World-Class Roll Forming Workshop

April 24-25, 2012

Grand Rapids, Mich.

- Attend new presentation on Steel Properties and Roll Forming
- Participate in session on continuous improvement techniques
- Learn the Three Common In-Line Welding Technologies Used in Roll Forming Applications
- Meet one-on-one with experts and get answers to questions about your existing drawings and parts
- Tour Herman Miller's Hickory Operations

Money Back Guarantee!

Gain two useable concepts you can implement in your operation or your registration fee is refunded. "From my experience both attending and presenting at World Class Roll Forming conferences, I firmly believe the value of information shared and gathered is priceless. I have found no other forum in which you get the quality of hands on experience along with the detailed industry leading Knowledge offered at this program - truly an opportunity to learn from the best the roll forming industry has to offer. World Class Roll Forming Workshop is as advertised - "World Class" in every sense of the Word."



-Kirk McCubbin, President and CEO Tower Oil & Technology Company

Exclusive Industry Sponsor:



Register at fmanet.org or call toll-free 888-394-4362



Fabricators & Manufacturers Association, International®

World-Class Roll Forming Workshop

Roll With the Experts at World Class Roll Forming Workshop!

If you want to learn new skills or update current competency, improve production, or upgrade your production practices to increase your bottom line, you will not want to miss World Class Roll Forming Workshop, April 24-25 in Grand Rapids, Mich.

Designed with smaller workshop sessions for more interaction. World Class features roll forming experts who are committed to answering your questions, providing solutions to your problems, and providing insights that will help you jumpstart your operation.

Relevant topics like continuous improvement, steel properties and roll forming, basic roll design, and roll form troubleshooting will provide advice that makes your job easier. Plus, a new presentation on Achieving Higher Precision and Accuracy with Encoder-based Length Controls will give you information you can immediate use in your shop.

Another benefit of attending is that you can talk one-on-one with the experts and get answers to questions about your existing drawings and parts during the exclusive Ask the Speaker session. What other conference offers you this opportunity, which could save you the cost of hiring a consultant to review and solve your problems?

Herman Miller will open its Hickory Operations in Spring Lake, Mich. to World Class attendees for an inside look at their roll forming operations. Plus you will make valuable contacts and spend time with the experts during an exclusive networking reception.

If you are ready to roll on to improved technology, reduced downtime, better production, and improved bottom line results, join experts and colleagues in Grand Rapids for a dynamic information exchange.

Reserve your place now or call 888-394-4362 and join experts and colleagues in Grand Rapids for a dynamic information exchange.

Exclusive Industry Sponsor **ROLL-KRAFT**

Roll-Kraft is one of the premier tooling and equipment manufacturers in the roll forming industry. For nearly 50 vears. Roll-Kraft has excelled at roll design and manufacturing for both roll forming and tube & pipe producers worldwide. For cold-forming systems and specialty equipment, the product line offers guality and reliability. backed by decades of experience.

Roll-Kraft serves customers in more than 50 countries, relying on ISO 9001:2008 quality management certification to ensure that the very best products are offered through continuous process improvements and investment in new technologies.

Roll-Kraft also provides services for roll forming and tubing manufacturers. One of the most effective services is the design of tooling using Finite Element Analysis (FEA) software to identify problem areas before manufacturing begins. After tooling or equipment is designed and manufactured. Roll-Kraft can provide testing. In addition, they offer on-site training seminars, mill evaluations, alignments, engineering consultations, and on-site assistance in setup and initial runs of tooling and equipment. For more information visit the website www.roll-kraft.com.

Workshop Sessions

Engineers, Tool Room Maintenance Staff, Setup Operators, and Managers in Roll Forming will benefit from this cutting-edge workshop. Bring parts, drawings, and guestions and get your challenges addressed.

