



Mechanical Contractors Association of America's 2019 Fabrication Conference



Facility Tour Hosted by:



Murray Company
MECHANICAL CONTRACTORS

May 1-3, 2019
LAX Airport Marriott
Los Angeles, California

Murray Company

Over the past 100 plus years, Murray Company has built a reputation as Southwest's leading full-service mechanical contractor offering a wide-array of plumbing and mechanical engineering services across multiple markets in the nation's biggest metropolis. Since 1913, and especially over the past decade, Murray Company has diversified its operations and expanded its plumbing, HVAC, engineering, industrial and civil utilities departments. As a specialty contractor, the need to create innovative, practical and intricate piping solutions for projects in the sports/entertainment, industrial, education, commercial, residential, biopharmaceutical and renewable energy markets, called for the acquisition of an 80,000 sq. ft fabrication facility. An Advanced Technologies building is also located at Murray Company's Rancho Dominguez headquarters which focuses on the highly-specialized pharmaceutical and biotech industry. Both facilities feature sophisticated technologies to achieve the highest degree of quality, safety and productivity in the industry.

PLUMBING

Our plumbing fabrication shop consists of cast iron, copper, plastics, fixtures, hangers and supports fabrication. Utilizing a lean approach coupled with automatic machines such as Tiger Stop, we aim to prefabricate all plumbing systems to the greatest extent possible. On the tour you will see how we have set up our shop to achieve optimal productivity.

PIPING

The steel piping shop consists of small-bore welds all the way up to 54-inch. This shop supports our healthcare, industrial and plumbing projects, as well as fabrication for other contractors. Murray Company has over 90 weld procedures meeting ASME, AWS and AWWA codes and standards. We also hold ASME Code Stamps for U, PP, A and R. Utilizing state of the art equipment the tour will showcase the workflow in this shop which allows for a high-volume capacity.

HIGH PURITY

Our 20,000 square foot high purity fabrication shop consists of Class 10, 100 and 1000 clean rooms. This shop supports our biopharmaceutical and semiconductor projects. Proven Standard Operating Procedures (SOPs) tailored for FDA compliance and cGMP facilities coupled with a comprehensive QA/QC program, this shop is like no other. The tour will include a discussion on multi-trade fabrication and modular skids.

ENGINEERING AND DETAILING

Employing 75 in-house detailers and draftsman plus an additional 15 design engineers in our in-house engineering department, the tour will discuss the software we utilize to create our fabrication drawings, setting up the project database utilizing material matrices and how we schedule and plan for the transition from detailing to fabrication.

CIVIL

Our Civil department is fully integrated and self-performs general engineering and heavy civil scopes of work in conjunction with and/or independent of the other divisions within our company. Capable of installing drainage systems up to 120" diameter, in all types of conditions and depths up to 25ft. Murray company self performs all facets of underground construction including pipelaying, appurtenance installation, drainage structure construction, box culverts, storm water utilization basins and engineered temporary shoring systems for the installation of piping, tanks, structures, and other heavy civil works. Learn about how we started this department and see the large investment in capital equipment that keeps this department busy all year.

OPERATIONS

With a 0.5 EMR, over 1.7 million manhours in 2018, and over 2000 days without a lost time injury in the fab shop, learn how we utilize the fab shops as a training center for new employees. We will also discuss the quality control processes in place to train our personnel on the importance of safety and quality.

The tour will also include our tool shop, material procurement process and the interaction between the fab shops and the project personnel.

Hosts

Your hosts for the tour of Murray Company facilities include: **Jim DeFlavio**, President/CEO; **Shaabini Alford**, VP Project Management & Design Build; **Mark Magnuson**, Vice President of Labor Operations.



Preliminary Program

Wednesday, May 1

3:00 p.m. **Registration**

5:00 p.m. **Conference Overview, John Koontz**

Murray Company Presentation

Jim DeFlavio, President, **Shaabini Alford**, Vice President Project Management, and **Mark Magnuson**, Vice President Labor Operations, will provide an overview of Murray Company's operations and fabrication practices.

6:00 p.m. **Happy Hour**

7:00 p.m. **Dinner and Idea Exchange**

Thursday, May 2

7:00 a.m. **Breakfast**

8:00 a.m. **Bus Boarding**

9:00 a.m. **Murray Company Tour**

The tour will cover Murray's Rancho Dominguez fabrication facilities. The full day will include ample time for discussions with Murray representatives. Lunch will be provided.

Tour stations will address:

Fabrication Logistics
Safety in the Fab Shop
Modular Fab and Skids
Clean Rooms
Copper
Hangers
QA/QC

Material Requisition
Modular Fab and Skids
Detailing
Steel
Cast Iron
Fixtures

- 3:00 p.m. **Return to Hotel**
- 4:00 p.m. **Program Reconvenes with Murray Tour Recap**
Murray Company's key leaders would greatly appreciate receiving your feedback on how they can improve their operations. They will also be available to answer any questions about their processes.
- 4:30 p.m. **Mini Product Show and Happy Hour**
- 6:30 p.m. **Dinner on your own**

Friday, May 3

- 7:00 a.m. **Breakfast**
- 8:00 a.m. **Conference Reconvenes**
- 8:00 a.m. **A Fabrication Shop Manager's Look at Lean - Dutch Martinez**
Dutch Martinez, based in the Phoenix, AZ area, is a fabrication superintendent with Harder Mechanical. He will discuss strategies for using lean principals effectively in your fabrication facilities.
- 9:00 a.m. **A UA Update on Prefabrication- Mark Buss**
Mr. Buss, an Administrative Assistant to the General President, will update you on the latest UA prefabrication efforts.
- 9:30 a.m. **Best Practices - Virtual Fab Tour - Premier Mechanical**
Brandon Hubner, Vice President of Premier Mechanical, will present a virtual tour of fabrication facility through the use of a 3D model. The presentation will focus on layout, material flow and fabrication equipment.
- 11:00 a.m. **My 10 Things and Conference Wrap-up - John Koontz**

Networking

Attendees at this conference represent the greatest collection of experience and expertise when it comes to fabrication and offsite manufacturing. You will have ample time to exchange ideas with your fellow attendees throughout the conference to gain valuable feedback on new tools, processes and technology that innovators around the industry are using.

MCAA extends its appreciation to all prior hosts:

CCI Mechanical	Dynamic Systems	Mechanical, Inc.
Hill Mechanical	W. E. Bowers John J.	Kirlin
Smith & Oby Company	Neptune Plumbing	S.A. Comunale
H. T. Lyons	Shinn Mechanical	McKinstry
Kinetics	ACCO Engineered Systems	Broadway Mechanical
Dunbar Mechanical	CFI Mechanical	Humphrey Co.
Current Mechanical	Binsky & Snyder	Limbach
C J Erickson Plumbing	J F Ahern	J.W. Danforth Company

MCAA Fabrication Committee

Jay Rohan, Committee Chairman Senior VP, Dynamic Systems, Inc., Buda, TX
Mike Bement, Director of Shop Operations, J.W. Danforth, Tonawanda, NY
Rob Cross, Field Operations Manager, Baker Group, Cedar Rapids, IA
Greg Fuller, President, North Mechanical, Indianapolis, IN
Jeff Knoup, Vice President, Mechanical, Inc., Freeport, IL
Mark Magnuson, VP of Labor Operations, Murray Company, Rancho Dominguez, CA
Mike Shinn, President, Shinn Mechanical, Kent, WA
John Koontz, National Director for Project Management, Lafayette, IN
Sean McGuire, Director, Construction Technology, MCAA, Rockville, MD

2020 Fabrication Conference



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