The Valve Manufacturers Association of America presents up to three full days of education to jump-start your career or expand your knowledge of industrial valves, actuators, and controls.

**NEW! CHOOSE ONE OR BOTH COURSES:**

- **VALVES 101:** Industrial Valves & Materials
- **VALVES 201:** Control Valves, Automation & Special Applications

**November 12 - 14, 2019**

HOUSTON AREA SAFETY COUNCIL | PASADENA, TX

**REGISTER ONLINE AT VMA.ORG/VALVEBASICS**
**TUESDAY, NOV. 12**

7:45 – 8:30 am  
**Registration/Breakfast**

8:30 – 8:40 am  
**Welcome to VMA’s Valve Basics Seminar**

8:40 – 9:50 am  
**LESSON 1-1: Introduction to the Industry**

*Speaker: Greg Johnson, President, United Valve, Houston*

We begin with a broad overview of the valve industry, the major valve and actuator types, and various end-user applications. Lesson 1 includes valve standards, basic piping information, pressure ratings and classes, as well as application issues that are critical to effective valve specification and usage. The stage is set for more detailed discussions on the major valve types to give attendees valuable knowledge that can be applied in their daily PVF work.

9:50 – 10:30 am  
**LESSON 2-1: Linear (Multi-turn) Valves**

*Speaker: Matt Lovell, Production Manager, United Valve, Houston*

In Lesson 2, linear valve types—gate and globe valves—are explained along with stems and bonnets. In addition, there will be an in-depth look at linear valve applications.

10:30 – 10:45 am  
**Break**

10:45 – 11:30 am  
**LESSON 3-1: Check Valves**

*Speaker: Jeff Kane, Director of Sales and Marketing, DFT Inc., Exton, PA*

Our check valve presenter details the unique qualities of check valves, explains how they work and why correct sizing is so essential for this valve type. Also included is a discussion of several specific check valve applications.

11:30 am – 12:30 pm  
**LESSON 4-1: Quarter-turn Valves – Plug and Ball**

*Speaker: Tom Waldmann, General Manager, Technical Support Dept., KITZ Corporation of America, Stafford, TX*

We continue up the valve chain to quarter-turn valves. With quarter-turn valve designs you can go from full open to full close in the blink of an eye with a mere 90-degree rotation of the closure element. This lesson will cover plug and ball valves. While these designs might seem similar, the similarities stop at 90-degree rotation. We will discuss the basic characteristics of each configuration, their pros and cons, and some of the services they are meant for.

12:30 – 1:30 pm  
**Lunch**

1:30 – 2:30 pm  
**LESSON 5-1: Quarter-turn Valves – Butterfly**

*Speaker: Tom Waldmann, General Manager, Technical Support Dept., KITZ Corporation of America, Stafford, TX*

This portion of the quarter-turn valve presentation covers three different butterfly valve designs. Like plug and ball valves, these are very simple to operate. Over the years they have become more and more popular for services no one would have thought possible less than 30 years ago. We will discuss advantages and disadvantages during this hour.

2:30 – 4:30 pm  
**Petting Zoo (hands-on instruction)**

Product tables are set up so that all attendees can sit at each table where our presenters will demonstrate how these products work and answer questions. The following products will be covered: linear, check, ball & plug, butterfly and pressure-relief valves.

4:30 – 6:00 pm  
**Exhibits Open/Reception in the Exhibit Hall**

All attendees who get signatures indicating they have visited each exhibitor are eligible to enter a drawing for an iPad Mini! The drawing takes place at 5:45 pm in the Exhibit Hall.

**WEDNESDAY, NOV. 13**

7:45 – 8:30 am  
**Breakfast**

8:30 – 9:15 am  
**LESSON 6-1: Pressure-relief Valves**

*Speaker: Kim Beise, President, Dowco Valve Company, Hastings, MN*

Pressure-relief valves (PRVs) are known as the “Last Line of Defense” in the valve industry. In this session, we learn how PRVs perform, their critical role in plant safety and important maintenance guidelines.

9:15 – 11:15 am  
**LESSON 7-1: Valve Materials**

*Speaker: Greg Johnson, President, United Valve, Houston, and Tom Waldmann, General Manager, Technical Support Dept., KITZ Corporation of America, Stafford, TX*

Many different materials are used in the construction of valves. Selecting the proper materials is as critical as the valve type itself. The materials chosen are vital to the durability and service life of each valve. This lesson covers basic metallurgy, properties of metals as they relate to valves, material descriptions and characteristics. Typical material selection for a variety of service applications is also on the agenda.

