

# Mechanical Contractors Association of America's 2020 Fabrication Conference







# **Facility Tour Hosted by:**



May 11-13, 2020
Des Moines Marriott Downtown
Des Moines, Iowa

# The Baker Group

Over the past 55 years, Baker Group has established a reputation of absolute reliability, zero surprises and uncompromising quality and has grown into the Midwest's leading provider of critical building infrastructure systems. Baker Group began as a small plumbing contractor in Des Moines, Iowa and has diversified and expanded its operations into a successful mechanical, electrical, plumbing and technology design-build contractor. With over 700 staff members, multi-million dollar revenues and the Baker Group name on many of the Midwest's marquis projects, Baker Group has certainly come a long way from its humble beginnings.

Commercial, industrial and institutional clients across the Midwest depend on Baker Group to provide consistent excellence in an evolving business climate, including expert solutions in the design, installation and servicing of: HVAC, Plumbing, Piping, Sheet Metal, Electrical, Automation, Compressed Air, Security Access Control, Video Surveillance, Fire Alarm Systems and much more. Our staff includes 31 detailers, 17 professional design engineers.

As an employee-owned organization, Baker Group employees are committed to delivering reliable, client-focused and high-value construction services to each client we serve.

### **SAFETY**

Safety is part of Baker Group's culture. As one of the Midwest's largest full-service specialty contractors, safety is our top priority. Baker Group is committed to communication, education and follow-through at all levels of the safety process. Our goal is to provide the tools for a productive, healthy, accident-free environment. Our proactive approach to safety has culminated in Baker Group' safety programs being consistently recognized by such organizations as the Mechanical Contractors Association of America (MCAA), Mechanical Service Contractors of America (MSCA), Sheet Metal and Air Conditioning, Contractor's National Association (SMACNA), Master Builders of Iowa (MBI) and many nationally recognized general contractors. Our **2019-2020 EMR safety rating of .71** is 29% better than the industry average.

### **PLUMBING**

Baker Group's core plumbing prefabrication includes restroom groups, water service entrances, rack piping, UG plumbing, hangers and pre-cut plumbing piping. Our plumbing fabrication shop consists of cast iron, PVC, copper, stainless steel, PEX, PPR and acid waste piping. Baker Group utilizes in-house mechanical, sheet metal, electrical, automation, and also has a dedicated area for multi-trade and skid fabrication, boiler skids, pump skids, hot water VAV boxes, shipping container conversions and much more.

#### **PIPING**

The steel piping shop has the ASME Code stamps S and U, the National Board "R" stamp and utilizes the Watts plasma table with PypeServer software for precision and efficiency. Baker Group's steel shop uses stainless steel, carbon, hastelloy, titanium, copper and HDPE and

PPR materials. This shop supports our commercial, industrial, healthcare, laboratory, renewable fuel, data center, biopharmaceutical and governmental projects as well as building hangers and structural supports. As with all units, the piping shop places a high focus on safety and quality.

#### **SHEET METAL**

Our expansive specialized work area allows us to fabricate all types of metal in various shape, size, and thickness including stainless steel, copper, aluminum, black iron, galvanized, pre-finished, PVC-coated, paint grip, perforated metal, expanded metal and more. Baker Group's sheet metal manufacturing standards meets or exceeds the Sheet Metal and Air Conditioning Contractors National Association's (SMACNA) technical standards. The sheet metal team utilizes the latest technology along with skilled craftsmanship to safely fabricate and install HVAC ductwork, specialty metals, industrial components, equipment enclosures, underfloor electrical raceways, and architectural metal work.

### **ELECTRICAL**

Baker Group is a full service electrical contractor with full capabilities in MEP design coordination, BIM coordination, AutoCad and Revit design solutions, estimating, planning and scheduling, scope coordination in power distribution, data, access security, video, fire alarm, preventive maintenance and emergency service.

### **AUTOMATION**

The automation group is the Midwest's leading expert in system design, installation and service optimization. Our team utilizes BuildingIT® by Baker Group to integrate critical data from multiple systems, products and technologies into a single-operator workstation to bring clients a graphical system that is functional and cost-effective. Baker Group partners with Schneider Electric to offer their leading commercial systems integration platform, EcoStruxure. EcoStruxure pulls together legacy control systems and seamlessly integrates them into a single system. Our automation services provide reduced energy costs and carbon emissions, increased cybersecurity, improved maintenance response time, higher information and business performance.