Twelve dynamic topics each will be presented a total of three times^{*}. There will be four sessions presented during each time slot, allowing you to attend nine sessions. Following are the times each will be presented.

| Tuesday 8:15 - 9:15 a.m. Tuesday 1:30 - 2:30 p.m. Wednesday 1:00 - 2:00 p.m. | Tuesday 9:20 - 10:20 a.m. Tuesday 2:40 - 3:40 p.m. Wednesday 2:10 - 3:10 p.m. | Tuesday 10:25 – 11:25 a.m. Tuesday 3:45 – 4:45 p.m. Wednesday 3:15 – 4:15 p.m. |
|--|--|--|
| Basic to Complex Roll Form Systems Paul Tiefenthal, Shape Corp. | New! Steel Properties and Roll Forming Brian Oxley & Jim Rosasco, Shape Corp.; Chuck Summerhill, Roll-Kraft | Highly Rated! Developing an Effective Continuous Improvement Program* Ray Leathers, Roll Forming Corp. * session only available on Tuesday. |
| Basic Roll Design John Kopsick, Formtek Cleveland | Updated! Material Handling for High Production Roll Forming Scott McMeekan, Ferret, Inc. Kevin Dierking, Roll Forming Corp. | New! Achieving Higher Precision and Accuracy with Encoder-based Length Controls Jacyen Rigger, AMS Controls, Inc. |
| Roll Form Tooling Installation Brian "Tiny" Rodgers, Roll Forming Corp. | New! Three Common In-Line Welding Technologies Used in Roll Forming Applications Mark Prasek, Rafter Equipment Corp. | Advanced Roll Form Trouble Shooting Steve Ebel, Roll Form Solutions, Inc. |
| In-line Punching Technology Paul Williams, Hill Engineering | Lubricants Used in Production Roll Forming <i>Kirk D. McCubbin, Tower Oil & Technology Co.</i> | Cutoff Technology Paul Williams, Hill Engineering |

HermanMiller Plant Tour Information

Herman Miller works for a better world around you - with inventive designs, technologies and related services that improve the human experience wherever people work, heal, learn, and live. Innovative business practices and a commitment to social responsibility have also established Herman Miller as a recognized global company. In 2011, Herman Miller again received the Human Rights Campaign (HRC) Foundation's top rating in its annual Corporate Equality Index and was also cited by FORTUNE as the "Most Admired" company in the contract furniture industry.



The Fabricators & Manufacturers Association, Intl. (FMA), is the leading educational association for the metal forming and fabricating industry. FMA offers products and services that keep metalworking professionals informed about the latest trends and technology. www.fmanet.org



Session Descriptions

Basic to Complex Roll Form Systems

- Understand different roll form systems
- Improve awareness of different processes used in a roll form system

• Enhance knowledge of different types of auxiliary equipment in roll forming *Paul Tiefenthal, Shape Corp.*

Basic Roll Design

- Basic roll forming design principles
- Ideas to make designs functional
- Design vs. operator issues

John Kopsick, Formtek Cleveland

Roll Form Tooling Installation

- Proper tooling installation
- Tooling adjustments
- Documentation of setup

Brian "Tiny" Rodgers, Roll Forming Corp.

In-line Punching Technology

- Prenotch dies stationary flying
- · Rotary punching machines
- Postpunch dies flying
- Bring in your line upgrade questions and existing line punching problems: what line speeds are realistic for my application? How can we get better tolerances? How can we eliminate secondary operations?

Paul Williams, Hill Engineering

New! Steel Properties and Roll Forming

- · List the three metallurgical aspects of steel that affect roll forming
- Identify the basic mechanical properties of steel as indicated by a stress-strain diagram and the effect they have on the roll forming process
- Describe how the various mechanical properties of steel affect spring back in roll forming

Brian Oxley, Shape Corp; Jim Rosasco, Shape Corp; Chuck Summerhill, Roll-Kraft

Updated! Material Handling for High Production Roll Forming

- Identify material bottlenecks in the rollforming operation that would benefit from increased automation
- Examine dedicated handling solutions
- Explore flexible handling solutions
- Scott McMeekan, Ferret, Inc. & Kevin Dierking, Roll Forming Corp.

New! Three Common In-Line Welding Technologies Used in Roll Forming Applications

- Identify the three major welding technologies most commonly used in roll forming
- Understand the pros and cons of each technology
- Learn to ask the right questions when deciding which technology is best for a given application

Mark Prasek, Rafter Equipment Corp.

Lubricants Used in Production Roll Forming

- Obtain basic knowledge of lubricants used in roll forming today
- · Understand use, control, and trouble shooting of roll forming lubricants

• Review modern application equipment and how it may impact lubricant choices Kirk D. McCubbin, Tower Oil & Technology Co.

