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TECH BRIEF

How to Get Your Factory Automation Projects Off the Back Burner

Most manufacturing facilities have a list of control system issues that need to be addressed. These control issues can range from troublesome shutdowns to changes or upgrades that improve efficiencies. The change could be a known modification requirement or an unknown "gremlin" that needs to be tracked down. In either case, it is often some sort of an issue that just keeps getting put off.

Part of the problem is often the lack of resources in your organization. This could be due to unfamiliarity with the equipment in question or to just being too busy with all of the other day-to-day responsibilities.

The following is a short guideline for using an automation contractor to help get these projects off the back burner, and move forward with the improvements you need.

Define the Scope of Work

This can be a big variable. In some cases, you may know that you just need a timer changed in a PLC program, or a sensor added to fix a material handling issue. But other times, you may be experiencing a random shutdown that is difficult to pinpoint.

But troubleshooting and problem identification can easily be stage-1 of the scope of work. Once the issue is defined, then stage-2 could be providing the solution.

Find Qualified Contractors

There are a number of resources on the Internet that will provide a list of system integrators and automation contractors. These can be large sophisticated consulting firms, down to small one-man operations. A small HMI change does not require a big system integrator to make, yet upgrading a conveyor system to variable speed drives might be too much for a small operation.

If you don't have a feel for what type of contractor is required, use budget quotes to get quick feedback from several.

Get Budget Quotes

This is where you weed out the solution providers that don't meet your budget, or don't provide the confidence that they can solve your issues. Multiple quotes are almost a "must", only to be limited by the time you have to solicit and review each one. This is a good way to get a mix of various sized contractors.

This is also a good chance to gauge the contractor's timeliness. If the quote is promised for Wednesday, but you don't see it until Friday, that should tell you something.

Check References

A good automation contractor should provide several references. Of course, they will only be providing you references that they expect to be good. So try to feel out some of the places they have serviced, above and beyond the list they provide. Who are they working with right now? Very often, you may have a contact, maybe a vendor that is familiar with places they have serviced. And if the project risk is higher, make some calls and get some constructive feedback on their performance. Don't forget details like staying on schedule, cost adders, communications, documentation and follow-up. Also, make sure that they are insured, both for liability and workers compensation.

Draw Up a Contract

This is where you need to define what you expect to be completed. This is where you document all the details, from the budget quote and conversations you have had. Also, define what materials and tools would be required, and who is responsible for them. This includes utilities, moving resources in and out of the facility and waste removal.

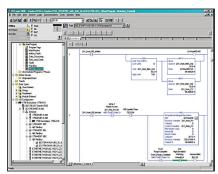
Note scheduled events—start date, start and stop times, weekend work and overtime (if applicable).

There should be a definable completion to the project. This may include an operational run-off or factory acceptance test. It should denote scheduled dates of completion.

Hopefully, this outline will help you tackle your automation projects and help you to be more efficient and productive.

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