# PROCESSING SYSTEMS AND EQUIPMENT





## Why Paul Mueller Company?

### Mueller® is Your One-Stop Processing Systems and Equipment Supplier!

*Paul Mueller Company is your full service provider.* Since our inception in 1940, we have evolved from a small-scale fabricator into a global process solution provider with nearly one million square feet of manufacturing space under roof. Our products are used in over 100 countries in a wide variety of applications. We offer a full range of tanks/vessels from shop fabricated alloy vessels through 20 feet in diameter to field fabricated vessels up through 2,000,000 gallons, but we do more than tanks — we provide process solutions. We offer integrated systems, modular fabrication, field construction, plant maintenance and repair, and complete turnkey project execution. Mueller delivers outstanding equipment and unique solutions to the process industries with our technical expertise, innovative engineering, and manufacturing resources.

We know that building a quality product starts from the ground up. Our sole purpose is to improve profit performance for our customers through our products and service offerings. Mueller has been built by focusing our extensive resources, process experience, and craftsmanship on solving the processing needs of our customers.

*State-of-the-art manufacturing facilities.* Our facility is equipped with metal cutting, forming, and welding equipment which provide us with the most state-of-the-art fabrication and machining capabilities available today. We procure steel direct from the mill and fabricate all of our own structural components.

Mueller products are made by our skilled craftsmen, whose average experience exceeds 15 years. On any given day, their talent and pride of workmanship can be observed in our production bays. Our process is well defined, and Mueller team members fully understand the importance of their individual roles in producing a quality product. Our central United States production facility lowers your transportation costs and speeds the delivery of your product to your location.

Factory technicians and field service available. Our trained factory personnel offer rapid response to your service needs.



*Mueller Field Operations, Inc.* Our field construction capabilities allow us to build on-site, which offers our customers more versatility and flexibility.

*Mueller Transportation, Inc.* Paul Mueller Company's own trucking company provides you with competitive delivery rates on standard products. We are able to provide dedicated handling for large or critical delivery items and are able to work with you directly to resolve any transportation issues.





## **Mueller® Manufactured Products**

### Processing Systems and Equipment



### Heat Transfer Products



### Refrigeration Products



### BioPharm Systems

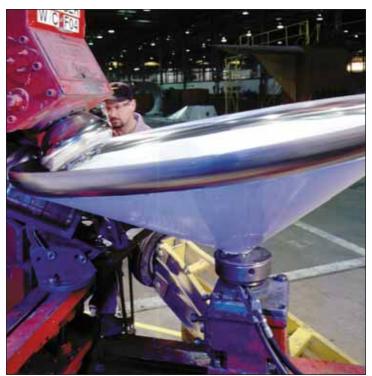


## Our Manufacturing Process is Well Defined

Whether you need an especially large piece of equipment or an entire integrated system, our facility can easily accommodate your needs. Our skilled work force has the expertise to provide everything from individual components or tanks to complete integrated systems including vessels, agitation, refrigeration, heat transfer, process piping, and automation/control systems. If it's too large to build in our factory, our field fabrication team will build your project on site.



SEAM WELDING & PLANISHING



### Design Capabilities

- Pressure Vessel Code (ASME)
- Petroleum Institute (API)
- Canadian Standards (CSA)
- Underwriter's Laboratory (UL)
- Pharmaceutical cGMPs
- Conformite Europeanne (CE)
- Chinese Pressure Vessel Code (SQLO)
- 3-A compliant equipment available
- Complete agitation packages
- Seismic design
- Heat transfer: dimpled jacket, half-pipe, and our Temp-Plate® heat transfer surface



MATERIAL CUTTING TO LENGTH



SHELL FORMING & WELDING





**AGITATION** 









SOPHISTICATED WELDING PROCESSES

**LAUTERING** 





QUALITY ASSURANCE MAINTENANCE FRIENDLY DESIGNS

## **Complete System Integration**

When it comes to complete system integration, our vast capabilities enable us to design any size system, build it in our own plant, disassemble it, and ship it directly to your facility on our own fleet of trucks. We take our customers beyond the basic design and construction of one piece of equipment into the development of turnkey systems, combining our expertise in process heating and cooling, heat transfer, and controls.

