We strive to produce quality parts for customers around the world looking for laser cutting precision. We are able to produce quality machined parts to the specifications provided by customers because of the strong quality system. Precision parts with tight laser cut hole tolerances cannot be done without our quality department. Supplying quality machined parts defines who we are and laser micromachining wouldn't be possible without it.

Certifications

We maintain our ISO 9001:2015 Certification for quality machined parts as the basis for our quality system. In addition, A-Laser is proud to maintain ITAR Registration to support any company that works with the government and requires a level of privacy to be maintained.

GD&T Inspection via OGP

We are able to dimensionally and visually inspect every part that is manufactured to make sure all specifications are met and the part looks good. This is done by our in-house OGP systems which allow us to measure these parts at 300x magnification and make sure all dimensions of the part meet specification. This can be done for sheet metal laser cut tolerances and a variety of other materials.

Engineering Support

In a perfect world, a customer's file would be cut on laser cutting precision tolerance and measured on our OGP system with no failures or visual defects. But we do not live in a perfect world, and occasionally we have issues with dimensions falling out of specification or have a visual defect. A-Laser has exceptional experience in making sure the defect is corrected and the part is manufactured to the highest standards.

During our first article inspection process for a laser cut hole tolerance or any other complex shape, a part might be failing dimensionally or be extremely close to the upper or lower limit of the tolerance. Our engineering/CAD team is more than capable of finding a solution to the problem.

This might be a CAD change on the file to bring the part back into the specification, or a parameter change on the laser tool so the apertures/outline cut differently. Because we deal with very small tolerances like .0125mm-.0254mm we need the measurement feedback from our quality team to make sure all measurements are as close to nominal

as possible and any adjustments that have been done are measured again to make sure it is error-free.

Some measurement examples we see on a daily basis are widths, diameters, radii, distances, profiles, concentricity, true position, X and Y location. We have experience with all of these not meeting specifications and we pride ourselves on finding solutions and making adjustments for every project no matter how difficult the obstacle might be.

At A-Laser, we have a simple goal, that is, to get quality precision parts right using our process the first time and every time. Laser cutting precision tolerance can be challenging, but we achieve this by utilizing a Business Process Management Approach, Lean Six Sigma, and Process Excellence. This Top-Down approach allows for staff commitment to service and excellence. Over the years, this task became easier, the more we stayed the course. With the help of great leadership and hand-selected staff members, our success story is nothing short of impressive.

Creating a Culture of Quality with Lean 6 Sigma

When it comes to laser cutting precision tolerance, our continual improvement systems are based on proven tools such as 6 Sigma Methodologies, Lean Tools, and advanced Quality Management processes. We have eliminated the guesswork and replaced it with a data-driven approach to support the requirements and needs of our customers.

Developing our employees has always been key to our success. Through active mentoring, training on laser cutting hole tolerances, design, and more, we create a culture where our staff have the skills and are empowered to take responsibility for the results of their actions. We understand that it is our people who make us who we are.

Problem-solving techniques and Innovative Engineering is a big part of our culture. This drive to excellence on all levels of the operation is reflected in our Services and shows in the culture and high retention of our people.

The road to Excellence is never-ending, but specifically, at A-Laser, it is full of excitement and progress. Our Products and Services reflect this culture, and our People enhance this experience.

Avoiding ESD at Every Level of Production

In order to create a reliable final product that will last for consumers or perform reliably in the field, we take measures to prevent ESD at every stage of the production process.

Our experience working within aerospace, medical, and other industries has helped us develop a process that ensures high reliability.

Here at A-Laser, we work hard to ensure the components we deliver to you have been shielded from the damage caused by electrostatic discharge. It's part of our commitment to high-quality, reliable work and laser cutting services.

https://a-laser.com/quality/