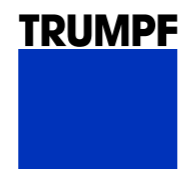




TRUMPF is certified to ISO 9001
 (Find out more: www.trumpf.com/s/quality)



TRUMPF Werkzeugmaschinen GmbH + Co. KG
www.trumpf.com

Intelligent functions in 2D laser cutting:

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.

Machine tools/Power tools
 Laser technology/Electronics

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 2D laser cutting machine: only through intelligent functions, you can 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 raise the performance of your 2D laser cutting machine in everyday operation. And incidentally, unlike for your car you can retrofit many of our intelligent functions at any time.

The intelligent functions enable you to transform the performance power of your machine into enduring output. Find out more:

Intelligent functions:
www.trumpf.info/872q56

Intelligent functions and automation: This dream combination launches the productivity of your processes to a whole new level. Load, unload, sort – the choice is yours.

Automation:
www.trumpf.info/8hy9bq

Connectivity is the key to more efficient production. Step by step, the TruConnect range shows you how. Discover where and how you can get the maximum benefit from connected manufacturing.

TruConnect:
www.trumpf.info/habmzo

Preparation

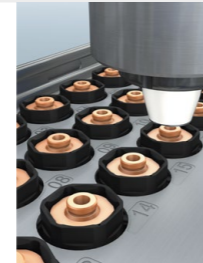


How is my machine doing?

One glance at the lights of the **Condition Guide** is enough to tell you the status of various elements that influence cutting ability. The program provides guidance, should you need any, and compiles forecasts for when maintenance will be required.

Are my nozzles in full working order?

If not, this may result in burring, which in turn leads to reworking and even rejects. **Smart Nozzle Automation** substitutes the right nozzle and checks the nozzles' condition and the beam centering – increasing safety and saving your time.



Is my sheet positioned correctly?

This is particularly important when you plan to cut pre-punched sheets. With **DetectLine**, a camera system precisely determines the position of the sheet inside the machine. Moreover, the function helps you to check the calibration of the focus position.

Are my lens or my protective glass dirty?

Spatter can soil the focusing lens on CO₂ machines. **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. You can cut at consistent quality and change the glass only when it's really necessary.

Particular advantages with thick sheets

Production

Can I also cut thick mild steel?

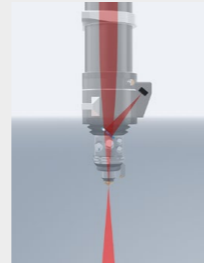
Yes. And with **CoolLine** you can even produce tight contours. This function keeps your workpiece constantly cool during cutting, allowing you to also cut delicate parts and perform yet more intricate nesting.



Particular advantages with thick sheets

Is my laser focus adjusted correctly?

Smart Beam Control takes care of that. If required, it readjusts the focal position during cutting. This creates process reliability and saves time.



Can I cut inferior material?

AdjustLine automatically adjusts the cutting parameters to the situation at hand. It allows you to also reliably cut material of inferior quality, while reducing waste and material costs.

How do I protect my cutting head?

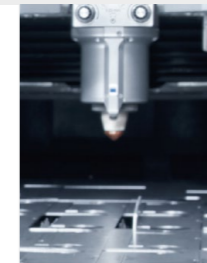
Especially when cutting thin sheets, there is the danger that parts may tip and collide with the cutting head. The **collision protection** minimizes the consequences – a kind of airbag for your cutting head.

Particular advantages with thin sheets

Sorting

How do I avoid collisions?

With **Smart Collision Prevention**: Your machine produces parts and inner contours in a sequence that cleverly factors in how cut parts will tip. In this way you can produce reliably without time-consuming microjoints.



Particular advantages with thin sheets

Beautifully cut – quickly removed!

Superb edge quality across all sheet thicknesses is what you get when your solid-state laser machine has **BrightLine fiber**. It also means you can produce smaller contours, and thanks to the optimized cut gap, you spend less time sorting.



Changing out cutting heads takes too long!

Then don't do it. Thanks to the **single-cutting-head strategy**, you can process all sheet thicknesses with one and the same cutting head.



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 extremely efficient.

Start follow-up process

How do I identify my parts?

Think about the next process step even while you're still cutting. Using the **Dot Matrix Code** you always know what part you have in front of you and what needs to happen next. This simplifies your processes, saves time, and reduces the reject count.



I have to remake a part – fast!

It now comes down to speed and using remainders. Thanks to camera support from **Drop & Cut**, you can remake parts from existing programs in a matter of seconds. What's more, you use up your remainder sheets.



Particular advantages with thick sheets

Splatter while piercing?

No thanks! **PierceLine** gives you precise pierce holes with a minimum of cutting residue. What's more, piercing time is kept to an absolute minimum – enhancing part quality, taking care of the machine, and reducing parts times.

