

Mechanical Contractors Association of America's 2021 Fabrication Conference



Facility Tour Hosted by:



NEW DATES! November 8-10, 2021 Des Moines Marriott Downtown Des Moines, Iowa

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, November 8

- 1:00 p.m. **Registration**
- 2:00 p.m. Optional Pre-Conference Breakout Session One
- 2:50 p.m. Optional Pre-Conference Breakout Session Two
- 3:30 p.m. Optional Pre-Conference Breakout Session Three
- 4:30 p.m. Conference Overview, Sean McGuire

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, November 9

- 7:00 a.m. Breakfast
- 8:00 a.m. Bus Boarding

9:00 a.m. Baker Group Company Tour

The tour will cover 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** 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, November 10

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. **Top 5 Management Mistakes on Fabrication** The final session of the conference addresses common mistakes that management can make when it comes to managing fabrication, investing in facility and equipment, planning and budgeting.

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. Industry 4.0

With the digital integration of 3D models and data driven manufacturing equipment, the construction industry is poised to take fabrication beyond offsite construction and into its next evolution. This can include manufacturing, modular assembly, direct to owner sales, productization, and automation.

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 Hill Mechanical Smith & Oby Company H. T. Lyons Kinetics Dunbar Mechanical Current Mechanical C J Erickson Plumbing Murray Company Dynamic Systems W. E. Bowers Neptune Plumbing Shinn Mechanical ACCO Engineered Systems CFI Mechanical Binsky & Snyder J F Ahern Mechanical, Inc. John J. Kirlin S.A. Comunale McKinstry Broadway Mechanical Humphrey Co. Limbach 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, VP of Field Operations, Baker Group, Cedar Rapids, IA Greg Fuller, President, North Mechanical, Indianapolis, IN Ryan Hoggatt, Director of Manufacturing, UMC, Mukilteo, WA 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 Sean McGuire, Director, Innovative Technologies, MCAA, Rockville, MD



The 2021 MCAA Fabrication Conference is powered by MSUITE, makers of BIMPRO, FABPRO and FIELDPRO. MSUITE is a cloud-based suite of management software to connect BIM, Fab, and Field Construction Teams. MSUITE helps you track, manage, and share data throughout the entire life-cycle of a construction project. Stemming from a Mechanical Contractor in Iowa in 2015, MSUITE's products have been a solution to a problem that the construction industry has needed for decades.