

TruLaser

Cost-effective
cutting through
thick and thin



The best solution for your application

The right laser for your cutting application, the right machine for your production, the automation that matches your material flow – this is what TRUMPF delivers. Our large range of laser cutting machines assures that you receive the right product. The vital questions for choosing the right machine are about your situation: What are your requirements regarding material and quality? How high is your average capacity? What do you need to make your manufacturing as cost-effective as possible?

Laser cutting is not only about cutting times. The entire process is important. Intelligent functions, for instance, help to design single processing steps in a smarter way. A large service network supports you if necessary. With TRUMPF, you receive suitable solutions: perfectly balanced, highly productive and passionately crafted.



Choose the laser that best suits your application.

CO₂ or solid-state? 4–7

Design your processes efficiently and use the full potential of your machine.

More output with intelligent functions 8–9

Get to know the TruLaser machines.

Our machines in detail 10–27

In this section you can find an overview of the technical details of all TruLaser machines.

Technical data 28–31

Select the right automation solution or switch directly over to the fully automatic laser machine.

Automation and TruLaser Center 7030 32–37

With our TruConnect solutions, we support you every step of the way to implementation of your Smart Factory.

Take control 38–39

With TruServices, you enjoy the benefits of a quotation that goes far beyond the machine itself.

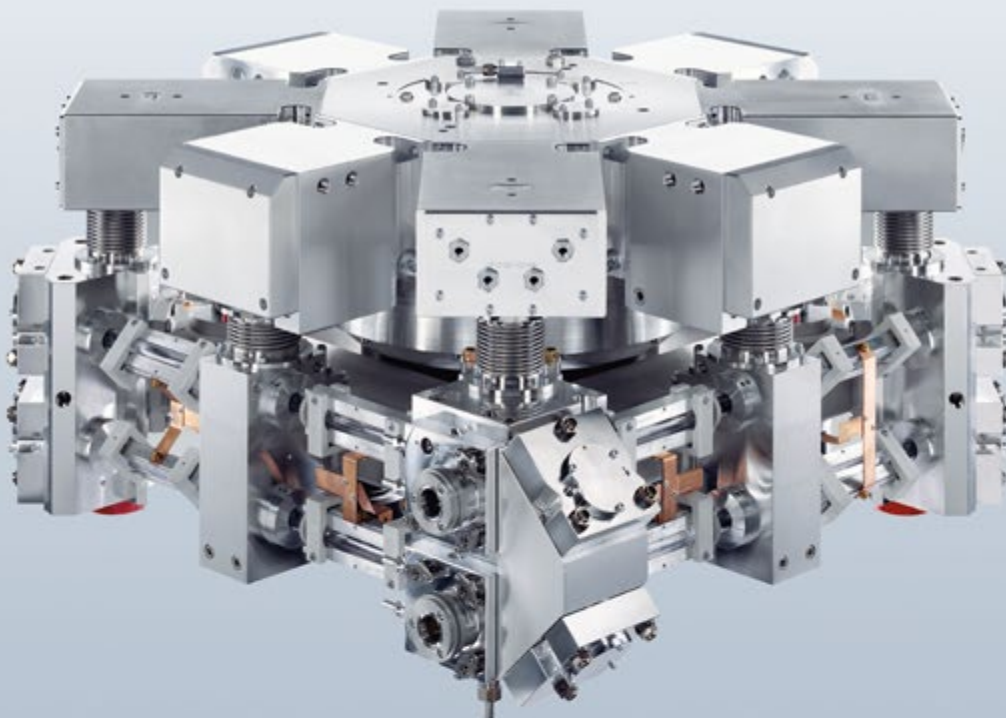
Everything from a single source 40–43

CO₂ or solid-state: The right ty

The question of the right beam source arises in almost every machine purchase. There is no general right or wrong answer. Different factors are important. TRUMPF offers the entire spectrum of beam sources for 2D laser cutting – your material mix, your sheet thicknesses and your quality requirements decide which laser your TRUMPF advisor will recommend.

CO₂ lasers: Consistently perfect edges

CO₂ lasers are an established type of industrial laser, featuring high durability and robustness. The cut edges they produce are of such high quality that reworking is usually unnecessary. The reason for this is that TruFlow lasers operate at a wavelength of 10.6 µm, ensuring edges with no burrs and extremely low roughness depths which are therefore immediately ready for further processing.



Areas of application

CO₂ lasers are particularly effective for any applications that require especially smooth and high-quality cut edges. They are the right choice for cutting edges that will be visible and where smooth edges matter for the further processing of your part.

pe of laser

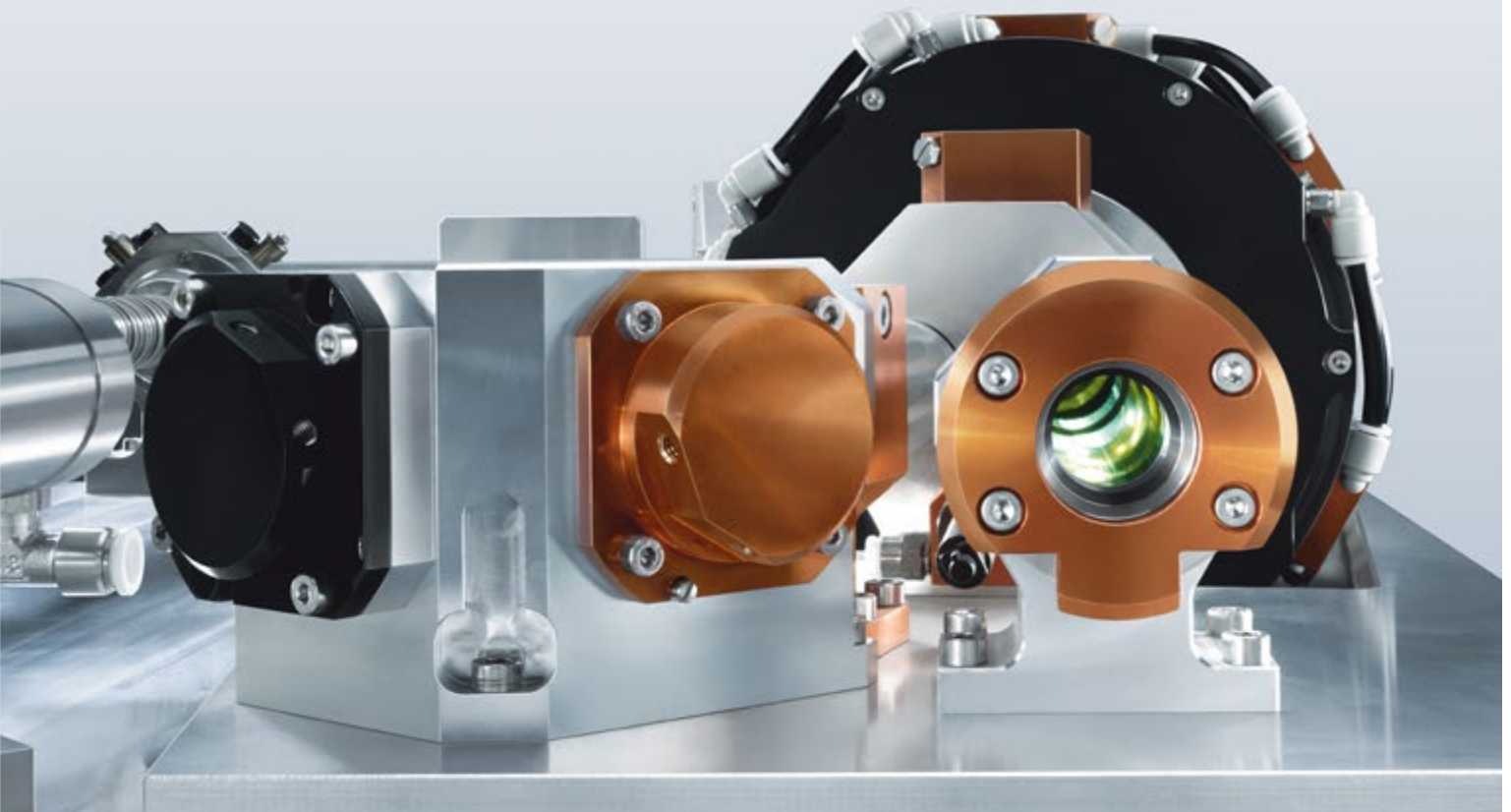


Solid-state lasers: Highly productive all-rounders

Solid-state lasers are fast, especially when used on thin sheet. This is made possible by the wavelength of the light it emits – the material absorbs this wavelength to a greater extent than the wavelength of a CO₂ laser. The laser injects more energy into the sheet metal so it can be cut faster.