11:15 – 11:45 am  
**Valves 101 Jeopardy!**

Have fun coming up with the questions as our presenters give you the answers. This is a great way to find out how much you learned during the Valves 101 course. Will your team come out ahead? If so, you could walk away with a special gift!

11:45 am – 12:45 pm  
**Networking Lunch**

12:45 pm  
**End of Valves 101; certificates available**

**WEDNESDAY, NOV. 13**

11:15 – 11:45 am  
**Registration for Valves 201**

11:45 am – 12:45 pm  
**Lunch**

12:45 – 2:15 pm  
**LESSON 1-2: Electric Actuators**

*Speaker: Paul Souza, Product Application Specialist/Training Manager, AUMA Actuators Inc., Canonsburg, PA*

Program Schedule
The focus of this presentation is on rotary and quarter-turn electric actuators. Their basic designs, common options and applications will be covered. The presenter will discuss electric actuators from the valve stem to the electrical connection, including mounting concerns, as well as the use of quarter-turn and multi-turn gearboxes in conjunction with electric actuation.

2:15 – 2:45 pm  Break

2:45 – 4:15 pm  Lesson 2-2: Fluid Power Actuators
Speaker: Stephane Meunier, National Sales Director, Fluid & Motion Control – Canada, Emerson Automation Solutions, Montreal, QC
This lesson provides a basic understanding of the various types of fluid-power actuators that are commonly used with rotary and rising stem valves. Beginning with the basic concepts for how thrust and torque are generated, the presentation moves through power actuators that are driven from a supply of compressed air, hydraulic fluid or natural gas. Operating principles for double-acting and spring-return functions as well as failure modes are defined, along with a variety of torque generating mechanisms with their associated torque output characteristics. Attendees will see a wide range of images, animations and application photos to enhance an understanding of the lesson contents, and to provide an increased level of confidence for specifying or evaluating a variety of potential actuator solutions.

4:30 – 6:00 pm  Exhibits Open/Reception in the Exhibit Hall
Attendees who get signatures indicating they have visited each exhibitor are eligible to enter a drawing for an iPad Mini! The drawing takes place at 5:45 pm in the Exhibit Hall. (Note: Attendees who participated in the drawing during Tuesday exhibit hours are not eligible.)

THURSDAY, NOV. 14  (201 course continues)

7:45 – 8:30 am  Breakfast

8:30 – 9:15 am  Lesson 3-2: Solenoid Valves
Speaker: John Molloy, Sales Training Manager, ASCO, Florham Park, NJ
Solenoid valves are defined and explained, along with guidelines on how to make the best selection of a solenoid valve. The presenter also discusses the functions of a solenoid coil, how 2-way, 3-way and 4-way solenoids operate, and various applications for solenoid valves.

9:15 – 10:15 am  Lesson 4-2: Valve Automation Controls
Speaker: Stephane Meunier, National Sales Director, Fluid & Motion Control – Canada, Emerson Automation Solutions, Montreal, QC
This lesson provides a basic understanding of commonly used control components to facilitate the automation of valve actuators that are driven from a supply of compressed air, hydraulic fluid or natural gas. Fluid-power actuators will generate a required thrust or torque to open and close a rotary or rising-stem valve, but some combination of control components is needed to command the actuator into action and to relay functional information back to the operator. Beginning with an overview of basic components and their schematic symbols, attendees will learn how to associate the proper combination of control components in order to achieve a desired operation. Hydraulic power units and gas-over-oil panels will also be discussed. Attendees will gain a good understanding of how to specify or evaluate valve automation control systems.

10:15 – 10:30 am  Break

10:30 am – 12:00 pm  Lesson 5-2: Control Valves
Speaker: Bert Evans, Manager, Educational Services, Emerson Automation Solutions, Marshalltown, IA
Our presenter defines control valves, explains what they do and describes typical control valve styles, including variations, types and applications. The discussion will also include valve sizing and selection, cavitation and flashing, and a brief overview of single loop controllers, control systems and pertinent safety standards.