Our process automation and control systems combine forward thinking and reliability with flexibility and convenience. Our skilled and versatile engineering staff enables us to provide our customers with optimal solutions to their unique problems and applications. Paul Mueller Company has the technical expertise, innovative engineering, and manufacturing resources to implement a complete system specific to your needs.

#### **BREWHOUSE EQUIPMENT**



## HEATING AND COOLING SYSTEMS



ASEPTIC N2 CONTROLS



CIP SYSTEMS

#### **CONTROL PANELS**



#### AMMONIA REFRIGERATION SYSTEMS



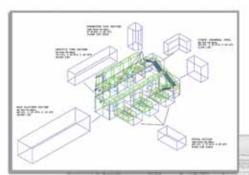
#### **SPECIALTY EQUIPMENT HAULING**



### Mueller-*ized*

### **Integrated Design • Manufacturing • Transport • Installation**

In any construction project, time is the most expensive commodity. Mueller's broad experience with modular construction means we can construct custom-engineered process systems in readily transportable modules. These modules are assembled and fully tested at our facility prior to shipment. Installation at the job site typically requires setting the unit, connecting to the necessary utilities, and training plant personnel. A Mueller-*ized* system provides rapid equipment availability combined with minimal plant disruptions and vastly simplified startup requirements.



DESIGN FOR MODULARIZATION



**ENGINEERING AND MODELING** 



ORBITAL WELDING PIPE SPOOLS



**AUTOMATION AND CONTROLS** 



**FACTORY ACCEPTANCE TESTING** 



DOCUMENTATION



SPECIALTY HAULING



SYSTEM INTEGRATION/SUPPORT FRAMES



PREPARING FOR SHIPMENT



ON-SITE INSTALLATION





HOT WATER SETS

**ASEPTIC PIPING** 





FIELD PIPING



CIP SYSTEMS

QUALITY ASSURANCE



**MODULAR CONSTRUCTION** 

## **Bringing Our Processes To The Field**

Large industrial processes often require sizeable equipment that cannot be economically constructed or transported from a shop environment. Mueller Field Operations, Inc. brings our manufacturing expertise to your facility, providing you, our customer, with high quality equipment worthy of your process.

MFO offers complete construction services with particular emphasis on large field erected vessels, equipment installation, tank retrofit or repair, and process piping. MFO also provides construction management, site supervision, procurement, and field integration services.



**EXPERIENCED FIELD CREWS** 



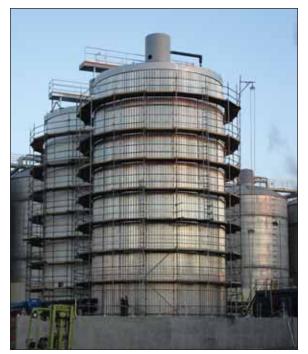


CONSTRUCTION MANAGEMENT



WASTE RECOVERY FERMENTERS







**INSULATION SYSTEMS** 





FULL SERVICE DESIGN/BUILD



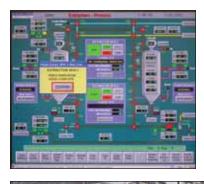


## **Design-Build**

Mueller understands that your project, large or small, requires comprehensive attention to detail to ensure timely completion and optimal performance. In design-build, the owner contracts with a single firm for both design and construction, which provides single responsibility for the entire project. This concept has become increasingly popular due to the cost and time savings that can be realized by merging the functions of design and construction together.

The team concept is the key to a Mueller design-build project. Our team of experienced professionals works intimately with your staff in the planning, design, cost control, scheduling, construction and project management processes.