The TRUMPF advantage

Lasers are complex high-tech products. In order to ensure that your beam source works in perfect harmony with your optics, machine and software, we develop and produce all components ourselves. This ensures that you can always rely on an exceptional complete package and all-round expert advice.



Areas of application

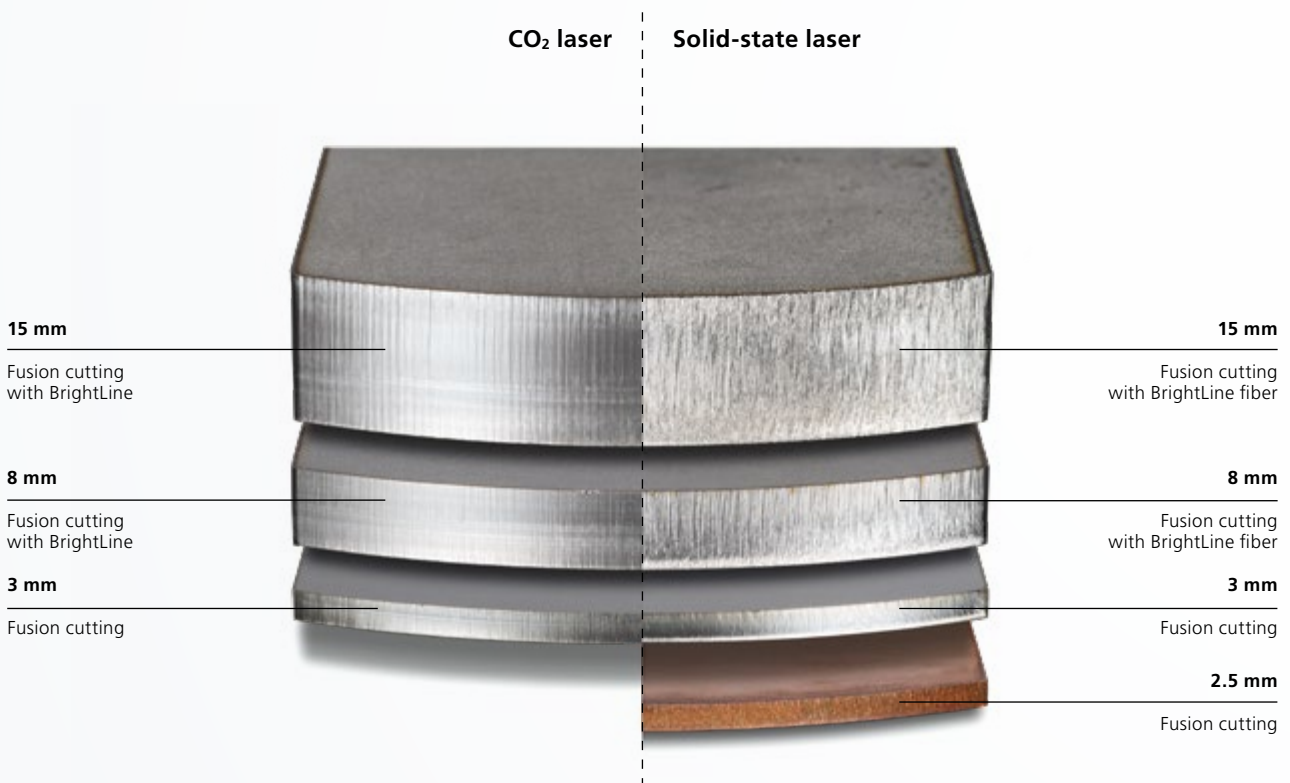
Unlike CO₂ lasers, solid-state lasers are also suitable for cutting copper or brass. Select the right laser power for your productivity requirements – and you are perfectly equipped for all cutting applications.



CO₂ or solid-state: Differences

When selecting a laser, one criterion is often particularly important – the cut edge. Consider these comparisons between edges:

Stainless steel and non-ferrous metal



The result:



CO₂ laser:

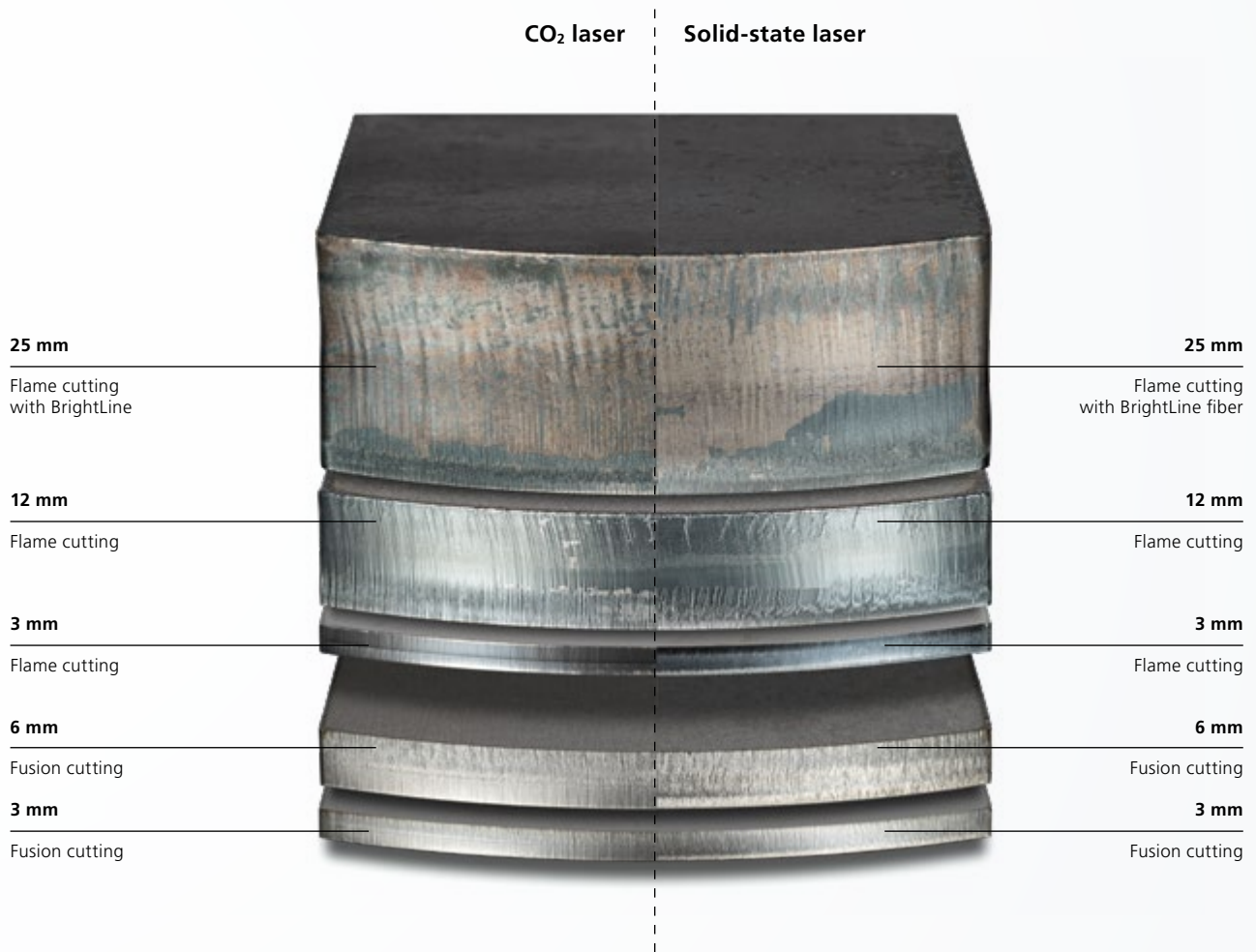
Exceptional part quality with extremely smooth and partly reflective edges – with BrightLine for thick sheet metal, and without BrightLine for thin sheet metal. Virtually no burr formation.

