

Managing the Complexities of Large Part Machining Deployment



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BIG ON THE DETAILS

Acquiring large part machining capabilities can be a surprisingly complex process . . .

If you plan to machine parts over a large work size envelope, the machine tool solution you'll need will not only be larger, but will probably require a special foundation, custom engineering and/or third-party integration, multimodal logistics, oversized transportation and rigging, on-site machine assembly, special testing, etc. . . . and you'll need a detailed order/project management process to guide and monitor this activity over a period of months.

In other words, make sure that whomever you purchase a big machine from is also big on the details!



EXPERIENCE MATTERS

Those who deal in commodity, CNC machines have limited understanding or experience in managing the many details of deploying large, custom machining solutions.

Acquiring a large part machining solution is very different from buying off-the-self products from a commodity machine tool distributor. It's unlikely that the salesperson who can put a standalone CNC machine on your shop floor in a couple of weeks has ever sold a hydrostatic horizontal boring mill with 30+ feet of horizontal travel. Will he be able understand and manage the process of custom configuring machinery around architectural details, specially poured foundations, on-site machine assembly and more?



MINIMIZING RISK

If you're considering the purchase of a large, custom machining solution, there's a lot more on the line.

Large part machining and turning applications demand more than just higher capital equipment costs. Every aspect of your order, including manufacturing, transportation, rigging, assembly, testing, training and support, carries more cost and risk for larger, custom machine tools.

A machinery distributor who is inexperienced in deploying large machinery, may not accurately plan or budget these special details into your purchasing decision upfront. This could lead to cost and schedule overruns that can play havoc with your capital equipment ROI!



UNDERSTANDING THE PROCESS



We think you should know more about the intricacies of managing the entire process.

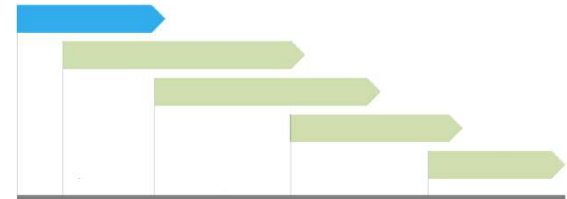
If you're considering a large part machining solution for your manufacturing operation, we think you'll benefit from gaining a better understanding of how this complex process is managed. This is based upon over 25 years of experience we have in providing large complex equipment to U.S. manufacturers.

MACHINING SOLUTIONS DISCOVERY

The right solution to your machining application demands much more consideration than a standard quote for an off-the-shelf machine.

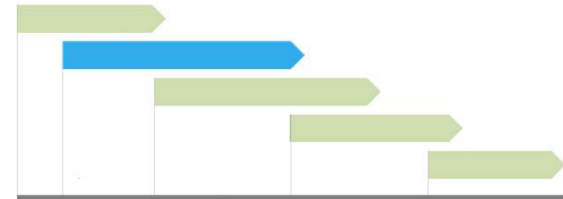
In-depth discussion and analyses is needed to help you determine the type and size of machine that will best meet your requirements. This includes exploration of features and options that can increase your productivity, including potential integration of 3rd-party products to enhance automation, monitoring and safety.

A comprehensive initial proposal should be created to best fit your requirements, including detailed machine descriptions, technical specifications and photos of similar machines. This proposal should be adjusted as exact specifications are refined to provide the greatest benefit to your operation.



All aspects of custom configuration must be confirmed, documented and managed, working with the machine builder and all parties.

At the time of order, a complete order management review should be conducted with a detailed document that identifies the timeline for all information required during the project cycle. An order acknowledgment contract should also be created that specifies the machine details, all agreements and timeline commitments from the builder, your machine provider and you.

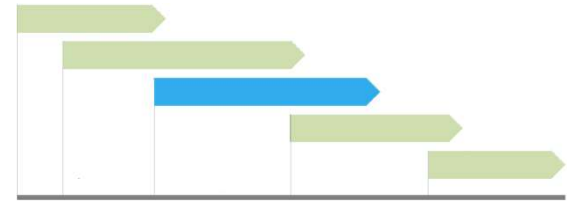
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PROJECT PLANNING AND MANAGEMENT

Maintaining a detailed project schedule is critical to coordinating build processes, site prep, shipping, integration, delivery and more.

