# University of Minnesota



# Minnesota Technical Assistance Program

200 Oak Street, Suite 350-1 · Minneapolis, MN 55455-2008 612/624-1300 · www.mntap.umn.edu · mntap@umn.edu

Strengthening Minnesota businesses by maximizing efficiency and lowering costs through energy, water and waste reduction

Internship: Lead a project focused on wastewater loading reduction, energy efficiency and water conservation.

Company: Avtec Finishing Systems – New Hope, MN

The Minnesota Technical Assistance Program (MnTAP) is seeking a junior or senior college student to lead a project focused on water conservation and chemical reduction with Avtec Finishing Systems. The intern will create a water map and investigate strategies to reduce water and chemical use by reducing dragout, and evaporation. The intern will quantify these opportunities, develop suggestions, and outline plans for implementation.

## JOB DUTIES:

As part of this project, you will be asked to complete the following tasks:

- 1. Identify and quantify water use within the facility. Create a water map.
- 2. Identify opportunities to reduce chemical and rinse water use by utilizing dragout reduction methods.
- 3. Investigate conductivity control and other flow control measures for rinse tanks.
- 4. Review reverse osmosis water reject settings and alternative uses.
- 5. Evaluate opportunities for dryer/oven insulation and perform compressed air leak audit.
- 6. Identify steam traps and perform steam trap audit.
- 7. Make recommendations for specific improvements based on research, testing, and calculation that will result in wastewater loading reduction, energy efficiency, and water conservation.
- 8. Estimate waste, energy, and water reduction potential from implementation of provided recommendations, then prioritize suggested changes using simple payback methods for financial justification.
- 9. As appropriate, initiate implementation of approved process changes or develop plans for future implementation.
- 10. Summarize findings in a detailed report, including recommended procedures and vendor proposals along with an economic analysis and justification of changes.
- 11. Present findings to the company and at MnTAP-hosted public presentation events.

As an intern, you will work at the company and report back to MnTAP. The position is full time, 40 hours per week, for three months to start after the conclusion of spring semester or quarter. Pay is \$18/hour, with a lump sum stipend of \$1,000 upon completion of the project deliverables: a final report and presentations. Cumulatively, this equates to \$20.00/hour when averaged over the project. Candidates must pass a background check.

### QUALIFICATIONS:

- Cumulative GPA of at least 3.0
- Good oral & written communication skills
- A technical academic background
- Troubleshooting skills
- Self-motivated
- Excel and other software skills
- Appropriate majors: Engineering, environmental or physical sciences and others as applicable

### TO APPLY:

Apply online at:

www.mntap.umn.edu/interns/student/apply/

Remember to submit your application form, cover letter, resume, and unofficial transcript.

Applications can be addressed to:

Matt Domski, Intern Program Manager

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MNTAP IS THE HIRING BODY: DO NOT CONTACT THE COMPANY