Solid-state laser:

Excellent part quality with thin sheet metal, assisted by BrightLine fiber with thicker sheet metal to ensure a consistent sectional view.

in the cutting edge

Structural steel



The result:



- CO₂ laser:** When carrying out flame cutting (with oxygen), both laser beam sources achieve the same level of quality. When carrying out fusion cutting (with nitrogen), the CO₂ laser outperforms the solid-state laser.
- Solid-state laser:** A slight burr forms when carrying out fusion cutting.

Please note: In these part images, the underside is shown facing upwards. This provides you with a better view of the slight burr formations.

More output with intelligent functions

Preparing

How is my machine doing?

The light on the **Condition Guide** shows you at a glance the status of important elements that affect the cutting ability of the machine; if necessary, the program provides you with recommended courses of action and generates predictions of when maintenance will be required.



Are my nozzles working properly?

If not, this can lead to burr formation, resulting in parts requiring reworking or reject parts.

Smart Nozzle Automation switches to the correct nozzle and checks the nozzle status and beam centering. This helps ensure reliability and saves you time.

Is my sheet metal positioned correctly?

This is important in particular if you wish to cut prepunched sheet metal. With **DetectLine**, a camera system precisely determines the position of inserted sheets. This function also helps to check the alignment of the focus position.

Is my lens or protective glass contaminated?

Spatter can contaminate the focusing lens of CO₂ machines. **LensLine** monitors your lens and switches off the beam if necessary. The benefit to you: Short downtimes for lens cleaning need only be scheduled when required, and you only need to replace protective glass if it is truly necessary. The **online protective glass status check** ensures that you always know the condition of the protective glass of your solid-state laser and can work with consistent quality.

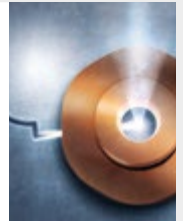
How do I tackle cutting problems?

The **Cutting Guide** supports you with finding the cause for cutting problems. It offers functions for inspection in order to adjust the machine optimally.

Producing

Can I cut inferior material?

Active Speed Control monitors the cutting process in real time. In the event of sheet thickness variations or quality fluctuations such as rust or coating remnants, the system adjusts the correct feed rate on its own. Alternatively, **AdjustLine** chooses robust cutting data before the cutting process starts.



EdgeLine Bevel

With the new EdgeLine Bevel process you can cut bevels and counterbores in the components directly at the machine. This saves additional process steps. Simple and quick programming supports a range of applications. So you can use it to process bevels with various angles and create counterbores in several sizes.

How can I protect my cutting head?

There is a particular danger of collision due to parts tipping over when cutting thin sheet metal. The **collision protection function** minimizes the effects of this – acting as a kind of airbag for your 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.



What good is having the quickest machine if your parts keep tipping over? With 2D laser cutting machines, downtimes can quickly take up half of your working time. These downtimes are spent setting up your machine, sorting or rectifying faults. This is why it makes sense to shorten your entire process and permanently ensure that power is converted into output – with intelligent functions from TRUMPF.

Sorting

How can I prevent collisions?

With **Smart Collision Prevention**: Your machine manufactures parts and inside contours in a sequence that intelligently takes parts tipping over into account. This means you can carry out production reliably – without collisions or microjoints.



This function is also available as a test or rental version.



Neat cuts – quick removal

With **BrightLine**, your CO₂ laser can achieve the ultimate in edge quality when cutting stainless steel and structural steel. However, thanks to **BrightLine fiber**, solid-state lasers can also provide exceptionally high-quality cutting results across the entire range of sheet thicknesses and with no reduction in cutting speed. In addition, optimized, high-quality cutting gaps save time in sorting and further processing.

Where does each part belong?

The **Sorting Guide** marks parts by color on a monitor depending on the order, downstream processes or geometry. This prevents mistakes.

Starting the subsequent process

How can I identify my parts?

Consider the next process step while still carrying out cutting: the **Dot Matrix Code** ensures that you always know which part you are working on and what processes need to be carried out on it.

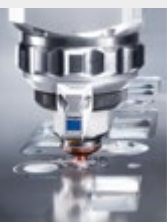


This function is also available as a test or rental version.



I need to reproduce a part quickly

Speed and reuse of leftover sheet metal are crucial factors here. Thanks to the camera support offered by **Drop&Cut**, you can produce parts from existing programs in seconds. This system also enables you to reuse leftover sheet metal.



Can I also cut thick structural steel?

Yes – with **CoolLine**, even tight contours are possible. This function keeps your workpiece consistently cool during cutting. This enables you to cut even delicate parts and to nest workpieces even more tightly.

Changing cutting heads takes up too much time!

Simply get rid of the process entirely: with the **one-cutting-head** strategy you can machine any sheet thicknesses with a single cutting head.

Your business, your choice



Choose the right laser machine, and use it to its full potential: In a solution that gives you the boost you need to achieve the best possible performance. Because the entire process is what matters, not just the cutting operation.



TruLaser Series 1000

01

Cost-effective and productive

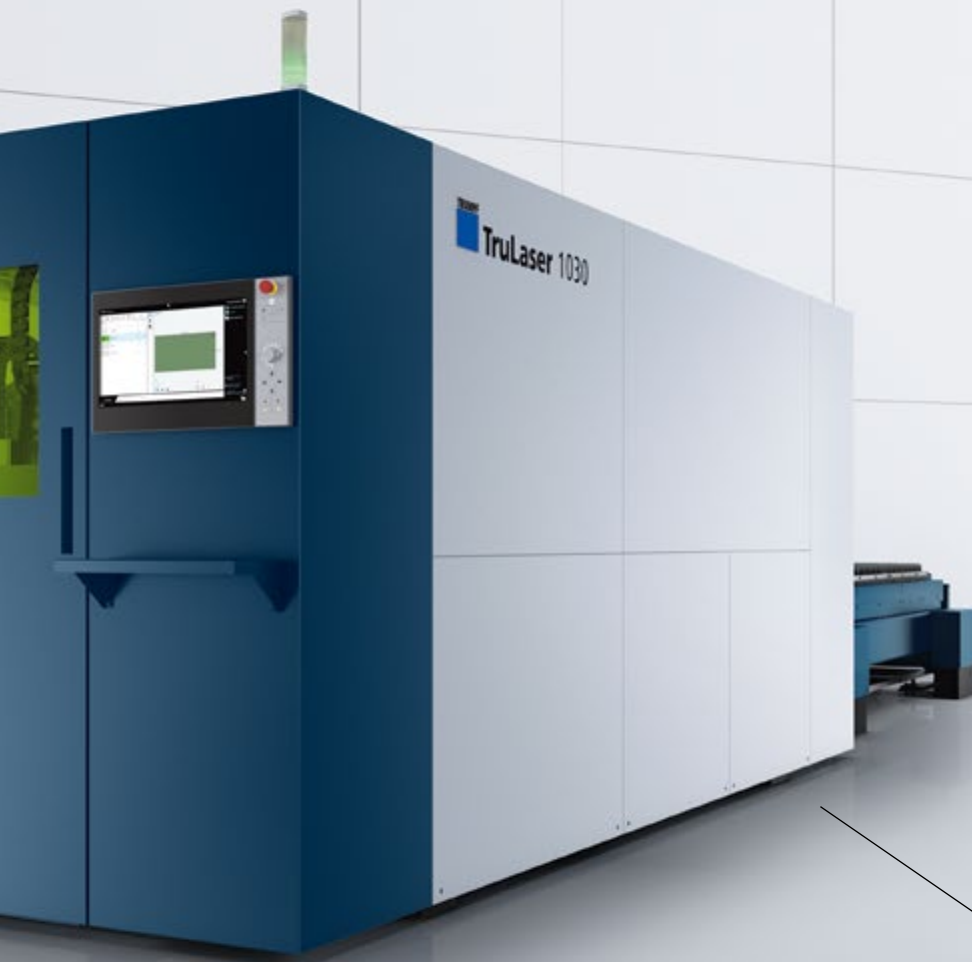
with Highspeed Eco and Drop&Cut

02

Robust and reliable

thanks to CoolLine and collision protection

A cut above the rest: You can perform laser cutting at the push of a button with the new TruLaser Series 1000. It provides many technological functions and is already worthwhile, even at low utilization levels thanks to the low investment and operating costs combined with maximum throughput and TRUMPF's high quality standard.