12:00 – 1:00 pm  Lunch

1:00 – 2:00 pm  Lesson 6-2: Electric Actuator Asset Management, Feedback & Monitoring
Speaker: Paul Souza, Product Application Specialist/Training Manager, AUMA Actuators Inc., Canonsburg, PA
This lesson will discuss the various control options that are used to operate and monitor electric actuators. The presenter will cover basic discrete control commands to fieldbus interfaces. Hints on specifications and where issues may arise will be discussed. Additional topics will include the asset tools available with today’s microprocessor controls, security concerns, and an introduction to Safety Integrity Level (SIL) application requirements.

2:00 – 3:30 pm  Lesson 7-2: Critical Service Applications and Valves
Speaker: Stan Allen, Global Director of Valve Application Engineering, Bray International, Houston
Valves have become more sophisticated as they are applied to many new applications and service conditions. This module includes high-performance valves such as metal-seated ball valves and triple offset butterfly valves, and the services in which they are used today. A description of some of the unique coatings and construction details of metal-seated ball valves will be discussed.

3:30 – 4:00 pm  Valves 201 Jeopardy!
Our presenters will provide the answers. Will you know the questions? Enjoy this fun way to test your recently gained 201 knowledge, and help your team win the game…and a special gift!

4:00 – 6:00 pm  Hands on learning in the “Petting Zoo”
Product tables are set up so that all attendees can visit each table where our presenters will demonstrate how these products work and answer your questions. The following products will be covered: electric actuators; fluid-power actuators; solenoids; control valves; and valve automation controls.

6:00 pm  End of program;
certificates for 201 and full-course attendees available
Several reasonably priced hotels are available within a few miles of the Houston Area Safety Council in Pasadena, TX. There are no room blocks at these hotels, so please make your reservations directly with the hotel of your choice.

We do not provide shuttle service from hotels to the Safety Council. If you are driving, the HASC facility has abundant free parking.

Fairfield Inn & Suites by Marriott Houston/Pasadena
832.664.8870; www.marriott.com

Hampton Inn & Suites Houston/Pasadena
281.991.1055; www.home2suites.hilton.com

Holiday Inn Express & Suites Deer Park
281.479.9888; www.ihg.com

Home2 Suites by Hilton Houston/Pasadena
281.991.1055; www.home2suites.hilton.com

Super 8 Pasadena
281.487.8882; www.wyndhamhotels.com

**Professional Development Hours**

Attendees who complete 1.5 days of either the 101 or 201 course will receive a total of 9 PDHs (Professional Development Hours). Attendees who complete both courses, over 3 days, will receive a total of 18 PDHs. Certificates of Completion will be given out at the end of the programs on Wednesday and Thursday. Attendees leaving before the end of the course will not receive full credit and certificates will be mailed out from the VMA office reflecting the reduced credits earned.

**Cancellation and Substitution Policy**

- Cancellations received up to 30 days before the event are refundable, minus a 5% registration service charge.
- Cancellations received between 15 and 29 days before the event are 75% refundable.
- Due to event guarantees, cancellations received between 0 and 14 days prior to the event are non-refundable.
- All cancellations must be in writing to mmaloneblevins@vma.org.
- Substitutions are allowed up until November 4th. Please advise Malena Malone-Blevins (mmaloneblevins@vma.org) of any substitutions so we can verify your payment and make up a badge in advance for the person attending in your place.

**Online Registration**

Attendees are strongly encouraged to register for this event online. Just go to VMA.org > Meetings > Basics Seminar & Exhibits.

**Fax or Email**

You may fax your completed registration form (with credit card information) to 202.296.0378, or scan in the form and send as an attachment to mmaloneblevins@vma.org. (Credit card registration payments will show up on international customer invoices in U.S. dollars.) If paying by check, mail to: Meetings Manager, Valve Manufacturers Association, 1050 17th Street, NW, Suite 280, Washington DC 20036.

**Questions**

Contact VMA Education Coordinator Abby Brown (abrown@vma.org) for program information, and contact VMA Meetings Manager Malena Malone-Blevins (mmaloneblevins@vma.org) or call 202.331.8105 x310 for questions about registration.

**Interested in Exhibiting?**

Are you a U.S. or Canadian valve, actuator or controls manufacturer; a U.S. or Canadian distributor or supplier to the valve industry; or an OEM-authorized service and repair facility? If so, you may be eligible to exhibit at the Valve Basics Seminar & Exhibits.