#### **GUYMON EXTRACTS - PORK EXTRACT PLANT**





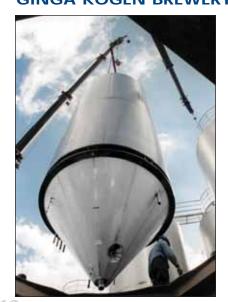








### **GINGA KOGEN BREWERY - JAPAN**







### PUERTO RICO JUICE CONCENTRATE PORT FACILITY











### PHASE I AND II - AUBURNDALE NFC ORANGE JUICE













## Complete Service from Start to Finish

Do you need a fitting installed in an existing vessel? Are you interested in improving the thermal performance of a processor or heat exchanger? Mueller has a staff of service technicians who will perform the work in your plant, according to your schedule.

Our response vehicles are fully equipped with all the tools, equipment, and supplies necessary for prompt and professional field service.

#### **ENGINEERED PROCESS SOLUTIONS**

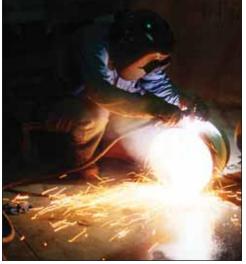




### FABRICATION/MANUFACTURING











### **INSTALLATION**





### CONSTRUCTION





### **AFTER-SALES SERVICE AND SUPPORT**



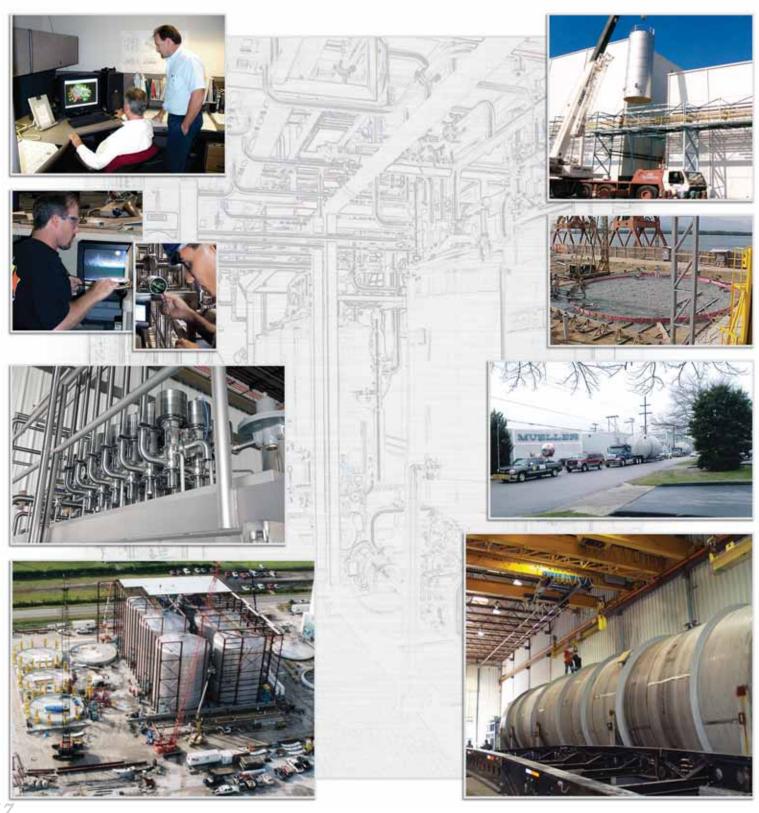


## **Your One-Stop Solution Provider**

Mueller has a range of products and services to meet all of your needs, including tanks/vessels, heat transfer products, integrated process systems, or complete production plants. From modular systems to complete turnkey plants, when you think of process, think...

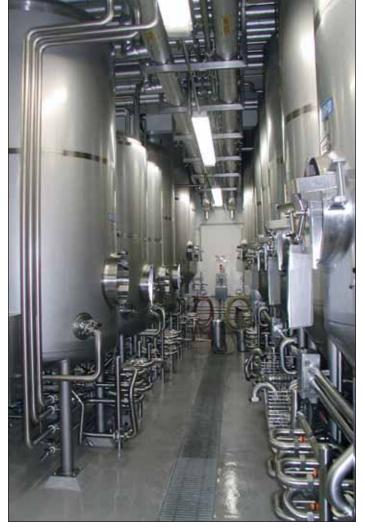
### **MUELLER PROCESS SOLUTIONS**

... Your Systems Specialists!















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