03

Top parts quality

with BrightLine fiber

04

Easy to operate and network

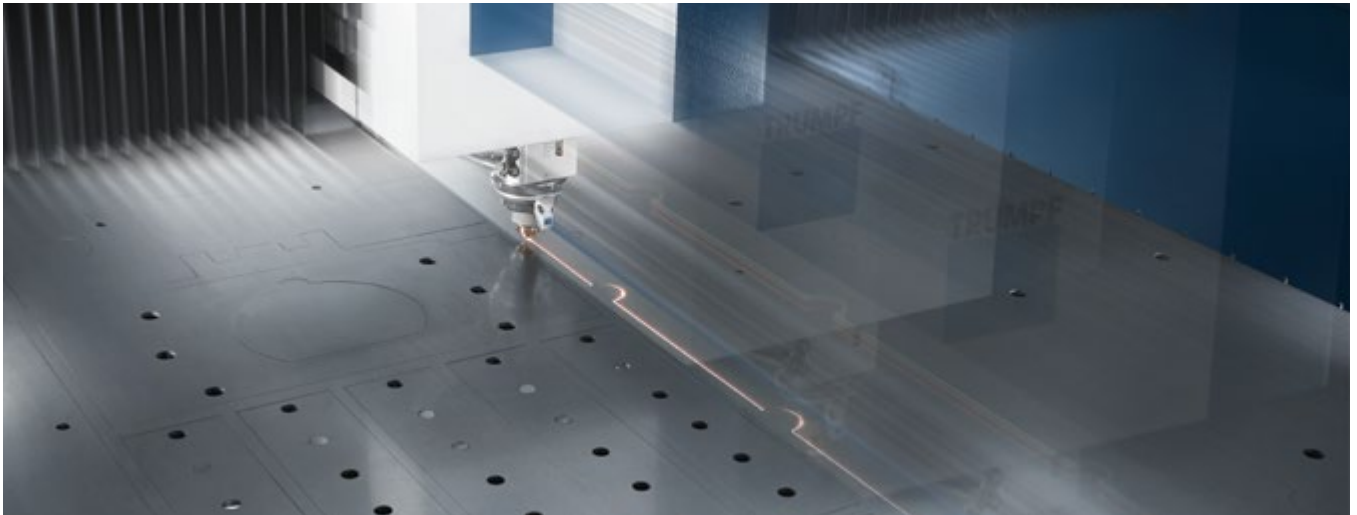
due to the touch display
and Central Link

01

Cost-effective and productive

with Highspeed Eco and Drop&Cut

You will set speed records with the Highspeed Eco cutting process: Depending on the sheet thickness, the feed rate increases by up to 70%. In addition, you achieve cutting gas savings of around 60%. Drop&Cut helps you make optimal use of remainder sheets. This saves material and time. A camera projects the image of the machine interior onto your user interface, and you can arrange part geometries on the remainder sheet as needed.



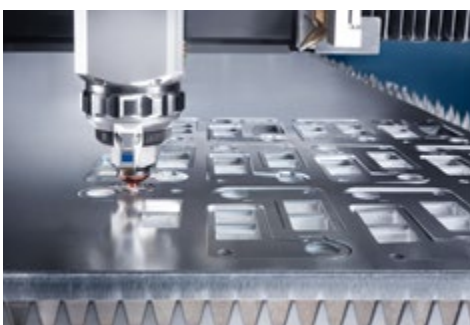
Reduced cutting gas consumption despite increased productivity: with the Highspeed Eco cutting process, you increase the feed rate by up to 70% while maintaining cutting quality.

02

Robust and reliable

thanks to CoolLine and collision protection

With CoolLine your workpiece remains cool – that opens up possibilities for geometries, facilitates closer placement of components, and also ensures reliable cutting of thick mild steel. The collision protection protects your cutting head like an airbag, giving you the ability to manufacture particularly reliably and productively thanks to minimal non-productive time.



With CoolLine, you can even cut tight contours in thick mild steel and thus also increase your process reliability.

03

Top parts quality

with BrightLine fiber

With flexible adjustment of the laser beam and special cutting data, BrightLine fiber converts your solid-state laser into an universal tool. The function enables high-quality cutting results in any sheet thickness. At the same time, you have access to all advantages of thin sheet processing with the solid-state laser, primarily the high speeds.



Smoothest possible cutting edges across the entire sheet thickness range are no problem thanks to BrightLine fiber.

Smart Collision Prevention

“Virtually zero risk of collision: The Smart Collision Prevention function processes your parts in an order that prevents tipping. And, to a great extent, without microjoints. This means that you can automate unloading without needing to keep an eye on the machine.”

Jean-Baptiste Karam, product manager TruLaser



04

Easy to operate and network

due to the touch display and Central Link

The menu navigation on the large touch display works intuitively. Due to the reliable, integrated cutting parameters from TRUMPF, the machine is very easy to operate. With Central Link and automation options, you can create a digital and physical network.



Generously dimensioned and easy to operate – the touch display of the TruLaser Series 1000.



Everything at a glance with the mobile display of the control panel.



LiftMaster Linear Basic with material buffer.

TruLaser Series 2000



01

Compact and flexible set-up

thanks to low space requirements

02

Productive cutting

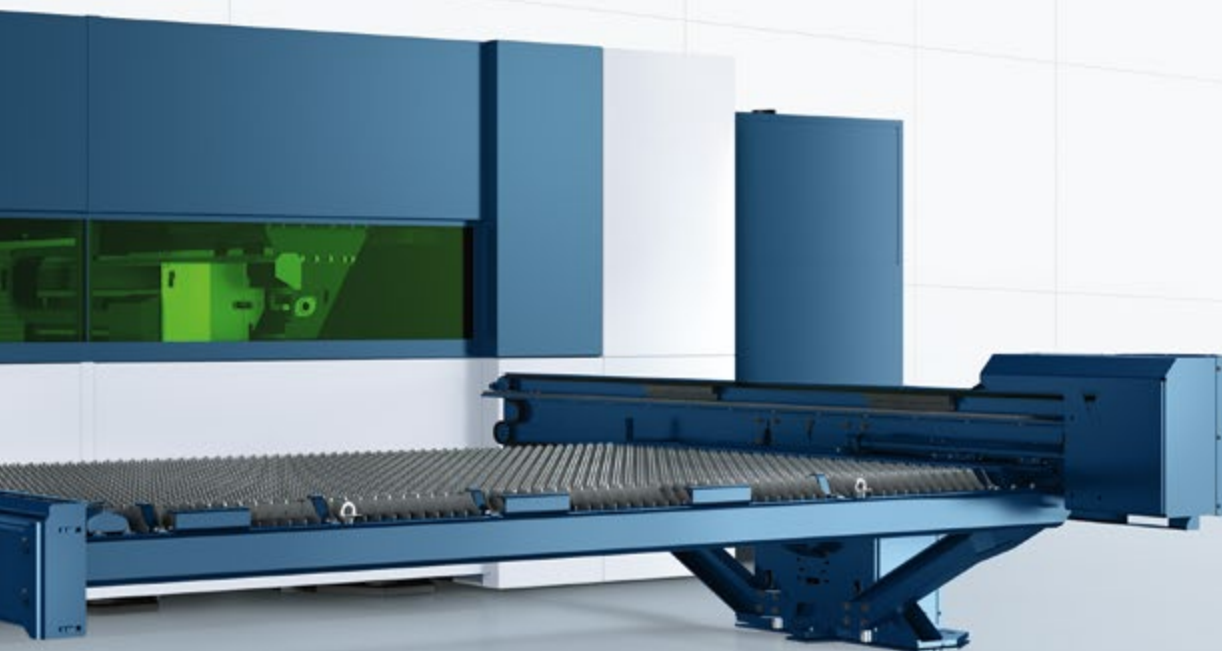
with reduced nonproductive time

03

Intuitive operation

with touch control

The compact TruLaser Series 2000 laser cutting machines combine minimum space requirements and ease of operation with high performance.