**Cost:** VMA/VRC members - early-bird rate is $450 thru Aug. 31; regular rate is $525; non-members - early-bird rate is $500 thru Aug. 31; regular rate is $575. Price includes 1 tabletop and 2 exhibit personnel; additional personnel - $75 each (early-bird); $85 (after Aug. 31)

PLUS, exhibit personnel receive discounted fees for attending the seminar. Please register using the EXHIBITOR registration form.

Find out more about our cost-effective tabletop display:

- Review the Exhibitor Prospectus by going to VMA.org > Meetings > Basics Seminar & Exhibits. Then, click on the link to the Exhibitor Prospectus.
- For additional information, contact Malena Malone-Blevins (mmaloneblevins@vma.org) or Abby Brown (abrown@vma.org).

Tabletop exhibits are open on Tuesday, Nov. 12, and Wednesday, Nov. 13, from 4:30-6:00 pm. Food and beverages will be served in the exhibit area.

**Here’s a sample of what attendees told us about past versions of this course:**

“I appreciate the principles speaking about technologies vs. brands.”

“I myself am beyond grateful for this experience. Awesome people and great content. Thank you all for the inspiration to learn more and more!”

“Well done! Will certainly use the additional knowledge daily and refer to the manual frequently. An invaluable course for those new to the industry!”

“I really enjoyed the presentations and how the petting zoos brought the information together. Thank you!”

“This was a fantastic training course and gave me an in-depth view of a wide range of valve/actuation types... and a much better understanding of valves, components, accessories and schematics. A great investment in training that will help propel my career forward.”

**Program Schedule**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>Wednesday, Nov. 13</td>
<td>8:30 am - 4:30 pm</td>
<td>Program Start</td>
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<tr>
<td>Wednesday, Nov. 13</td>
<td>4:30 pm - 6:00 pm</td>
<td>Seminar Discussion</td>
</tr>
<tr>
<td>Thursday, Nov. 14</td>
<td>8:30 am - 4:30 pm</td>
<td>Seminar Session</td>
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<tr>
<td>Thursday, Nov. 14</td>
<td>4:30 pm - 6:00 pm</td>
<td>Seminar Break and Lunch</td>
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ATTENDEE REGISTRATION
Pasadena, TX | Tuesday, November 12 to Thursday, November 14, 2019

Choose appropriate registration type:

<table>
<thead>
<tr>
<th>Registration Type</th>
<th>First attendee from co.</th>
<th>Additional attendee from same co.</th>
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<tr>
<td>REGISTRATION – EARLY BIRD thru Aug. 31 (check one: ☐ 101 or ☐ 201)</td>
<td>$600</td>
<td>$550</td>
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<tr>
<td>REGISTRATION for 1 course only (check one: ☐ 101 or ☐ 201) after Aug. 31</td>
<td>$650</td>
<td>$600</td>
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<tr>
<td>REGISTRATION for both courses – EARLY BIRD thru Aug. 31 (101 and 201)</td>
<td>$1,175</td>
<td>$1,100</td>
</tr>
<tr>
<td>REGISTRATION for both courses (101 and 201) after Aug. 31</td>
<td>$1,250</td>
<td>$1,175</td>
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<tr>
<td>ATTEND tabletop event ONLY on either ☐ Tues. or ☐ Wed.</td>
<td>$50 or $75</td>
<td>n/a</td>
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Registration fees include all lessons, daily breakfast, lunch and breaks, plus reception, printed seminar materials, access to PDFs of slides, and VMA Certificate of Completion.

Choose charge or check:

☐ Charge: Complete and fax to 202.296.0378, or scan and send as attachment to the VMA Meetings Manager (mmaloneblevins@vma.org).
☐ VISA ☐ MasterCard ☐ Discover ☐ AmEx

Name (exactly as printed on card)

Billing address (if different than address on left)

Card No.

Exp. Date 3- or 4-digit code

Sign here and provide date to activate your quarterly subscription:

______________________________
Signature  Date

PLEASE FILL OUT A SEPARATE FORM FOR EACH ATTENDEE.

FIRST AND LAST NAME

NICKNAME FOR BADGE

TITLE

COMPANY

E-MAIL

ADDRESS

CITY

STATE/PROVINCE ZIP/POSTAL CODE

PHONE FAX

Questions? Contact Abby Brown (abrown@vma.org or 240.328.3866) for program information. Contact Malena Malone-Blevins (mmaloneblevins@vma.org or 202.331.8105 x310) for registration.