



MDAVIS

One Source For All
Industrial Construction, Fabrication & Maintenance





A Message From Our Executive Committee

*Featuring Our CEO,
Peggy Del Fabbro*

When I think about our company and everything we have accomplished in our 150+ years in business, I can confidently say our team is our greatest strength. The discipline that our M. Davis team members exhibit every single day with respect to quality and safety, along with the way we confront challenges head on, is what really makes M. Davis different. I am so proud of our 2021 Top Workplace Award, because this was based solely on employee feedback. Knowing that our team feels supported in the workplace makes winning this award so meaningful.

Over the years, we have cultivated an attitude of continuous improvement. We are constantly looking for better, safer ways to do things. An important aspect of this work includes ongoing improvements in the technology space. Investments in technology have helped position M. Davis to better weather the COVID-19 pandemic.

Technology was extended beyond the traditional office functions and engineering to the tools and equipment out on the shop floor and on jobsites. Our foremen and leadmen are gifted tradespeople, and they have also had to learn to embrace technology to make their jobs and work more efficient. It is no longer unusual to see laptops and tablets onsite in addition to traditional tools and equipment. Our unique ability to prefabricate has helped us become a leader in modular construction. Technology is instrumental for modular construction and prefabrication projects that lend themselves to offsite fabrication.

Along with technology improvements in our shops, we have also made investments in more robust cyber security technologies. Cyber security has become a pivotal area for focusing continuous improvement efforts. As soon as security measures are adopted, someone can come up with a way around whatever safeguards are currently in place. Recognizing this, our IT department works tirelessly to always be at the forefront of cyber security.

In the last year and a half, we have all had to learn to adapt to new virtual technologies in our workspace. It has certainly been different using Microsoft Teams, Zoom, and hybrid solutions to effectively communicate and collaborate, both within M. Davis and also with our customers. The most important thing is that we have all found a way to stay connected and show flexibility in how we communicate.

We are continuously grateful to our customers for choosing M. Davis as their project partner, and we hope you all enjoy this virtual edition of the M. Davis Messenger. Thank you all for the ongoing support. ■

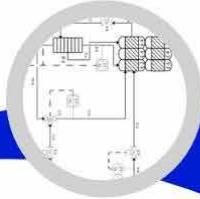
M. Davis & Sons Wins 2021 Top Workplaces Award!



M. Davis & Sons has been awarded as a Top Workplaces 2021 honoree by The News Journal Top Workplaces. This list of winners is based solely on employee feedback gathered through a third-party survey administered by employee technology partner Energage LLC. The anonymous survey uniquely measures 15 culture drivers that are critical to the success of any organization, including alignment, execution, and connection. Upon accepting this award, members of the M. Davis team were delighted to attend the 2021 Top Workplaces virtual award celebration on August 19.

Reflecting on this success, our CEO, Peggy Del Fabbro, states, "Our team members are really what makes M. Davis the company that it is today. We are so excited to be recognized as a Top Workplace and will continue to always make our team our top priority."

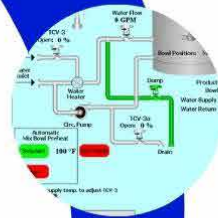
"During this very challenging time, Top Workplaces have proven to be a beacon of light for organizations as well as a sign of resiliency and strong business performance," said Eric Rubino, Energage CEO. "When you give your employees a voice, you come together to navigate challenges and shape your path forward. Top Workplaces draw on real-time insights into what works best for their organization, so they can make informed decisions that have a positive impact on their people and their business." ■



Generate P&ID from client brief and requirements



Produce code compliance requirements



Generate user requirement specifications and sequence of operations



Design-Build the module; Frame, Piping, Electrical and Control System

QA/QC

Factory Acceptance Testing



Delivery and Site Installation



SEE THE NEXT PAGE FOR MORE DETAILS.

M. Davis & Sons offers end-to-end modular solutions to optimize your operations and allow for maximum efficiency and time savings. The M. Davis Engineering Group works in tandem with our Modular Fabrication shop to deliver on this multistep process.

