



TOP 10

QUESTIONS TO ASK WHEN CHOOSING A HYGIENIC PIPING SYSTEM INSTALLATION PROVIDER

While many food-and-beverage manufacturers search for low-cost solutions, the right provider should check all the boxes

By Buck Evers



Introduction

Food, beverage and pharmaceutical manufacturers remain under constant and tremendous pressure to develop products that, without fail, satisfy consumer expectations for such things as appearance, taste and texture. A batch of soda pop that lacks “fizz,” a bag of potato chips that tastes “off,” a carton of ice cream that feels “gritty” or, heaven forbid, any of the above that cause illness in the consumer can place manufacturers and their processes under a microscope. The results can be detrimental and can include loss of product and excessive repair and downtime costs, with a high-profile product recall and resulting loss of reputation the ultimate worst-case scenario.

To meet acceptable standards, manufacturers must engineer production piping systems that employ a method of construction and operation without adversely affecting the look, taste or feel of finished products. To accomplish this, they must partner with industry-certified piping system providers and installers that adhere to the highest levels of hygienic and sanitary operation throughout the entire manufacturing process.

There are 10 critical factors for the manufacturer to consider when selecting a process piping system provider. Think of the following as a Buyer’s Guide to identifying, evaluating and selecting the best single-source piping-system supplier, who can be a true partner for the manufacturer from concept to completion.

1

Is the provider certified in hygienic/sanitary piping installations?

Hygienic/sanitary piping system installation providers must be familiar with all regulations governing hygienic process design and possess a demonstrated ability to meet the stringent demands and parameters. The Food & Drug Administration (FDA), U.S. Department of Agriculture (USDA), 3-A and ASME BPE are just some of the most recognizable regulatory bodies governing the food, beverage and pharmaceutical manufacturing industries. Their regulations and codes are designed to protect the public through optimized microbiological safety measures and quality of the products made.



With that in mind, many use Hazard Analysis and Critical Control Point (HACCP) principles, which is a system that identifies and controls potential biological, chemical and physical hazards at specific points in the manufacturing process. HACCP serves as a roadmap to ensuring that the design, fabrication, construction, installation and operation of their machinery does not create safety or health risks. To verify the piping system provider's claims of regulatory compliance, ask to see any and all certifications pertaining to hygienic or sanitary operation as well as a list of references from other manufacturing companies that they have worked with in the past.

2 Does the provider have experience and expertise with hygienic/sanitary piping installations?

Hygienic/sanitary and high-purity piping installations require specialized training, tools and experience because of their precision applications.

Make sure the provider has a documented history of getting the job done right the first time. In many cases, the ability of the field supervisor and his team to complete a "done-right" project is in direct correlation with the team's experience. This ability is manifested in a wide range of areas, such as how well the team works together and flexibility in piping routes. Installation teams should be OSHA-trained and include an experienced orbital welding staff for consistent and quality welds. Providers should also offer QA tools, like video boroscope technology, to test and confirm quality welds.



Require a viewing of the provider's past project photos, drawings and details. A process piping provider who is reluctant to meet such a rudimentary request may not be someone you'll want to trust with such an important project.

3 Does the provider also offer engineering and fabrication?

All indications suggest that more and more food, beverage and pharmaceutical manufacturers want a single-source for process piping system engineering, fabrication, construction and installation. These "one-stop shops" are becoming increasingly popular because they remove the middlemen from the process, eliminating miscommunication concerns and leave fewer balls to be dropped in all phases of the project.

An all-in-one piping system provider can be a cost-effective solution for the manufacturer. In addition to working with a single source, the provider's engineering department may

offer cost-savings suggestions, control upgrades and other process-improvement recommendations. Also determine what other services the provider can supply, such as project management, process engineering, automation, design/3D modeling services, or startup support.

4

Is the provider willing to perform a site visit to align on goals & objectives?

A quality provider considers all of your needs to determine whether or not the project can be completed in a way that satisfies all of its parameters. A site visit is imperative at this stage to ensure that the provider knows the challenges and needs of the project. If the provider remains focused on you, the client, they will clearly articulate project requirements and what will make you successful.



5

Does the provider estimate accurately?

At a predetermined point, the provider will produce an estimate that details the overall cost of the project. To help avoid pitfalls, ask questions during this stage, such as:

- What is your track record for completing projects on time and on budget?
- Can you show a history of meeting the scheduled demands of past projects?
- How and when do you issue change orders?
- Will we have a chance to define and agree on critical project milestones?



Find out if the provider tends to bid low for a project and then comes back with multiple change orders that ultimately increase costs and potentially compromise the budget and timeline. Low estimates may seem attractive up front, but change orders and delays can quickly inflate the budget.

6

Does the provider have capacity to meet your schedule?