Highly Rated! Developing an Effective Continuous Improvement Program

- Appreciate the importance of employee involvement and ownership of CI programs
- Understand Roll Forming Corporation's CI program
- Identify other sources of materials for creating a successful CI program

Ray Leathers, Roll Forming Corp.

New! Achieving Higher Precision and Accuracy with Encoder-based Length Controls

- Understand the generic terms used to describe roll forming machine applications
- Obtain a general understanding of encoder-based controls
- Explore best practices for encoder systems on computer controlled roll forming lines

Jaycen Rigger, AMS Controls, Inc.

Advanced Roll Form Troubleshooting

- Troubleshoot roll form machines
- Troubleshoot the setup of the roll form tooling

 Understand material conditions and how they affect roll forming Steve Ebel, Roll Form Solutions, Inc.

Cutoff Technology

- What is the best application for your cross section?
- Slug-type cutoff dies
- Slugless crop cutoff dies
- Combination cutoff dies
- Cutoff press types air, mechanical, hydraulic
- Paul Williams, Hill Engineering

Workshop at a Glance

Tuesday, April 24

| 7:30-8:00 a.m. | Registration/Continental Breakfast |
|---------------------|---|
| 8:00-8:15 a.m. | Welcome/Overview |
| 8:15-11:25 a.m. | Workshops |
| 11:30 a.m12:30 p.m. | Ask the Speaker session |
| 12:30-1:30 p.m. | Group Lunch |
| 1:30-4:50 p.m. | Workshops |
| 5-7 p.m. | Networking Reception |

Wednesday, April 25

| 8-11:30 a.m. | Herman Miller plant tour |
|--------------|--------------------------|
| 11:30-Noon | Break for hotel checkout |
| Noon-1 p.m. | Group Lunch |
| 1-4:15 p.m. | Workshops |

This program was developed in cooperation with FMA's <u>Roll Forming Technology Council</u>, a volunteer panel of industry leaders.

To learn how you can participate on one of FMA's Technology Councils, contact Audrey Long at 815-227-8206.

Upcoming Roll Forming Events

METALCON

Roll Forming for the Metal Construction Industry Parts 1 and 2

Oct. 9-11, 2012 Donald E. Stephens Convention Center • Rosemont, IL

FABTECH

Nov. 12-14, 2012 Las Vegas Convention Center • Las Vegas, NV



General Information

Program Dates/Location/Hotel April 24-25, 2012 Amway Grand Plaza Hotel

187 Monroe NW Grand Rapids, MI 49509 Tel: 616-776-6400

Hotel Accommodations

Contact the Amway Grand Plaza Hotel and identify yourself as an FMA World-Class Roll Forming Workshop attendee to receive the discounted rate of \$127 single/double. This rate also includes complimentary self parking (normally \$16/day).

Make your reservation early! After March 31, group rates cannot be guaranteed, and reservations will be made only on a space-available basis. Special rates are available three days prior to and after seminar dates, subject to availability.

Plant Tour

Your workshop fee includes a plant tour of Herman Miller. Registration for the tour is not automatic; to participate, you must check the appropriate box on the registration panel and be approved by Herman Miller. Please note that cameras are prohibited at the tour sites.

Bring your Team and Save on Registration!

We want to make it affordable for your team to take full advantage of all this conference has to offer. Save \$50 off each registration when you register three or more individuals from the same company **at the same time**. *Please note that if a cancellation occurs and fewer team members attend, registration rates will be adjusted and additional fees will be charged, as appropriate.*

On-Site Training

Get the biggest bang for your training buck when you have our experts come to you. On-Site Training can increase efficiency, improve quality, decrease scrap, eliminate accidents, and reduce costly downtime. Each course is customized to address your specific needs.

Contact Audrey Long at 815-227-8206.

Join FMA!

An excellent way to keep up with the latest issues and newest innovations is to participate in FMA. Membership has everything you need for growth, including a variety of opportunities to develop new business relationships and build on current ones. Whether you're a manufacturer of machine tools, provider of fabricating services, or distributor, you'll get up-to-date technical information you can apply to your operation. As a member, you help to build a stronger future for yourself and the industry. Go to <u>http://www.fmanet.org/members/</u> <u>member-benefits.cfm</u> for an overview of membership levels.

FMA's Roll Form Operator Skilled Trade Certificate Program

Establish your credentials in the area of roll forming with FMA's skilled trade program! The program fills a need for operators and employers.