04

Top cutting edges

due to BrightLine fiber

05

Productive and high-quality

thanks to intelligent functions

01

Compact and flexible set-up

thanks to low space requirements

If you are looking for a high-power product in a compact format, with its flexible layout and compact design, this laser cutting machine is tailor-made for you: simply select the setup variant that suits your requirements.



The compact design of the TruLaser 2030 fiber machine saves space. Its layout makes it extremely flexible and easily adaptable.

03

Intuitive operation

with touch control

Thanks to the intuitive design of the control panel, you have easy access to all of the functions of your machine: The 19" touch display offers ideal working conditions for the operator. It also provides an excellent overview of the entire working area and all processes – with complete safety.



The touch display makes work pleasant for the operator.

02

Productive cutting

with reduced nonproductive time

The TruLaser Series 2000 combines the advantages of a compact machine with the power of higher machine classes: With the TruDisk disk laser, you can cut highly productively and reliably in the long term. It is also possible to cut nonferrous metals due to its insensitivity to back reflections. Depending on the power you need, choose the TruDisk Laser 2001, 3001 or 4001, with 2, 3 or 4 kW respectively.



Well protected, even in the event of collisions, due to tilted parts, as a result of collision protection.



Replacing cutting nozzles by hand is a thing of the past: with the automatic nozzle changer, your machine can perform this task in a fraction of the time.

04

Top cutting edges

due to BrightLine fiber

You can even create high-quality cutting edges in thick sheet with the BrightLine fiber function. The optimized kerf makes part removal easier and saves time.

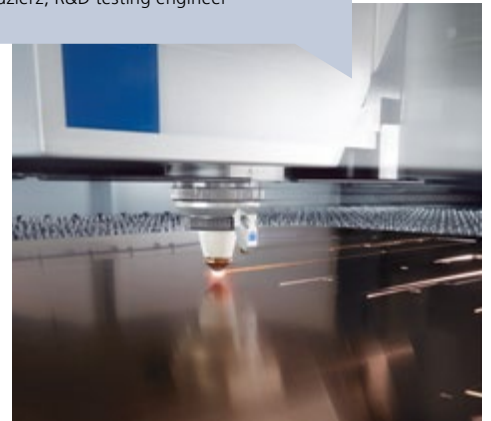


Win over your customers with thick sheet and cutting edges that shine.

Inensitive to back reflections

“With our robust TruDisk laser, we can even cut reflecting materials such as copper reliably.”

Jim Mozdierz, R&D testing engineer



05

Productive and high-quality

thanks to intelligent functions

TRUMPF laser cutting machines boast many other intelligent functions that make your work easier and enable you to produce at faster speeds and in premium quality. The TruLaser 2030 fiber, for example, has the PierceLine function. This ensures that your laser pierces quickly, there are hardly any sparks and the material does not warp.



Save time when producing each pierced hole with the PierceLine function. An additional benefit: premium quality at the piercing spot.

TruLaser Series 3000



01

Limitless flexibility

in terms of format, power and options

02

High-quality results

in all sheet thicknesses

The machines of the TruLaser Series 3000 are true all-rounders in laser cutting, and are extremely flexible and reliable.



03

Go full throttle

while saving cutting gas

04

Versatile automation

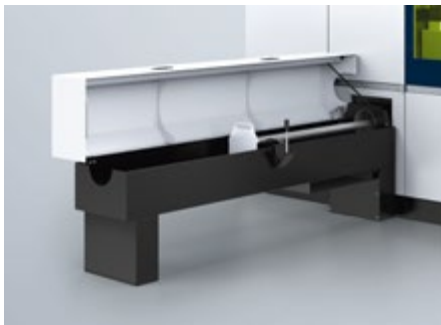
for an uninterrupted process chain

01

Limitless flexibility

in terms of format, power and options

You can completely customize the layout of your machine to suit your needs: You can choose between large format (3 × 1.5 m), max-format (4 × 2 m) or even oversize format (6 × 2.5 m). A transverse setup is also possible. You can likewise choose the laser power: 4, 6, 8, 10 or 12 kW. With the RotoLas option, you can even process pipes directly on your 2D laser machine. When equipped with the multisheet processing function, your 2D laser machine can automatically cut multiple sheets one after the other on a single pallet.



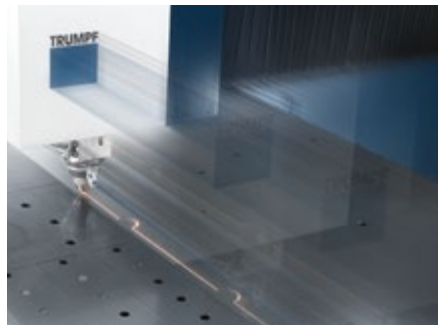
RotoLas enables you to add pipes and profiles to the range of parts you can produce.

03

Go full throttle

while saving cutting gas

Using the Highspeed method, you can carry out nitrogen cutting with the solid-state laser in record time: This method enables you to nearly double your feed rate and sheet throughput when processing medium and thick structural steel and stainless steel sheets. The new nozzle design reduces your cutting gas consumption by up to 40% and even prevents burr formation on contours with sharp edges. And if that's not enough, with Highspeed Eco you reduce cutting gas consumption by up to 70%.



Go full throttle and save gas: With Highspeed, your cutting gas requirements are reduced by up to 40%, while your sheet throughput is increased by up to 100%.

02

High-quality results

in all sheet thicknesses

BrightLine fiber turns your solid-state laser into a universal tool: This function provides high-quality cutting results in all sheet thicknesses, while still enabling you to enjoy all of the benefits of thin sheet processing with a solid-state laser, most notably high cutting speeds.

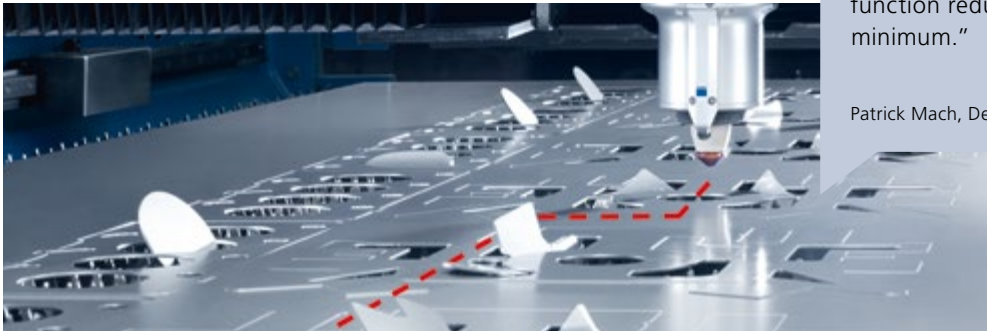
BrightLine makes the cutting pattern of your CO₂ laser perfect: Special cutting data and the BrightLine nozzle significantly improve the quality of your cut edges, particularly when processing thick stainless steel. BrightLine fusion cutting helps you to achieve edges you can see your reflection in – with no need for any reworking.



With BrightLine fiber, you can cut a wide variety of materials and sheet thicknesses with the best possible quality.



BrightLine enables maximum cutting quality. The characteristic feature of this function is the mirror edges.



Smart Collision Prevention

“Parts tipping over? Smart Collision Prevention takes them into account. As a result, this function reduces the risk of collisions to a minimum.”

Patrick Mach, Development, Laser Cutting

04

Versatile automation

for an uninterrupted process chain

With the right automation solution, you can optimize your process chain for specific requirements: Select the required components from a large modular system. From simple loading through to fully automated loading and unloading including part separation and storage connection, everything is now possible with the TruLaser Series 3000.



A strong team: LiftMaster Compact automatically loads and unloads your machine. With the PartMaster, you can manually remove finished parts and grid residue from the transport belt with ease while production is in progress. More information on the topic of automation is available on pages 32 and 33.

TruLaser Series 5000

01

Maximum dynamics

even with complex contours

02

Producing with process reliability

even in fully automated operation

03

Extremely fast

with Highspeed Eco



The high-power products in the TruLaser Series 5000 set new standards for productivity and cost-effectiveness.



