

## 2009-2010 Plumbing Design & Handbook Classes

Eastern Michigan

DATE: Tuesday, March 16, 2010

BASIC CLASS: **CPD Preparation Class**

VENDOR CLASS: No class this month

DESIGN CLASS: **Pumping System Optimization & Applications: Variable Speed Pumping**

Reece Robinson will discuss some basic concepts of variable speed pumping (not just show those boring old affinity law equations that you see in magazine articles). The following concepts will be discussed (the speaker reserves the right to add or subtract from this list without notice): Proper use of affinity laws; Control Curve vs. System Curve; Control Parameters; Will energy savings actually be achieved/how to determine this; Motor Requirements (What is "Inverter Duty"). Typical Plumbing (and HVAC on request) examples will be used to illustrate the above.

SPEAKER: **Reece Robinson, PE**

TIME: 6:00 - 8:30 pm

WHERE: Plumbing Industry Training Center  
1911 Ring Drive - Troy, MI 48083



Reece Robinson is the Applications Engineering Supervisor for packaged pump systems at Grundfos Pumps Corporation, a pump manufacturer with its North American headquarters in Olathe, KS. He has been with Grundfos for 11 years and provides training, technical support and marketing support for their variable speed packaged pumping systems (BoosterpaQ®). Prior to Grundfos, he worked for a consulting engineering firm, providing energy analysis and HVAC system design. Mr. Robinson received a B.S. degree (Mechanical Engineering) from California State University – Fresno.

### CLASSES

Classes are open to anyone interested—you do not need to be a member to attend classes. There is no charge to attend classes. Registration is required. SEE reverse side for registration information.

### DINNER

A hot catered dinner is available at a cost of \$15 per person to non ASPE, ASSE and MBPA members. Cash (at the door) or checks made payable to ASPE-EMC are accepted. We ask that you please notify us when you register for class if you plan to eat dinner.

### ASPE PLUMBING ENGINEERING DESIGN HANDBOOK CLASSES

Basic classes are held each month, unless otherwise stated, from 3:30 - 5:30 pm with instructor, Joe Hernandez, CPD.

### VENDOR CLASSES

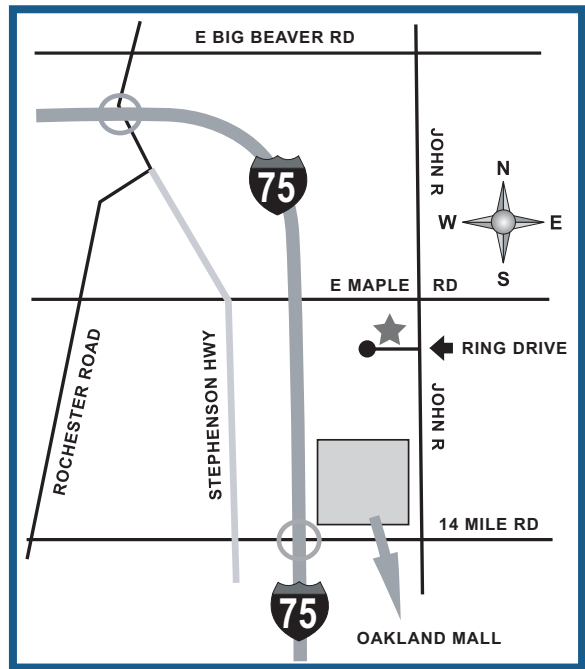
Get introduced to the latest technologies. Classes run from 3:30 - 5:30 pm.

# ASPE Eastern Michigan Chapter Plumbing Design Classes

## Plumbing Industry Training Center

DATE: Tuesday, March 16, 2010  
 WHERE: Plumbing Industry Training Center  
 1911 Ring Drive - Troy, MI 48083

TIME: 3:30 - 5:30 PM  
 BASIC CLASS: **CPD Preparation Class**  
 VENDOR CLASS: No class this month  
 DINNER: 5:30 - 6:00 PM  
 PROGRAM: **Pumping System Optimization & Applications:  
 Variable Speed Pumping**  
 SPEAKER: **Reece Robinson, PE**  
 TIME: 6:00 - 8:30 PM



### PLEASE NOTE

Topics, times and places are subject to change, depending on the availability of the presenter or unpredictable circumstances. Check our web site for the most up-to-date information.

## SPREAD THE WORD!

Please post a copy of this flyer on the bulletin board at the place where you work.

## REGISTRATION

Registration is *required* by 5:00 PM on the **Friday** prior to the day of class. Visit our web site at [www.aspe.org/Eastern\\_Michigan](http://www.aspe.org/Eastern_Michigan) (*URL is case sensitive*) for easy registration and a printable map to the Plumbing Industry Training Center. Register by contacting ASPE VP Technical David Rhodes with your name, contact information and indicate if you will be eating dinner:

**BY PHONE** - David Rhodes at (586) 739-8915 x 59 *or*

**BY E-MAIL** - [drhodes@cr-plumbing.com](mailto:drhodes@cr-plumbing.com)

**BY FAX** - Fill in the form below and fax it to the attention of Mary Chapman at (313) 341-1007.

<p>_____</p> <p>NAME <input type="checkbox"/> ATTENDING DINNER Yes <input type="checkbox"/> No</p> <p>_____</p> <p>NAME <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>_____</p> <p>COMPANY OR AFFILIATION</p> <p>_____</p> <p>ADDRESS</p> <p>_____</p> <p>TELEPHONE NUMBER</p>	<p>_____</p> <p>NAME <input type="checkbox"/> ATTENDING DINNER Yes <input type="checkbox"/> No</p> <p>_____</p> <p>NAME <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>_____</p> <p>CONTACT PERSON OR SUPERVISOR</p> <p>_____</p> <p>CITY / STATE / ZIP CODE</p> <p>_____</p> <p>E-MAIL ADDRESS IF AVAILABLE</p>
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