

Quality Makes the Difference in Custom Design & Fabrication

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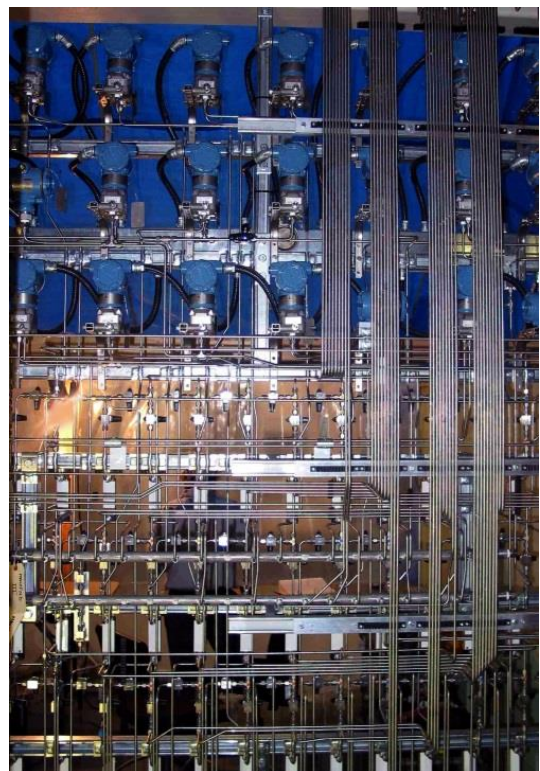
Zeton has designed and fabricated pilot, demonstration, and modular production plants for over thirty years. In that time, we have built plants that are detailed, highly specialized, and have varying requirements—no two have been exactly alike. To deliver quality within the diversity of our field, we have developed and honed our own unique methodology that allows us to bring exceptional efficiency and distinction to any project we undertake.

In both the design and fabrication stages, team members are encouraged to come together in order to build on their years of experience and specialization. They are empowered to use their expertise to quickly resolve the innumerable questions and concerns of any given project. And our state-of-the-art facility allows us to fabricate the modular plants in the exact same configuration as they will be installed at our customer's plant site.

Trusting Our Team

Our team works to a robust ISO 9001 quality monitoring and control program, but our internal quality aims higher by channeling our years of skill and expertise by empowering team members to make decisions regarding quality all along the project's journey.

In the design phase, project engineers draw on their



experience with previously proven, reliable solutions. For the selection of plant components, they turn to trusted manufacturers and suppliers who have been vetted through years of feedback from our customers, working with hands-on experience on similar applications that we have designed and built.

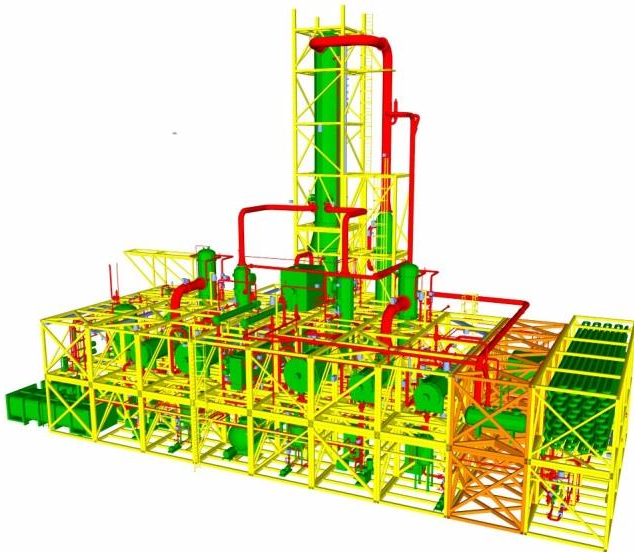
In all cases design solutions and plant components are selected that are appropriate for the scale of the plant. Equipment, instruments, and valves are integral to pilot-plant success, and there are hundreds of manufacturers who can supply components over a wide range of cost. Having trust and history with our suppliers means that we can work together efficiently to quickly find high-performance components that are appropriate for the scale, budget and operating conditions of the plant.