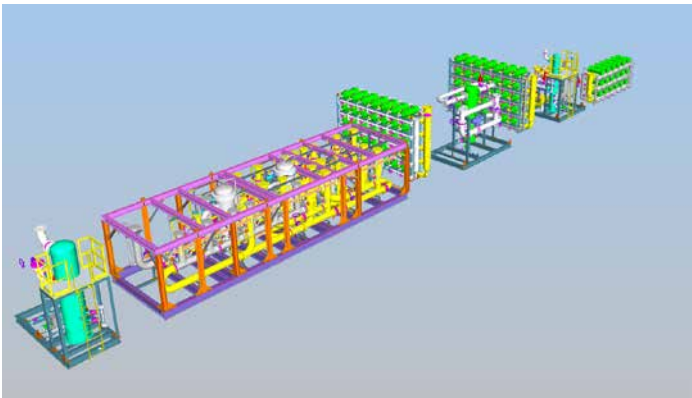


Step 1: Development of the P&ID

The P&ID is a joint effort with the customer, using their PFD or via collaboration and communication with their engineering process team. The P&ID is used to determine scale, code requirements, and the overall engineering effort.

Step 2: Produce Code Compliance Requirements

Assessment of a project's regulatory code compliance requirements is a critical step in any project. This process involves an in-depth investigation of which codes are applicable, mandatory, and nonmandatory. These requirements and guidelines are then applied to the proposed engineering solution, which involves numerous parametric iterations of the design to generate a final, code-compliant design.



Step 3: Generating the User Requirement Specifications (URS) and Sequence of Operations (SO)

This process is a critical, collaborative effort between the M. Davis team and the customer. The URS is the master plan for factory acceptance testing and begins the verification and validation process. Once the URS is accepted by the customer, it is converted into a detailed SO, which then allows us to build the control system, program the controllers, and develop the user interface. A logical SO is vital to the success of the final system being delivered.

Step 4: Design-Build the Module: Frame, Piping, Electrical, and Control System

Upon customer approval of the URS and SO, the next step is to undertake the detailed skid design, which involves structural design of the skid platform and frame; laying out piping; preliminary equipment positioning; determining service access; coordinating breakpoints for connection between skids; and design of all electrical aspects, including control panels, wiring, conduit routing, and instrumentation and control equipment locations. This stage is pivotal to the following assembly stage, and every effort is made to anticipate any assembly issues and solve them ahead of time.

Step 5: Factory Acceptance Testing

This vital process is critical to achieving customer satisfaction. Our customers are provided access to all necessary infrastructure in the form of adequate power, calibrated hydro testing equipment, nitrogen gas for inert high-pressure testing, state-of-the-art instrumentation for recording and documentation, and heating and cooling equipment for environmental simulation. The M. Davis team offers full step-by-step support from our team of credentialed engineers and technicians.

Step 6: Delivery and Site Installation

With access to our own fleet of 40-foot flatbed tractor trailers, the M. Davis team delivers on time, every time. To ensure that our customers are not subject to transportation delays associated with the trucking industry, your project is loaded onto our trucks for delivery to your site. Upon delivery, customers have access to more than 400 field tradespeople, including qualified welders, electricians, plumbers, control specialists, and engineers, to take you through the entire site installation process or assist with any unforeseen issues.

At M. Davis, delivery and installation are not seen as the end of a project, but as the beginning of the next phase of our customer relationship, with our main goal being your complete satisfaction. ■



Lab Renovation Services

From the M. Davis & Sons Team

The construction of laboratories and research facilities requires the utmost attention to detail. M. Davis & Sons partners with our customers from design through the successful completion of facility renovation and construction. From training our tradespeople in safe work practices and current Good Manufacturing Practice, we offer skilled manpower that is adept at working at sites that require a certain level of attentiveness. As a "One Source for All" service provider, our tradespeople work seamlessly across teams to keep your project moving forward on time and on budget. Onsite services include:

MEP capabilities

- Clean rooms—ISO class 1–6
- Biosafety labs—BSL 1–3
- Miscellaneous metals
- Ductwork and pipe, including complete demolition and renovation/installation
- Conduit and wire
- Controls
- Structural steel
- Plumbing piping systems

