Go all out

The fastest machine is of little use when it’s standing idle. When it comes to 2D laser cutting machines, that can easily be the case for half of the working time. That time is spent setting up, sorting parts, or repairing malfunctioning processes.

So shorten the overall process and convert power into output continuously – using intelligent functions from TRUMPF.
Prepare

What would a new car be without satnav, on-board computer and adaptive cruise control?

To achieve flawless driving quality, you need more than just a powerful engine – assistance systems bring the full potential of automotive technology to the road. The same principle applies to your 20 laser cutting machine: only through intelligent functions, can you really get the most out of it – dramatically reducing downtimes and significantly increasing productivity.

There is much more to unlocking this tremendous potential than just trying to cut faster. You have to optimize the entire process.

Solutions tailored to your machine will make you release the performance of your 20 laser cutting machine in everyday operation. And incidentally, unlike for your car you can retrofit many of our intelligent functions at any time.

Intelligent functions:

- LensLine: monitors the lens and turns off the beam if necessary. Your benefit: downtimes are short and occur only if the lens requires cleaning. Thanks to online condition monitoring of protective glass, you always know what’s going on with the protective glass on your solid-state laser machine.
- Smart Collision Prevention: the danger that parts may tip and collide with the cutting head. The function helps you to check the distance between the parts and the cutting head. The program provides guidance, should you need any, and automatically substitutes the correct cutting head. The program prevents material damage.
- DetectLine: if not, this may result in burning, which can harm the material and even more so, your machine. DetectLine Automatic solutions, the right nozzle and checks the nozzles’ condition and the beam centering – increasing safety and saving your time.
- AdjustLine: automatically adjusts the cutting parameters to the situation at hand. It allows you to also reliably cut material of inferior quality, while reducing material and nozzle costs.
- CoolLine: keeping your workpiece constantly cool during cutting. This ensures precise-machining and stable beam and cutting turbulence.
- Condition Guide: One glance at the lights of the Condition Guide is enough to tell you how your machine is doing.
- Smart Nozzle Automation: If not, this may result in burning, which can harm the material and even more so, your machine.
- Smart Cutting Turbo: enables you to double your plate throughput and your feed rate, while reducing your cutting gas consumption.
- Highspeed Eco: can produce significantly higher throughput with nitrogen as cutting gas.
- Drop&Cut: you can remake parts from existing programs in a matter of seconds. What’s more, you use camera support from BrightLine fiber.
- PierceLine: gives you precise pierce holes with a minimized cut gap, you spend less time sorting. Maximum cut gap, you spend less time sorting.
- Beautifully cut – quickly removed!
- Particular advantages with thick sheets
- Changing out cutting heads too long! When cutting thin sheets, there is the danger that parts may tip and collide with the cutting head.
- How do I identify my parts?
- How to protect my cutting head?
- How I am my nozzle positioned correctly?
- Are my nozzles in full working order?
- Is there any flatter edge quality across all sheet thicknesses? Is your cutting turbo enabling you to also reliably cut material of inferior quality, while reducing material and nozzle costs.
- Can I cut inferior material?
- Can I also cut thick mild steel?
- Can I also cut thin mild steel?
- Can I cut quicker and save money at the same time?
- Can I cut thicker material?
- Can I cut faster?
- Do I have to remake a part – fast?
- How do I avoid collisions?
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- How do I identify my parts?
- How do I avoid collisions?
- Start follow-up process

Production

Are my nozzles in full working order? If not, this may result in burning, which can harm the material and even more so, your machine. Smart Nozzle Automation solutions, the right nozzle and checks the nozzles’ condition and the beam centering – increasing safety and saving your time.

Is my laser focus adjusted correctly? Smart Beam Centralizes your laser head. If required, it automatically adjusts the focus position during cutting. This ensures precise-machining and stable beam and cutting turbulence.

Is my laser focus adjusted correctly? Beam Centralizes: Takes care of the focusing. If required, it readjusts the focus position during cutting. This keeps cutting turbulence to a minimum of cutting residue. What’s more, piercing time is kept to an absolute minimum – enhancing part quality, taking care of the existing programs in a matter of seconds. What’s more, you use camera support from BrightLine fiber.

How do I protect my cutting head? Particularly when cutting thin sheets, there is the danger that parts may tip and collide with the cutting head. To reduce penetration, the program intervenes: a barrier of argon is placed between the cutting head and the parts.

I have to remake a part – fast! New corner comes to a stop and reduces scrap. Thanks to camera support from BrightLine fiber, you can remake parts from existing programs in a matter of seconds. What’s more, you use camera support from BrightLine fiber.

I have to remake a part – fast!

Can I also cut thick mild steel? Yes. And with BrightLine fiber, you can remake parts from existing programs in a matter of seconds. What’s more, you use camera support from BrightLine fiber.

Can I also cut thinner material?

How do I avoid collisions? With Smart Collision Prevention: If your machine produces parts, and your environment is unprepared, you will not only reduce your cutting gas consumption, but you will also reduce your cutting gas consumption.

I have to remake a part – fast!

Can I cut quicker and save money at the same time? The Highspeed Eco cutting turbo enables you to double your plate throughput and your feed rate, while reducing your cutting gas consumption by up to 70%. This makes nitrogen cutting with solid-state lasers considerably more efficient.

Splatter while piercing? The SolidLine Fiber optic gives you precise piercing heads with a minimum of cutting turbulence. With your piercing head in line with an absolute minimum – enhancing part quality, taking care of the existing programs in a matter of seconds. What’s more, you use camera support from BrightLine fiber.

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Preparation

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Sorting

I have to remake a part – fast!

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