A Zeton plant will have anywhere between 500 and 4,000 different pieces of equipment, instruments, valves, controls, and electrical items. We have made it a priority to seek out and develop relationships with proven high-quality suppliers because we believe that trust and understanding means our teams have partners to turn to for input on unique situations, and, ultimately, these relationships save both time and money while upholding our standards for quality.

Design and Fabrication Facility

A well-thought-out and reviewed design is at the heart of delivering a quality plant. We lay out the plant equipment and route the piping using 3D-modelling software. This is not only efficient, but easily allows

for changes as new information comes in from the extensive model reviews that are held within the engineering group and with our customer's engineering and operations staff.



When the design moves into fabrication, supervisors, lead hands, and technicians are consulted on a daily basis and empowered to make decisions related to the quality of the build. This includes how custom components designed to be fit-up in our shop are installed and mounted, how equipment and

instrument supports are placed, and how best to position for maintenance accessibility. We have found that combining design, engineering, and manufacturing in the same location greatly improves the quality of modular plant fabrication. Engineers and designers are present and immediately accessible during fabrication to deal with





issues as they arise. They are there to inspect and monitor the quality of the fabrication, and they can quickly and repeatedly ensure that rigorous and special specifications required for the plant are met.

Zeton's manufacturing facilities have been custom built with sufficient height to enable us to fabricate modular pilot and demonstration plants in the exact same configuration as the plant will be when installed at its final site location. This ensures that all connections and interfaces between modules

are fit prior to the plant arriving at the operating site. This important quality control feature provides significant value to our customers by reducing the time to install the plant modules at the site and significantly reducing site construction costs, while eliminating rework associated with making the modules fit together again.

Factory Testing

The final step prior to shipping a pilot or demonstration plant is rigorous factory testing. This is a key step in Zeton's quality process. Simulating fluids are used to run the plant for a sufficient period to ensure all components are functioning as designed at the minimum and maximum operating conditions. All control system inputs and outputs are checked as well as the operation of all safety interlocks.



Continuity of Support

Our quality focus continues when the plant is delivered to the customer's site. We send experienced supervisors to the site who worked directly on the particular plant as it was fabricated in our facility. This comprehensive site support means that any issues that arise during the installation can be dealt with quickly and efficiently. And when the plant is ready for start-up, the project engineer and controls engineer who worked on the plant will be on site to assist in making sure everything runs smoothly.



Zeton's Quality Commitment

Zeton's commitment to a quality process of design, fabrication, and delivery over the past thirty years can be seen in the many customers who return to work on multiple pilot and demonstration plants with our team. We believe that a high-quality process begins with a centralized focus on team trust, experience, and empowerment. And it is from this foundation that our customers benefit in terms of time and cost efficiency from working with Zeton for their unique pilot and demonstration plants.

At the heart of Zeton's commitment to quality is the team itself. From

design to fabrication, our teams work together, and are empowered to make decisions based on their experience all along the process, and this minimizes deficiencies and time lost through rework. We take this commitment to team continuity to the customer. When the plant moves to its final location, it is accompanied by team members who know it intimately. This depth of experience on the project minimizes installation time and fit issues at the plant site.

Summary

In summary, there are four major benefits Zeton's quality approach offers our customers. Firstly, we use 3D plant modelling in the design stage for its power, flexibility and cost efficiency. Secondly, we combine design, engineering and fabrication of our plants in the same location to improve the communication from design to fabrication and the overall quality of the plant. Thirdly, we apply scale-appropriate solutions and only select high quality components from proven suppliers to ensure reliable, long-term operation of the plant. And lastly, in the fabrication stage, Zeton's purpose-built space allows us to build plants in the exact same configuration as in the final installation at our customer's location, which significantly reduces the time for installation of the plant modules at site.