CUSTOM EQUIPMENT

3748 Industrial Park Drive
Mobile, AL 36693 USA
+1.251.662.1250 phone
+1.251.662.8250 fax
www.egm-llc.com
Egm can design and build custom equipment for your specific task. Our **CEO** Team (**Custom Equipment Operations**) can work from layouts and drawings you provide, or perform all the engineering, site survey, and design work to develop the system you need. With experience building specialty equipment for the chemical, oil, maritime, pulp and paper, mining, municipal, commercial construction, and other industrial segments, the EGM staff has the expertise, skill, and application knowledge to help deliver equipment that will perform reliably in any application. Whether the process begins with a site survey, client provided drawings, or develop from our in-house engineering and CAD design group, EGM will deliver a system that will meet your expectations.

### CUSTOM EQUIPMENT SERVICES:

**SCOPE, DESIGN & BUILD PROCESS OPTIONS:**

- Needs / Requirements Discovery
  - Site visits
  - Conference
  - Plan Review
- Design services
  - Engineering services
  - Cooperative work with 3rd party engineering firms
  - CAD drawings (P&I, Electrical, Mechanical, Elevation)
  - Electrical system design and manufacture
- System assembly, test and delivery
- On-site start-up assistance

This nine position feed system was purpose built for an ASA Size delivery application for a 9-ply cylinder machine. The compact design allows for a small footprint but features easy access to critical components and is built for precision control via input from mill DCS.

### EGM CUSTOM EQUIPMENT DESIGN PHILOSOPHY:

- Packaged systems require less capital for installation compared to concrete pad mounted options
- System is built and tested as complete unit, eliminating costly re-work on permanent installations
- Compact designs afford easy installation and less real estate consumption
- Electrical installation is simplified, requiring only power source and control signal integration from client site
- Localized instrumentation facilitate simple and quick troubleshooting
- EGM expertise delivers expected performance
Engineering for custom designed systems is handled in-house at EGM. Our staff can build equipment from user supplied drawings, or completely design and build the system to meet end-user requirements. With our own internal panel shop, electrical design, PLC programming, and customized control schemes can be created to deliver the necessary automation.

Pictured here is a multiple position water booster system designed to allow for manual splitting of process flow.

Feed systems that require custom components can be built by allowing EGM to specify the components, or by using client required elements.

This centrifugal pump system features client specified flow meter, pump, motor and pressure relief valve to comply with site E&I standards.

Upon inspection, it is easy to see there are no shortage of unions in the plumbing which allow for easy maintenance and the ability to get to critical components quickly. The automated inlet valve features a limit switch which prevents the pump from starting unless confirmation from the interlock is received.

This pressure set was custom-built for use on off-shore barges to provide reliable potable water flow.

The design incorporated twin, vertical centrifugal pumps that are wired to provide redundancy, as well as “boost” capability to keep up with demand in the event that the pull exceeded the capacity of one pump. The incorporated pressure switches trigger the pump run cycle and maintain the downstream pressure between pre-determined set-points.

The structure was custom fabricated at EGM to allow for crane installation and removal onto a barge and can be fastened in place via bolt-down lugs incorporated into the base.
**CUSTOM SHOWERING AND SHOWER BAR SYSTEMS**

Many clients find that fulfilling the need for showering and shower bar systems for applying additives via either hydraulic or air-atomizing spray applicators is complex. Often, customers will be left to piece together a comprehensive system by sourcing individual components from numerous sources.

Custom Problems need Custom Solutions...

EGM maintains inhouse expertise to assist client companies with their complete showering and spray application needs. Not only can EGM design and manufacture the feed system with regards to chemical or product make-down, dilution, delivery and dosing, but also has the capability to design and fabricate shower headers, spray bars, manifolds and mounting systems.

Unlike systems that are pieced together, an EGM showering system is one comprehensive package with the shower supply and shower delivery systems working in unison. EGM maintains close working relationships with several nozzle manufacturers, giving us direct and reliable access to OEM companies to assist with out nozzle selection and showering layout, as well as reliable scope of supply.

Typically, turnaround times from EGM for complete showering systems are a fraction of what is experienced by customers trying to source the individual components of the system separately.

With EGM assistance, clients are confident that they will obtain reliable spray coverage, consistent shower bar pressures, accurate product delivery and dilution and rugged design and fabrication.

Pictured to the right is a custom shower spray applicator that utilizes three separate feed headers within an EGM fabricated assembly. The three streams are mixed at the spray nozzle.