

Modular/Skidded Systems for the Processing Industries

There is considerable interest in modular systems within the various processing industries and certainly this approach is distinctly advantageous for expansions or replacement of existing systems. This interest in modular or skidded systems has grown for several reasons. For example, this approach typically leads to shorter schedules, since activities such as obtaining the necessary permits and preparing the site can be completed concurrently with the design and fabrication of the process system. It also provides a controlled environment for the fabrication and allows proven technology and reliable equipment to be utilized. Once fabricated, installation of the modular unit can be completed quickly, so that interruptions in production at the customer's site are minimized. Furthermore, the modular unit is pre-assembled at the vendor's facilities and fully tested, making it "ready to run" immediately after it has been installed. The overall result is that the modular unit costs significantly less than that fabricated (partially or totally) and installed at the particular site.

Another benefit worth mentioning is the availability of "operator training" at the vendors facility in advance of delivery to the production facility. Operators, with this proactive, "hands on" training already behind them, arrive at the production facility with more confidence and abilities to effectively operate these process modules with production objectives & goals attained more quickly.

An important consequence of using a modular approach for the design and fabrication of a process system is the "single source responsibility." The project team at A&B Process Systems coordinates all the activities through to and including the installation phase. Design engineers are always close at hand should changes be required. Many of the components of the system, the interconnecting piping and the tubular frame, are fabricated at A&B's facilities. The company has an Automation and Controls group, ensuring the incorporation of user-friendly, reliable instrumentation and able to provide training to plant personnel after the installation and start-up of the modular unit. In other words, the "single source responsibility" falls upon A&B Process Systems.

A&B Process Systems is renowned throughout North America for the design, fabrication and installation of high quality, stainless steel process systems. The company quickly recognized the advantages that modular systems offer to the processing industries and established the necessary inhouse resources --- design engineers, welders, fitters, machinists, QA/QC professionals and project management personnel --- to support the fabrication of such systems. A&B Process Systems has four plants that represent 80,000 square feet of manufacturing capacity. Welder fabricators and welder fitters are available 24 hours per day, 7 days per week to provide top quality products. Plasma cutting, automated seam welding, GMAW, GTAW and orbital welding capabilities are available when needed. Fabrication is completed in accordance with any one of several guidelines, for example FDA, 3A, USDA, cGMP, ASME or BPE. A&B specializes in GTAW, GMAW and orbital welding techniques and are ASME certified in each of these procedures. Based upon project certification and compliance requirements, the finished product is inspected and tested with required methods.