KEY STATISTICS

	4,136,000 gallons of water reduced
	165,144 pounds of hazardous chemical usage reduced/replaced
	1,204,000 kWh electricity reduced
	33,771 therms natural gas reduced
	1,353 metric tons of CO ₂ (mt-CO ₂ e) emissions avoided
	\$260,624 annual savings realized

ABOUT EATON B-LINE

Established: **1969**
Location: **Highland, IL**
of employees: **400**
Producer of: **Wiring channels, racks and supports**
NAICS code: **332510**
Website: **www.cooperindustries.com**

ABOUT ICORE

ICORE is a project of the ISTC Technical Assistance Program. ICORE strives to achieve significant energy and water conservation and reduced carbon emissions among Illinois' rural communities and businesses by providing on-site technical assistance to water and wastewater treatment facilities and industrial facilities. For more information: **The ICORE Project TN13-104.**

Find other fact sheets and more information about ISTC's Technical Assistance Program at: **istc.illinois.edu/tech.**



INGREDIENTS FOR SUCCESS

Here is a breakdown of strategies and technologies that help Eaton B-Line increase efficiency and reduce environmental impact.

Energy Use

- ✓ Lighting Efficiency & Quality
- ✓ Lighting Controls
- ✓ Electric Motor and Pump Controls
- ✓ Compressed Air Conservation
- ✓ Process Heating Efficiency

Pollution Prevention

- ✓ Membrane Filtration of Paint Stream
- ✓ Metal Lubricant Purification & Reuse
- ✓ Counter Current Rinsing
- ✓ RO Efficiency and Reject Water Reuse
- ✓ Water Conductivity Control

Other Sustainable Practices

- ✓ Expanded Recycling Program
- ✓ EPA Summer Intern Sponsor (2)
- ✓ IEPA Intern Training Center

ABOUT ISTC

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

ACKNOWLEDGMENT

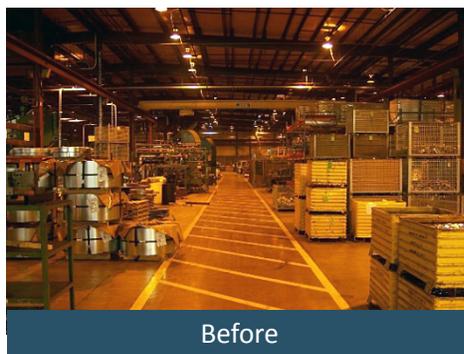
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Since that first visit in 1994, the ISTC TAP engineers and B-Line have worked together to make B-Line more sustainable through the implementation of membrane separation and filtration technology; more efficient and higher quality lighting; counter current rinsing; metal working fluid purification and reclamation; reverse osmosis (RO) efficiency and reject water reuse; conductivity controls on rinse water; process heating efficiency; lighting controls; electric motor and pump controls; and expansion of its recycling program.

LIGHTING UPGRADE

When B-Line began the lighting upgrade project, the difference in lighting quality was so drastic that the first question Bochantin was asked about the project was “Why are we putting in sky lights?” Bochantin also reported that this was the first improvement project where he received only positive comments from employees at the plant.

Production Floor Lighting Upgrade



Before



After

OTHER SUSTAINABILITY PRACTICES

B-Line mentors its industrial peers in adoption of sustainable technologies. B-Line has also sponsored two Illinois EPA summer interns and passed sustainability knowledge on to them, which better prepared these college students to enter the manufacturing and environmental work force.

The company's efforts to reduce their environmental footprint and improve their community has earned them two Illinois Governor's Sustainability Awards.



EHS Manager Chris Dietrich and Matt Bochantin Receiving the Illinois Governor's Sustainability Award from ISTC.