TruLaser 5030

05

Semi-autonomous laser cutting

with Active Speed Control

04

Top part quality

thanks to BrightLine fiber

01

Maximum dynamics

even with complex contours

The productive machines in the TruLaser Series 5000 can effortlessly handle both thin and thick sheets. With the TruDisk 12001 and highly dynamic drives, they enable highly productive and reliable manufacturing across the entire range of sheet thicknesses. The machines in this range are designed for maximum capacity and are able to convert these high feed rates into sheet throughput.



With the 12 kW TruDisk 12001 laser, you can process a wide range of materials in the best possible quality with even higher productivity.

02

Producing with process reliability

even in fully automated operation

Ensuring that the nozzle and lens are in the best possible condition is an important prerequisite for achieving reliable processes and high part quality. Smart Nozzle Automation combines intelligent functions that ensure just that – even in fully automatic operation. With the CoolLine function, you can perform delicate cutting operations, even in thick structural steel. This function cools the workpiece during cutting and enables new geometries, more efficient sheet configuration, and reliable processing of thick structural steel.



Smart Nozzle Automation ensures that the nozzle and lens are kept in the best possible condition.

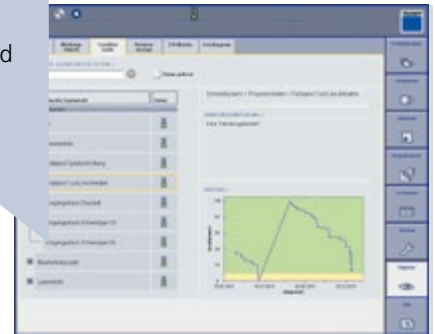


The LiftMaster Compact loads and unloads the TruLaser 5030 fiber particularly quickly. You can find out more about automation on pages 32 and 33.

Condition Guide

“How is your machine doing? You can find out at a glance: the light in the Condition Guide shows the status of important elements that could affect the cutting ability of the machine.”

Andreas Vollmer, TruLaser technology expert from the demonstration center



03

Extremely fast

with Highspeed Eco

The Highspeed Eco cutting process enables you to get even better performance from your laser machine. When carrying out nitrogen cutting, this method enables you to nearly double your feed rate and sheet throughput when processing medium and thick structural steel and stainless steel sheets, without any reduction in quality: Highspeed Eco even prevents burr formation on contours with sharp edges. Due to the patented nozzle design, you save up to 70% of cutting gas.



Highspeed Eco: Up to 100% higher productivity and up to 70% lower cutting gas consumption.

04

Top part quality

thanks to BrightLine fiber

BrightLine fiber combines special optics with flow-optimized BrightLine nozzles and the switchable 2-in-1 cable. The result of this is that you achieve maximum part quality. The smooth cutting edges ensure that your parts do not get caught during removal, saving you a great deal of time.



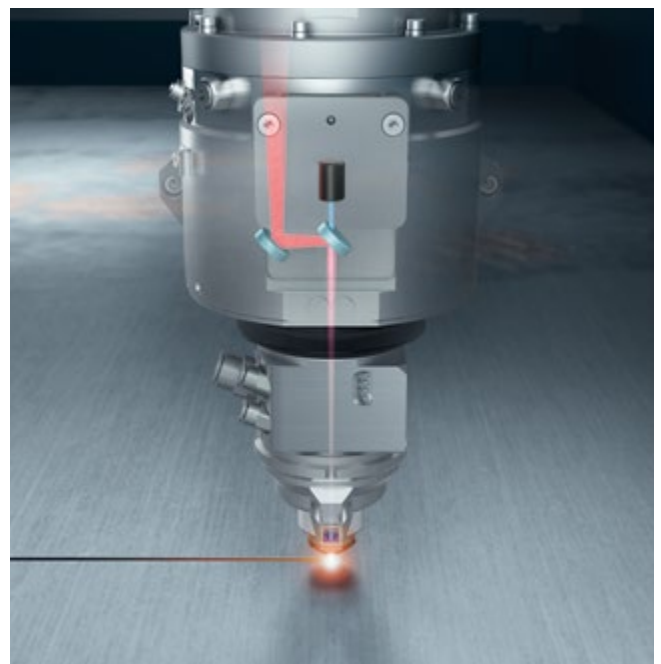
Simple parts removal included: BrightLine fiber.

05

Semi-autonomous laser cutting

with Active Speed Control

Another milestone on the way to the autonomous machine: Active Speed Control. The system sees through the nozzle into the kerf, monitors the cutting process, and regulates the feed rate on its own. Even in the event of thickness variations in a sheet, or if the sheet has been affected by quality fluctuations such as rust or coating remnants, the system ensures the right feed rate for flame and fusion cutting. Cutting disruptions are prevented which reduces the amount of reject parts significantly.



Active Speed Control, the adaptive feed rate regulation, increases process reliability and relieves operators.

Technical data

We have summarized the technical data for the TruLaser machines for you on these pages.

Technical data							
		TruLaser 1030 fiber	TruLaser 1040 fiber	TruLaser 1060 fiber	TruLaser 2030 fiber	TruLaser 3030	TruLaser 3040
Maximum format size that can be processed							
X-axis	mm	3000	4000	6000	3000	3000	4000
Y-axis	mm	1500	2000	2500	1500	1500	2000
Z-axis	mm	116	116	116	75	116	116
Workpiece							
Max. weight (up to 6 kW)	kg	900	1600	3000	900	900	1700
Max. weight (8 kW and higher) ^[1]	kg	–	–	–	–	–	–
Max. speed							
Simultaneous ^[2]	m/min	140	140	140	140	140	140
Accuracy^[1]							
Positioning deviation P _a	mm	0.07	0.07	0.07	0.1	0.05	0.05
Average positioning scatter band P _{s max}	mm	0.03	0.03	0.03	0.03	0.03	0.03
Available lasers		TruDisk 3001/4001/ 6001	TruDisk 3001/4001/ 6001	TruDisk 3001/4001/ 6001	TruDisk 3001/4001	TruFlow 3200/4000/ 5000/6000	TruFlow 3200/4000/ 5000/6000

Laser data						
		TruLaser Series 1000 fiber			TruLaser Series 2000 fiber	
		TruDisk 3001	TruDisk 4001	TruDisk 6001	TruDisk 3001	TruDisk 4001
Max. power	W	3000	4000	6000	3000	4000
Wavelength	µm	1.03	1.03	1.03	1.03	1.03
Max. sheet thickness						
Structural steel	mm	20	25	25/32 ^[4]	20	20/25 ^[6]
Stainless steel	mm	15	20/35 ^[4]	25/35 ^[4]	16	20
Aluminum	mm	15	20	25	12	16/20 ^[6]
Copper	mm	6	8	10	6	8
Brass	mm	6	8	10	6	8
Power consumption						
Average power consumption during production	kW	12	13	15	12	13

^[1]Data relates to a single pallet. When loading several pallets, different values apply. ^[2]The positioning accuracy data relates to the entire working length. The positioning accuracy is recorded in a production plant in accordance with VDI/DGQ 3441. ^[3]With fully adaptive cutting unit. ^[4]With cutting package for thick sheets. ^[5]With fully adaptive cutting unit and cutting package for thick sheets. ^[6]With BrightLine fiber.



TruLaser 3030 fiber	TruLaser 3040 fiber	TruLaser 3060 fiber	TruLaser 5030 fiber	TruLaser 5040 fiber	TruLaser 5060 fiber
3000	4000	6000	3000	4000	6000
1500	2000	2500	1500	2000	2000
116	116	116	116	116	116
1100	2000	3000	1100	2000	3000
1800	3300	4900	1800	3300	4900
170	170	170	283	283	283
0.05	0.05	0.05	0.05	0.05	0.05
0.03	0.03	0.03	0.03	0.03	0.03
TruDisk 4001/6001/8001/ 10001/12001	TruDisk 4001/6001/8001/ 10001/12001	TruDisk 4001/6001/8001/ 10001/12001	TruDisk 6001/8001/10001/ 12001	TruDisk 6001/8001/10001/ 12001	TruDisk 6001/8001/10001/ 12001

TruLaser Series 3000				TruLaser Series 3000 fiber	TruLaser Series 3000/5000 fiber			
TruFlow 3200	TruFlow 4000	TruFlow 5000	TruFlow 6000	TruDisk 4001	TruDisk 6001	TruDisk 8001	TruDisk 10001	TruDisk 12001
3200	4000	5000	6000	4000	6000	8000	10000	12000
10.6	10.6	10.6	10.6	1.03	1.03	1.03	1.03	1.03
20	20	25	25	25	25/32 ^[4]	25/32 ^[4]	30/32 ^[4]	30/35 ^[4] /50 ^[5]
12.7	15	20	25	20/35 ^[4]	25/35 ^[4]	30/40 ^[11] /35 ^[4]	40	40/50 ^[4]
8	10	12.7	16	20	25	25	30	30/40 ^[5]
-	-	-	-	8	10	12	12/16 ^[3]	12/16 ^[3]
-	-	-	-	8	10	10	12.7	12.7
29	31	35	38	13	15	17	22	25

Subject to alteration. Only specifications in our offer and order confirmation are binding.