It's difficult for providers to turn down work, so they must fight the urge to say "yes" to every potential client. Ask about capacity upfront to ensure that the provider has the time and manpower available to complete the project in the time frame needed. Choosing a

provider that doesn't have the capacity to finish the job may lead to problems and schedule slip. Ask if the provider will utilize in-house technicians or contract with a third-party for additional staffing needs. If subcontracting is necessary, confirm the reputation of the subcontracting firm before proceeding.

7 Does the subcontractor have a focus on lean construction methods and continuous improvement?

Leading-edge piping system providers rely on 5S and lean manufacturing techniques to reduce waste and increase productivity. Examples of such principles include keeping job sites clean and organized; making it easier to more quickly and efficiently find parts and tools; minimizing the amount of time it takes to move from one station to another; and identifying and promptly communicating any problems.



Field supervisors keep all technicians on the same page by establishing job-site performance goals and providing feedback as the team strives to meet those goals. Supervisors communicate all performance expectations on a daily basis. Daily and weekly checklists will be completed for every job based on the performance goals assigned to the team, performing regular audits and scoring of the team's 5S performance.

8 Does the provider maintain project management and communication systems for documenting and communicating work progress across teams and functions?

Make sure to ask the provider to clearly explain the project management process and how the team stays on task.

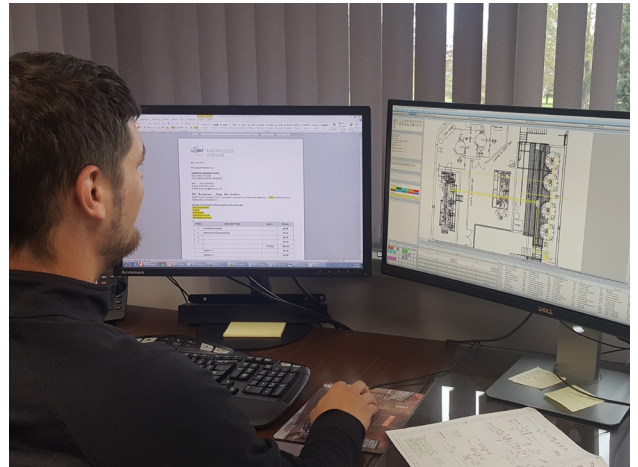
Ask if the provider's system of documenting and communicating work progress includes hours worked, digital photos of projects and specific tasks that have been completed. Before any on-site work begins, clear lanes of communication must be established and the roles of all of the people involved in the design, fabrication, construction and installation of the system clearly spelled out. Identify a primary contact as well as a backup in case of emergencies.

The development, operation and continued advancement of cloud-based project management platforms provide real-time access project updates and documentation to help keep teams in the loop across locations.

9 Does the provider possess a reputation for quality?

The best piping system providers define quality as "the ability to meet client requirements each and every time." The driving force should remain a goal of Zero Defects upon completion of the installation.

To help determine the provider's commitment to quality, ask to see welding kits or samples. Verify that the provider only employs qualified and certified welders. Inquire about the type of quality-assurance program the provider maintains and the program's history of success. The provider should allow you perform visual weld inspections, pressure testing, radiography and liquid-penetration tests before signing off on the project's completion. In the end, you must trust the provider implicitly and believe without reservation that the provider will deliver a finished system of the highest quality.



10 How important is safety to the provider?

Last, but certainly not least, ensuring the safety of the installation site and the employees who work there should remain of the highest importance to the provider. Ask if the provider proactively uses any type of safety training programs to ensure a safe job-site culture. The provider should produce documentation, when asked, showing which employees maintain OSHA certification. Ask to see past safety audits and how the provider corrected safety shortcomings, if any, that needed updated. Find out what the provider's recordable incident rate is and if it signals an inability to keep a work crew safe.



Conclusion

A&B Process Systems maintains the highest level of standards and can answer these 10 critical questions with ease. Use the standards described in this indispensable resource as you search for your piping system partner. For more than 45 years, Stratford, Wisconsin-based A&B, a product brand of the JBT Corporation, has been committed to becoming a single source for manufacturers in the design and installation of process piping.

A&B strives to be a true partner for its customers “from concept to completion.” The proof that this approach is working can be found in the fact that, since 1973, A&B has installed more than 8 million lineal feet of process piping throughout the United States, with the largest single installation totaling more than 70,000 lineal feet.

About the Author

Buck Evers is the Director of Installation Services for A&B Process Systems, Stratford, WI, with more than 25 years of experience in the military and equipment manufacturing for the food industry. Contact him at buck.evers@jbtc.com or call 1-888-258-2789. A&B Process Systems, a product brand of the JBT Corporation, is an industry leader in the design, fabrication, automation and installation of turnkey stainless-steel industrial and sanitary process systems for use in a wide variety of industries. JBT Corporation is a leading global technology solutions provider to high-value segments of the food-processing and air-transportation industries. For additional information, visit us at www.jbtc.com. [link to: <https://www.jbtc.com/en/north-america/foodtech/products-and-solutions/brands/a-and-b-process-systems?lr=1>]