With a Roll Form Operator Skilled Trade Certificate, roll form operators confirm to an employer the valuable technical skills they bring to a position. An investment of time and effort in completing some basic program requirements can pay off many times over and enhances your standing in the company and earning power on the job.

Employers get the benefits of selecting, promoting, and retaining a highly skilled workforce, can provide a valuable career path for employees, and can stay a step ahead of the competition.

The certificate is offered at four levels. All levels require a completed application, an application fee, and an initial exam that will be administered through FMA's web-based exam vendor.

For a level one certificate, currents skills are evaluated and documentable on-the-job experience and schooling are counted toward the certificate. For levels 2-4, skills are also supplemented with strategic training, including classroom instruction, hands-on exercises, and a final exam. Upon successful completion, the Roll Form Operator Skilled Trade Certificate will be granted. For more information, contact Audrey Perteete Long at 815-227-8206.

Registration form

World-Class Roll Forming Workshop

April 24-25, 2012 Grand Rapids, Mich.

| How to Register: | | |
|------------------|--|--|
| Fax: | Fax completed registration form to FMA at: 815-381-1371 | |
| Online: | Log on to <u>www.fmanet.org</u> , click on Training | |
| Phone: | Call Customer Service: 888-394-4362 | |
| Mail: | FMA • Dept. 4300 Carol Stream, IL 60122-4300, USA | |

| Conformer Free | Member (FMA) | General |
|-----------------|--------------|---------|
| Conference Fees | \$695 | \$795 |

Registrations made within 10 days of the event must be made by telephone.

Join FMA/TPA and register at the special member rate:

Advantage+Training \$1450 USD (access to FMA Training, resources and professional development)

□ Advantage Member \$450 USD (serves all members at one location)

Basic Member \$150 USD (serves an individual)

Types, I would like to attend the plant tour on Wednesday, April 25. (No additional fees. Transportation provided.)

Yes, I will attend FMA's Networking Reception on Tuesday, April 24. (Guests are welcome; please enclose an additional \$25 for each guest.) Total number attending, including myself: ____

□ Yes, my company is interested in displaying our products/services on the literature tables during the workshop (\$250 literature table fee). Please fax me a registration form. My fax number is _____

□ I have special dietary needs. □ Vegetarian □ Other (FMA Customer Service will contact you)

TOTAL Fees \$____

| Payment options: | 1/154 | | -0- | DI/COVER |
|--|-------------|--------|-----|----------|
| Check or money order payable to FMA enclosed (U.S. funds) | | | | |
| | Credit card | number | | |
| Purchase order number | | | | |

| | | | |
|----------------|-------|------|-------------------------------|
| Credit card nu | ımber | | |
| Exp. mo/yr | | | CVC (3 or 4 digit number) |
| | | | |

Signature

Cardholder's name (print)

Please print or type (make copies for additional attendees.)

| Name | | | |
|------------------|----------------|----------|---------|
| Title/Position | | | |
| Company | | | |
| Company address | | | |
| City | State | Zip | Country |
| Direct telephone | Main company t | elephone | |
| | | | |

| Name | | | |
|------------------|----------------|-----------|---------|
| Title/Position | | | |
| Company | | | |
| Company address | | | |
| City | State | Zip | Country |
| Direct telephone | Main company t | telephone | |
| Company fax | E-mail address | | |

Registration

All fees must be paid in advance in U.S. funds, either by check or credit card. Registration tuition includes the program, handout materials, group lunches, and proceedings workbook. Fees do not include hotel accommodations or transportation to and from the workshop.

Team Discount

To qualify for a team discount, two or more individuals from the same company must register for the conference at the same time. If a cancellation occurs, registration rates will be adjusted and additional fees will be charged, as appropriate.

Cancellation/No-show Policy

Cancellations must be received in writing 14 days before the program for a full refund. Those received between 13 days and one day in advance will incur a \$100 service charge. Those received the first day of the program, and no-shows, are subject to the full registration fee. In the event of program cancellation, FMA's liability is limited to the return of registration fees.

Photography Agreement

Attendees are deemed to have agreed to have their photo appear in FMA publications unless they object in writing by the first day of the program. FMA reserves the right to amend this program if deemed necessary.

Please call the program site if you require special assistance.