Intelligent functions

Which intelligent functions are available to you with which machine series?
This table provides you with a simple overview.

Laserart	 TruLaser Series 1000 Solid-state	 TruLaser Series 2000 Solid-state
Active Speed Control		
AdjustLine	■	
BrightLine		
BrightLine fiber	■	■
Cutting Guide	■	
Condition Guide	■	
CoolLine	■	
DetectLine	■	
Dot Matrix Code	■	
Drop&Cut	■	
Dynamic Focus Control		
EdgeLine Bevel		
One-cutting-head strategy	■	■
Highspeed	■	
Highspeed Eco	■	
Collision protection	■	■
LensLine		
Online condition checking, protective glass	■	
PierceLine	■	■
Smart Collision Prevention	■	
Smart Nozzle Automation		



TruLaser Series 3000

TruLaser Series 5000

TruLaser Series 3000		TruLaser Series 5000
CO ₂	Solid-state	Solid-state
		■
■	■	■
■		
	■	■
■	■	■
■	■	■
■	■	■
■	■	■
■	■	■
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Automation is worth it

Automated, your TruLaser cutting machine works even more productively. Select from a large assembly kit of modular automation components. This provides you with a solution tailored precisely to your needs, ranging from semiautomatic loading through to a fully automated machine with a storage connection.



Automation functions

Loading

Loading and unloading

LoadMaster

LiftMaster Compact

LiftMaster Linear Basic



Combinable machines

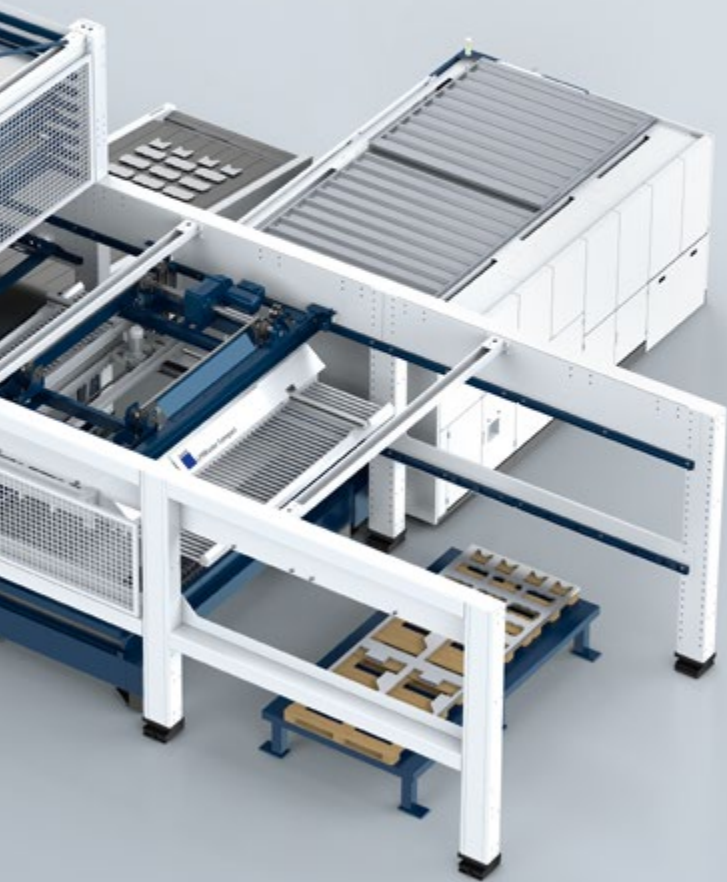
TruLaser Series 1000

TruLaser Series 2000

TruLaser Series 3000

TruLaser Series 5000











Regardless of the extent to which you wish to automate your processes: you can find the right solution for your production processes on our website and in the automation catalog: www.trumpf.info/zqi2wh

Loading and unloading/part sorting

Auxiliary pallet operation

Storage system operation

Loading and unloading/part sorting			Auxiliary pallet operation		Storage system operation
LiftMaster	LiftMaster Linear	LiftMaster Store LiftMaster Store Linear	SortMaster	Material buffer	TruStore
					
■	■	■	■	■	■
■	■	■	■	■	■
■	■	■	■	■	■

TruLaser Center 7030

The first full-service laser machine. Takes care of everything – from drawings to sorted parts.



All laser cutting processes come together in the TruLaser Center which greatly reduces your throughput time and part costs. Reworking is no longer needed and you have excellent quality straightaway, without microjoints, without risk of collisions. One major added benefit is the automatic sorting function: Idle state due to manual sorting is now a thing of the past. The machine produces finished parts – so you can increase your number of orders without additional personnel.

Get a dynamic start

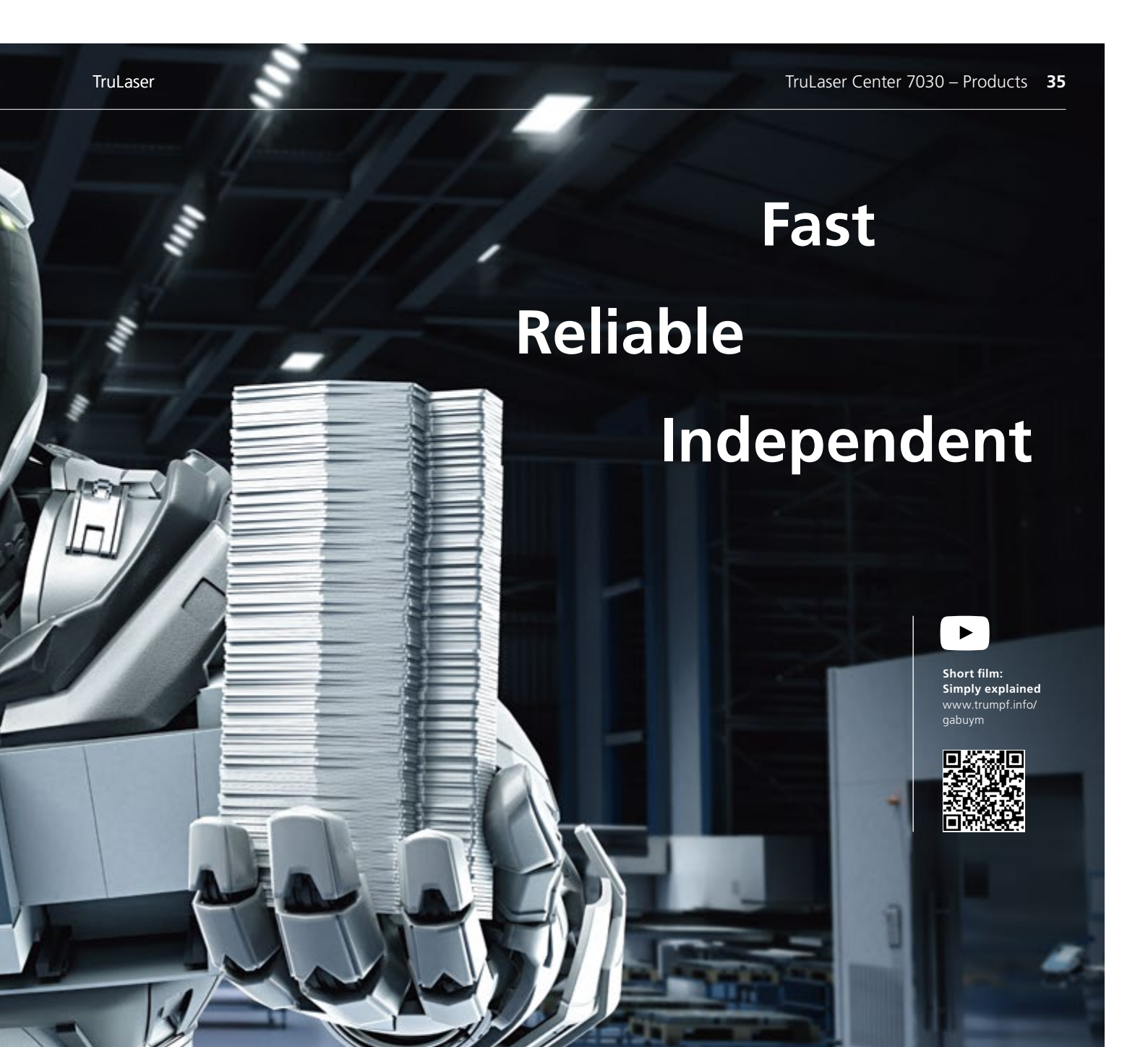
With the TruLaser Center 7030, the cutting head and sheet metal move. Thanks to an additional axis at the cutting head and overlapping axis motion, it is extremely powerful and cuts very dynamically with up to 12 kW of perfectly utilized laser power.

