



# Three Key Features of Tube Laser Software

*Today's advanced tube lasers call for software that is easy to use, quick to program and contained within a single platform.*

**H**ours at the cut-off saw, across the shop floor to the drill press for the slow process of puncturing and tapping, finally over to the grinder for cleanup and extruded cutouts. Fifteen years ago this was the fabrication process for every pipe. With the release of modern-day tube lasers, this multi-step process is completed on one machine, by one individual, in less than a quarter of the time. This advancement has delivered measurable improvement to productivity while lowering production time and cost—all of which has a positive effect on the bottom line. Problem solved right?

Tube lasers require software for programming, and many companies are tracing production bottlenecks directly to this programming stage. With the increased speed of today's CO2 and fiber tube lasers, programmers are finding it a challenge to keep up with the machines, and keep them operating at full capacity. These machines usually come equipped with programming software. Generally speaking, this software is basic and often lacks the advanced functionality to produce the programs needed to keep the machine running at maximum volume. When purchasing machinery, manufacturers typically shop, compare and scrutinize functionality. Unfortunately, many do not give software this same level of attention. It is the equivalent of putting cheap retread tires on your \$100,000 sports car.

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*SigmaTEK Systems, LLC, Cincinnati, offers SigmaTUBE tube cutting software, among other nesting and CAD/CAM software products. For more information, visit [www.sigmanest.com](http://www.sigmanest.com).*

mize their tube cutting investment need to consider secondary software solutions. While these programs often vary by the software vendor that develops them, a few key components are needed to accomplish the fastest programming possible.

First, the software should be contained within a single platform. This means a user should not have to import or export the design into a secondary platform to draw, program or post. This multi-platform scenario wastes time and creates confusion. It does not give the programmer the ability to check the designs for any necessary programming changes until the end and can create slip-ups between the engineering department and programming.

Second, for the quickest programming possible, the engineered products should be programmed from the purest design possible. This means a programmer should not have to completely disassemble an assembly to program its components, nor should the programmer have to delete unused geometry within a model. The programming software should be able to read material type, thickness and geometry on its own. The software should also be capable of distinguishing which parts need to be programmed for the tube laser. This saves thousands of hours of programming time over the life of the machine and increases throughput tremendously.

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