Sanitary process systems

- WFI
- Clean steam
- Cleaning-in-place (CIP) and sterilization-in-place (SIP)
- Reverse osmosis water
- Deionization water
- Aseptic product lines

"One Source for All" capabilities include:

- Fabrication and manufacturing
 - Pipe fabrication
 - Duct fabrication
 - Modular skids
 - Customizable power distribution equipment

Engineering services

- In-house professional engineer
- 2D and 3D modeling and design for
 - HVAC (commercial and industrial)
 - Modular skids
 - Stainless steel
 - Power distribution systems
 - ASME section VIII division 1 and 2 pressure vessels
 - Plant process automation
 - Electrical
 - RO systems
 - Motion controls
- Certified Wonderware, Trihederal, Beijer, Anybus Integration Engineering ■



Did You Know?

M. Davis refurbishes Portable Power Distribution Centers!

The VTi by M. Davis Portable Power Distribution Centers (PPDCs) offer a unique, useful solution to temporary power distribution problems or fast turnaround situations in industrial plants and for construction projects. Offering safe and convenient power distribution at a low cost, the PPDC eliminates the need for expensive, time-consuming switch-ratch construction at each new jobsite. Move your PPDC to the next project site and be up and running immediately.

As part of our "One Source for All" services, M. Davis & Sons offers our customers full refurbishment of any existing PPDCs they have previously purchased. Rather than spending money on buying new units, we offer our customers the flexibility to have their existing units restored. Weather damage, dents and dings, and broken or unusable parts are all carefully renovated to have you back up and running as quickly as possible.

Work can involve complete unit disassembly and rebuild, which includes a quality control checklist for each individual unit and electrical assembly with brand new parts—or it might be the replacement of specific parts—or it could be a fresh coat of epoxy primer for protection and a new powder coat finish. Our engineering and quality control teams review the list of work needed for each unit, and our fabrication unit takes over to get each unit functional again. Once fabrication is complete, the electrical shop team handles the electrical assembly and final quality control.

Every PPDC is designed for safety and durability, and having your unit refurbished will keep it up and running even longer. Reach out to the VTi by M. Davis team for a quote to get your units looking and working like brand new! ■

Before



After



Thank You, Sharon Cometa!

A Shout-Out to the M. Davis Electrical Project Team

Sharon Cometa, Senior Buyer for Chemours, congratulated the M. Davis team on their efforts in completing electrical work for Chemours Chambers Works. There were three phases to this project, and M. Davis & Sons was awarded all three.

One team was involved in the demolition and renovation of existing packaging equipment in the Viton area of Chambers Works, including structural steel and duct work, the relocation of utility piping, the offloading of equipment, and assistance with the layout and installation of the new package line. Another M. Davis team worked in tandem to complete the demolition of the old power and control wiring and to document the removal of the old packaging system. Installation of new electrical power panels and control panels was also completed, along with the installation of several large transformers and PLC control wiring for the new pellet packaging line. The M. Davis team was able to complete this project under budget and ahead of schedule.



"I wanted to acknowledge their excellent work. This will also include appreciation of all the LONG hours, and weekends, that they worked. I received numerous calls from our project manager pertaining to M. Davis folks handling every situation that they were given with perfection. They went above and beyond to make sure everything was installed properly. It's always a pleasure working with your company. Your men know how to get the job done!"

Thank you for the kind words, Sharon! ■

M. Davis in the Community

Helping Delaware Students With ABCares



Every year, students in the Colonial School District go to school with more than just reading, writing, and arithmetic on their minds. Many students do not have access to much needed personal hygiene items to make it through their day, let alone a month or entire school year.

ABCares, part of Associated Builders and Contractors (ABC) Delaware, began a collection drive over the summer to help students and ensure they could focus on education, not on personal items many people take for granted. By the August 25 deadline, the M. Davis team was able to collect and drop off multiple boxes of donations for the ABCares drive. Items donated included pantry toiletries and clothing, and collection boxes were filled across all six M. Davis shops. M. Davis & Sons was honored to show our support and to help students and teachers focus on learning this school year! ■



Ready to learn more about our services and capabilities?

*Get in touch with us: **1-800-91-DAVIS***

sales@mdavisinc.com

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