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MnTAP FRP Tips Newsletter

1 message

Minnesota Technical Assistance Program <mntap@umn.edu> Thu, Jun 5, 2014 at 3:52 PM
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Improving Energy Efficiency in FRP Operations

MnTAP's E3 Project Focuses on Efficiency in the FRP Industry

MnTAP is working to bring E3 to Minnesota's Fiber Reinforced Plastics industry. Lean, energy, and waste assessments will be used to help save money, increase productivity, and reduce waste.

Some opportunities that may be available to FRP manufacturers include:

- Receiving FREE lean, energy, and pollution prevention assessments by participating in MnTAP's E3 program.
- Financial and business consulting services from the Minnesota Small Business Development Center.
- Improving spray technique to maximize transfer efficiency – putting your raw materials on the product where you want them rather than into the trash.
- Optimizing cleaning procedures to make the best use of cleaning solvent.
  Using resins with no or lower styrene content.
- Replacing hazardous chemicals such as MEKP and acetone with less hazardous alternatives.
- Utilizing lower emission processes such as closed molding or vacuum molding where appropriate.
- Maximizing motor efficiency through proper sizing and use of synchronous belts and

variable speed drives.

- Replacing inefficient light fixtures.

Did you know…

Lighting upgrades can typically save 40-60% of total energy costs, with payback times of 1-2 years. Replacing just 40 light fixtures saved one Minnesota company over $2000/year in energy costs!

- LED lightbulbs are both more efficient and longer lasting than either incandescent or fluorescent lights.
- Energy-Efficient Fluorescent Lights**:** Older T12 (1.5") fluorescent lights are being phased out and can be replaced with more efficient and longer lasting T8 or T5 bulbs. Always specify that new fluorescent lights use electronic ballasts for flicker-free operation while using up to 30% less energy than magnetic ballasts.
- Exit signs – many older exit signs with incandescent bulbs use 350 kwH per year and cost about $28 annually to operate. New Energy Star labeled LED exit signs use only 44 kWh annually and cost less than $4 to operate each year. That's an annual savings of $24 per sign!
- Occupancy and daylight sensors – Only use your lights when you need them! Typical sensor projects achieve energy savings of around 40%, but in some cases it can be up to 75%. Some areas to consider motion sensors include; stairwells, bathrooms, locker rooms, break areas, conference rooms, copy rooms – anywhere that is frequently unoccupied!
- Rebates- Many utilities offer rebates to cover some of the costs of efficiency upgrades and encourage their customers to conserve energy.

This is the second in a series of newsletters providing helpful tips on how to improve YOUR economic results, energy efficiency, and environmental impact! Stay tuned for the next newsletter which will focus on strategies for saving money through energy efficient lighting.

Let us know if you are interested in getting involved in the E3 project, and send us your ideas for future newsletter topics! Contact Jane Pamperin, MnTAP Senior Engineer, at janep2@umn.edu. If you are not the appropriate recepient for this email or if you know of additional people who should receive this communication, please send their email addresses to mntap@umn.edu.

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FRP - 2