Development of a project plan and schedule is essential to guide your equipment deployment process, including site preparation, machinery shipment, etc. The build process and order management schedule must be continuously monitored to ensure on-time and accurate delivery of your machine. Your machine provider should jointly determine the machine acceptance criteria, including preparation of machine geometrical alignment and accuracy protocol.

Your provider should prepare all documentation needed for timely shipment and customs clearance. When machine transportation is arranged, the shipment must be monitored and the schedule confirmed to arrange machine truck loading and coordination of machine delivery to your facility.

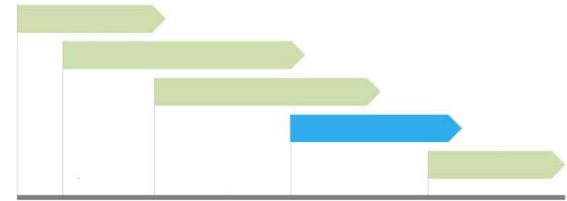


ASSEMBLY/INSTALLATION AND TESTING

Delivered in sections, the large machine build process is completed with expert assembly and final testing in your facility.

Due to transportation and architectural constraints, large machines are delivered and rigged in sections at your facility, where final assembly will take place. Your facility team should be involved throughout this process, however experienced installation personnel from the machinery provider and assemblers from the machine builder should be present to assure critical machine alignments during assembly and accuracies are verified on your floor.

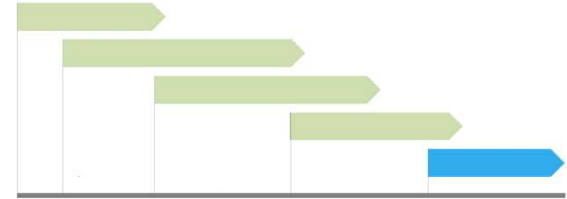
After on-site assembly, your machine should be tested and final machine geometrical alignment protocol presented. All final lasering should be conducted with certified results to provide a baseline for future reference.



CUSTOM ON-SITE TRAINING

Your large part machining solution is unique, so your team will need customized training to run and maintain it effectively.

After the machine installation, your large machinery provider should conduct custom, on-site training to instruct your personnel on machine operation, as well as troubleshooting and maintenance techniques for your specific model, CNC control and axis configuration. This training should be personalized for your internal processes and the skillsets of your operators and maintenance crew. On-site curriculum should include hands-on maintenance training and CNC control operation, with a file copy of your control provided as a backup for future reference.



ONGOING CUSTOMER SUPPORT

You need a partner dedicated to long term service and parts support for leading large machine tool brands.

You need more than just a machine provider when it comes to ongoing support of your large machining solution. You need a trusted partner who is committed to leading large machine builder brands for the long term. This partner will stand behind your machine warranty with 24/7 parts and service support, lifetime phone technical support and be able to offer on-site parts inventory. Whenever possible, your replacement parts should be sourced in the U.S. for expedited delivery. Your large machinery partner should also offer on-site services, preventative maintenance programs and machine geometrical and laser alignments, as needed. Finally, make sure that part programming, tooling, fixturing, turn-key assistance and customized training programs are available.



THE LARGE PART MACHINING EXPERTS

Your partner for managing the complexities of large part machining deployment . . .



Pilsen is the complete solution for all of your large part machining needs. We provide and support world-class TOSHULIN, TOS KURIM and REIDEN machines, ensuring that you get the highest quality and productivity over the entire operating life of your equipment. We specialize in providing large and custom vertical turning/boring machines, horizontal boring mills, vertical gantry systems, 5-axis/universal machines and press brakes.

Pilsen has the right machining solution for your large part manufacturing applications. Contact us to learn more about our capabilities:

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