

## Commercial & Industrial Fan System Training

Oct. 22, 2025

8:30 a.m. to 4:30 p.m.

Idaho Power Corporate Headquarters or Webex

1221 W. Idaho St. Boise, ID 83702

**Class is free for Idaho Power customers!**

Are there opportunities for energy savings and productivity improvements in your fan systems? In some industrial and commercial fan system settings, while the fan itself may be operating efficiently, it could still be exhausting thousands of dollars' worth of heating (or cooling) energy to the atmosphere! In this one-day course, we'll introduce you to cost effective methods of recovering this otherwise wasted energy and discuss cases where the payback period of tuning such systems is as little as zero to three years! You will also learn how to estimate the operating costs of fan systems and analyze optimization opportunities using the recently released MEASUR software from the US Department of Energy (DOE). Moreover, we'll discuss fan affinity laws and how you can use them to estimate the savings of incorporating variable-frequency drive (VFD) to slow the fan if it's developing more pressure and flow than the process needs. We'll highlight best installation practices for VFDs so you can be confident that your VFD-driven fans are reliable as possible. A light breakfast, lunch, parking, and course material will be provided.

### Key Learning Objectives

- Introduce the new MEASUR software available for free from the US DOE
- See how to use MEASUR to calculate the cost of operating fans in your facility
- Practice using the fan affinity laws to estimate VFD savings
- Best practices for VFD installations to make your VFD operated fans more reliable
- Review five cost-effective methods for capturing waste heat from fan systems

### Who should attend?

- Maintenance technicians
- Plant operators/managers/engineers
- Process/system engineers
- Energy managers and efficiency consultants
- Production supervisors and managers

### Instructor

**Ronald Wroblewski**, holds a bachelor's and master's degree in mechanical engineering, and has 35 years of experience designing, analyzing, troubleshooting, and optimizing fan, pump, and blower systems. He is the lead fan systems optimization trainer for the DOE and has taught fan systems optimization courses worldwide as a senior trainer for the United Nations Industrial Development Organization (UNIDO).

### Background

- Registered Professional Engineer, Illinois

- BS, Mechanical Engineering, University of Illinois Urbana-Champaign, Champaign, IL, 1982
- MS, Mechanical Engineering, University of New Mexico, Albuquerque, NM, 1984

**Registration**

Deadline for registration is Tuesday, Oct. 15.

To register for the in-person or virtual offering, enter your information [here](#).

**Questions?**

Visit [idahopower.com/training](https://idahopower.com/training) or contact us at [training@idahopower.com](mailto:training@idahopower.com).