How to Select the Right Robot Vendor



FPSON

Robot selection can mean the difference between great success and disappointing failure. With such an important task at hand, how does one go about selecting the right robot? The answer is larger than just selecting the right robot because chances are that more applications will come up over time that require a variety of robots. So the real question that has to be answered is how to select the right robot vendor? Let's review some areas to examine and questions to ask when selecting the right robot vendor for your application.



Before Talking to Robot Vendors

The first step before talking to any robot vendors is to establish the goals of your robot project. Shown below are a few examples of items to consider. This list is certainly not complete but should help get you thinking about what your project requirements are. Having these items defined up front provides a core for a common question list to prospective robot vendors.

- What do you want the robot to do? (What is the application?)
- Have a rough idea of the layout for the robot workcell.
 (The right robot vendors can help you with this, but you should have a rough idea of what is needed)
- What placement precision is required? (What are your manufacturing tolerances?)
- What are the throughput requirements?(i.e. How many parts per minute?)
- What peripheral devices will be working with the robots?
 (Vision, Feeders, Conveyors, etc.)
- What kind of ROI do you need for your project to be successful?

(Some robot projects can have ROI's as little as 6 months although ROI's vary tremendously depending upon the application)

As a final note, be sure to review your application with multiple vendors to make sure that you find the best fit. There are great vendors in the industry today and if you do the proper homework upfront you will surely be able to find one that meets your needs.



Factors to Consider When Selecting a Robot Vendor

There are many factors to consider when selecting the right robot vendor for your project. Shown below is a sample list of some of the key factors to consider when selecting a robot vendor. The best robot vendors have:

Reliable, High Performance Products

Check things like duty cycles vs. just looking at cycle time specs to get a better picture of real world performance.

A Wide Variety of Robots and Robot Types

Consider what you need both now and also in the future. Being able to use the same vendor for many different projects will save development and maintenance time as well as help reduce overall project lifetime costs.

Powerful Development Tools

Why reinvent the wheel when the best robot vendors have builtin tools that significantly reduce overall development time.

Products that are Easy to Learn & Use

The best robot vendors will give a demo showing how their products are easy to use so you can decide for yourself based on what you see.

A Wide Variety of Integrated Options

Integrated Vision Guidance, Conveyor Tracking, .Net Support, Additional Axis Control, Force Sensing, EtherNet/IP, DeviceNet, and other options available from the robot vendor normally offer superior performance and help save a ton of development time vs. trying to integrate on your own.

Outstanding Support Personnel

Technical personnel with 10+ years experience who will help you with design decisions up front and technical issues as required.

Application Feasibility Mockups

The personnel, ability, and experience to do feasibility studies which show solutions for your applications prior to even making a purchase.

A Wealth of Experience

Does the vendor have experience with applications similar to yours? Can they provide you references?

Excellent Training

The best trainers and the ability to deliver courses at their facility or yours.

