



SUSTAINABILITY INITIATIVES



Briess Industries respects the environment and makes a conscious effort to minimize the environmental impact associated with our operations. We continuously seek im-

provements and foster partnerships that make more efficient use of natural resources to reduce pollution, emissions and waste. We are dedicated to maintaining a healthy balance between environmental stewardship, social equity, and economic stability for the well being of our community as a sustainable business. —Briess Environmental Mission Statement

NAMED 'ENERGY SAVER' BY THE D.O.E.

"Green With Briess", the company's sustainability program, was formalized in 2005 when Briess' application to the U.S. Department of Energy's "Save Energy Now" program was accepted. Overseen by the D.O.E. Industrial Technologies Program, "Save Energy Now" is a national initiative to reduce industrial energy intensity.

Subsequently, an energy audit of all Briess plants and facilities was conducted by the University of Wisconsin-Milwaukee graduate engineering group. The audit established a baseline of energy usage at all Briess production facilities, and noted a number of energy efficient practices that Briess was already employing such as computer automated processes and the use of variable frequency controls. Over and above the audit, Briess further employed thermal imaging to pinpoint areas of electrical and heat loss.

The audit and thermal imaging report provided direction for improving efficiencies, and Briess entered into an aggressive two-year program to improve processes, procedures and equipment throughout all manufacturing and support facilities. Acting upon recommendations from the audit, Briess successfully and significant-

ly reduced energy consumption at multiple plants by implementing new operating procedures and investing in additional heat exchange and heat recovery systems.

In 2009 Briess Industries received an "Energy Saver" award from the D.O.E. for the reductions it had realized from 2006-2008. Briess received the award for meeting or exceeding 7.5% total energy savings.

Briess has reduced energy consumption and emissions the equivalent of 288 fewer trips being driven around the earth since 2006.

RECOGNIZED AS A 'BEST FRIEND OF THE ENVIRONMENT'

In 2011 Briess Industries was recognized for Environmental Stewardship by Wisconsin Manufacturers & Commerce with a "Best Friend of the Environment Award-Medium Size Company". Accomplishments of the company's "Green With Briess" program were cited in the nomination.

ONGOING INITIATIVES

Operating in an environmentally conscious manner has become a robust and integral part of day-to-day operations and long-term business plans at Briess. The most recent effort is the company's application to join the State of Wisconsin's Green Tier program to help achieve superior environmental performance.

Rev. November 4, 2011





SUSTAINABILITY INITIATIVES, CONT'D

ENERGY REDUCTIONS, 2006-2008

1. **20% reduction in natural gas use at the Irish Road Extract Plant**
 - a. CO2 emissions reduced the equivalent of 4,650,728 fewer miles being driven a year
 - b. That's equivalent to 174 trips around the earth which were realized after operating changes were made
 - Heat exchange systems recover hot water streams for reuse in cleaning and boiler systems
 - Heat generated by drying operations is recovered and reused throughout the plant
2. **10% reduction in natural gas use at the Chilton Malthouse**
 - a. CO2 emissions reduced the equivalent of 895,665 fewer miles being driven a year
 - b. That's equivalent to 35 trips around the earth which were realized after operating changes were made
 - Air-to-air heat exchangers were installed on kilns which decreased natural gas consumption by 25%
 - New operating procedures reduced natural gas consumption to produce roasted malts by 20%

ENERGY REDUCTIONS, 2009-PRESENT

1. **20% reduction in natural gas use at the Chilton Malthouse**
 - a. Equivalent to driving 1,791,330 fewer miles a year or 70 trips around the earth
 - Additional reductions from air-to-air heat exchangers that were installed on kilns in 2008
2. **8% reduction in electrical use at the Chilton Malthouse**
 - a. Equivalent to driving 214,400 fewer miles a year or about 9 trips around the earth

ONGOING INITIATIVES

1. **Conversion from freon to ammonia refrigeration**
 - a. Eliminates ozone damaging greenhouse gases
 - b. Reduces energy consumption by 20%
2. **99% of all waste streams are recycled**
 - a. Used as cattle feed and fertilizer by local farming operations
 - b. High strength waste helps generate a continuous 1.5 megawatts of electricity at a local farming operation
3. **General Operating Efficiencies**
 - a. Strict maintenance programs assure equipment and vehicles operate at peak efficiency
 - b. Clean-in-place reduces chemicals needed to clean/sanitize to food-grade requirements
4. **All product packaging is recyclable**
5. **Two railroad spurs and an East Coast transloading station**
6. **Recycle paper, toner cartridges, cardboard and glass; electronic faxes; smoke-free campus**