### **ENGINEERING + DETAIL**

Baker Group's experienced licensed Professional Engineers work jointly with project stakeholders to ensure their requirements and needs are adequately addressed during design, while not losing sight of the constraints of cost, schedule or quality. Our team of professional engineers assist our owner's in the selection of the proper materials, process equipment and design of required utilities to upgrade their existing facilities or build new facilities. In each case, we focus on achieving exceptional client satisfaction.

# **Preliminary Program**

# Monday, May 11

1:00 p.m. **Registration** 

2:00 p.m. Optional Pre-Conference Breakout Session One

Demo of MSUITE softwareDemo of Stratus Software

- Demo of ManufactOn Software

3:15 p.m. Optional Pre-Conference Breakout Session Two

Demo of MSUITE software

- Demo of Stratus Software

Demo of ManufactOn Software

4:30 p.m. **Conference Overview, John Koontz** 

**Baker Group Corporate Overview** 

**Gary Bridgewater**, President; **Doug Kumm**, Executive Vice President; **Joel Veenstra**, Mechanical Business Unit Leader; and **Brandon Hummel**, VP of Development will provide an overview of Baker Group's operations and fabrication practices.

5:30 p.m. Reception and Mini Product Show

**Dinner on Your own** 

## Tuesday, May 12

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

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

9:00 a.m. **Baker Group Company Tour** 

The tour will cover the Baker Group's fabrication facilities. The full day will include ample time for discussions with Baker Group representatives. Lunch will be provided.

Tour stations will address:

Safety, VDC, Pipe Cutting, Welding, Specialty Cutting, Plumbing, Multitrade Fabrication, Hangers, Electrical Fabrication, UL Certified Panel Fabrication, Water Jet, Technology, Commercial Sheet Metal, Lean Building, Service, Transportation and Engineering.

3:00 p.m. **Return to Hotel** 

4:00 p.m. **Program Reconvenes with Baker Group Recap** 

The Baker Group'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.

5:30 p.m. Transportation to Off-Property Reception at Smash Park

MSUITE is sponsoring a reception at the nearby Smash park where all attendees are welcome to eat, drink, and play games like pickle ball or corn hole.





# **Sponsored by:**



## Wednesday, May 13

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

8:00 a.m. Workflow Tools for Fabrication Processes

Jonathan Marsh from BIM Innovation Labs will discuss how VDC has changed the typical workflow of projects and share some free tools can be used to manage internal processes and find missing gaps.

9:00 a.m. **UA Update on Prefabrication- Mike Mulvaney** 

Mr. Mulvaney, the United Association's Director of Energy and Infrastructure will update attendees on the latest UA prefabrication efforts and provide an overview on the Yellow Label Agreement.

9:30 a.m. **Break** 

9:45 a.m. Forget the Paper: From the Model to the Shop Floor

Traditional, paper (or PDF) based spool sheets are an extra step not required in a model-centric fabrication workflow. Curt Baker & Stacy Zerr from The Waldinger Corporation will show how they are using STRATUS to eliminate spools sheets, increase the amount of fabrication in their shop, and directly connect fabrication equipment to the model.

10:30 a.m. **Modular Construction** 

One of the growing trends in the industry is offsite modular construction. More mechanical contractors are developing partnerships with multiple trades and using space to specifically build multi-trade fabrication. Examples of projects, modules and roles for contractors will be explored.

11:00 a.m. My 10 Things and Conference Wrap-up - John Koontz

11:30 a.m. **Program Concludes** 

### **Baker Group Key Leaders**

Gary Bridgewater - President

Doug Kumm - Executive Vice President of New Construction

Joel Veenstra - Mechanical Business Unit Leader

Brandon Hummel - Vice President of Development

Rob Cross - Vice President of Field Operations

Rick Perkins - Mechanical Fabrication Shop Manager

Jason Rice - Sheet Metal Fabrication Shop Manager

Mike Lipp - Electrical Business Unit Leader

Steve Brommel - Virtual Design Construction Manager

## **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

Murray 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, VP of Field Operations, Baker Group, Cedar Rapids, IA Greg Fuller, President, North Mechanical, Indianapolis, IN Jeff Knoup, Vice President, Mechanical, Inc., Freeport, IL Dave Liggett, Fabrication Manager, SA Communale Company, Bemberton, OH 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