Reliable automation

The machine ensures reliable parts handling thanks to integrated automation. Tipping and tilting of workpieces and using microjoints are now things of the past.

Production around the clock

When connected to a storage system, the fully automatic machine supplies itself with material and stores finished parts, which maximizes utilization. Around the clock, the machine relieves you of tiresome and monotonous work steps and thus relieves the strain on employees.



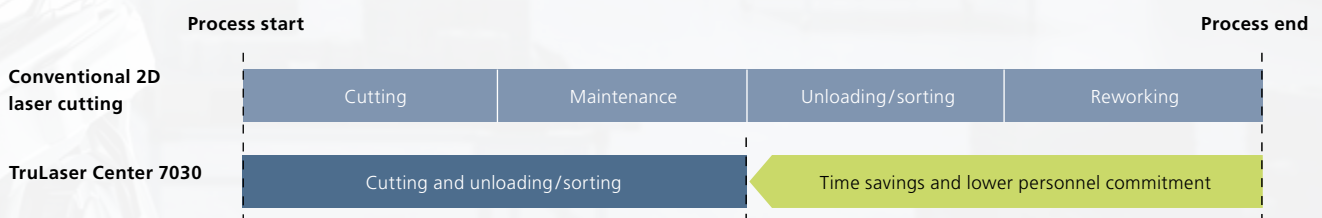
Fast Reliable Independent



Short film:
Simply explained
www.trumpf.info/gabuym



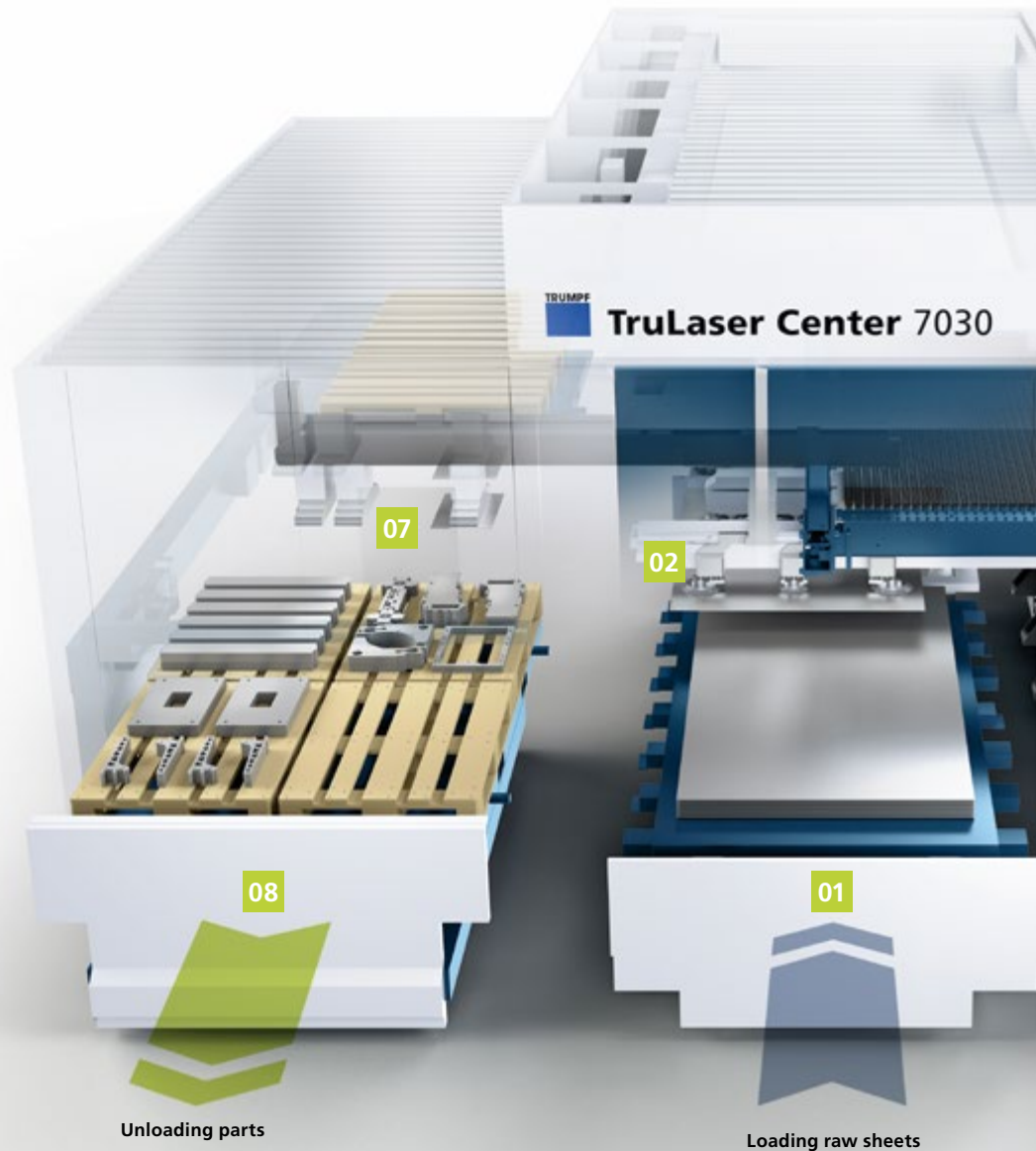
A comparison of the process steps



> The result: the TruLaser Center 7030 takes care of all processes involving laser cutting safely and reliably – reducing your processing costs considerably.

Depending on the country, the available product range and data may differ from the details listed here. The technology, equipment, price and available accessories are subject to change. Please contact your local contact person to find out whether this product is available in your country.

Working in perfect harmony for your success



Unloading parts

Loading raw sheets

Programming an order

At the press of a button, the TruTops Boost programming system performs a fully automatic calculation for a comprehensive proposal for the cutting, removal, sorting, and depositing of your parts.

Loading raw sheets

The loading cart (01) can be loaded parallel to production. The LoadMaster Center (02) places the raw sheet on the brush table in the clamping unit. High-performance peeling techniques separate the sheet reliably from the stack.

Cutting parts

The clamping unit moves the sheet in the Y direction, the cutting unit (03) processes it in the X direction and also in the Y direction using a highly dynamic additional axis. The SmartGate supports the cutting process.

Anyone who wants to manufacture using laser cutting in an economical way, needs a machine in which all steps are interlinked. This is where the TruLaser Center 7030 scores with the close interaction between integrated intelligence and new automation solutions.



Unloading scrap skeletons



See for yourself:
This is how the TruLaser Center 7030 works:
www.trumpf.info/xvnp0u



Removing parts and scrap

The intelligent SmartGate **(04)** removes slugs, scrap, and small parts reliably. The sorting flap separates finished cut parts from scrap. Finished parts are sorted into eight containers **(05)**. Scrap and slugs fall into a slag cart **(06)**.

Unloading parts onto stacks

The SmartLift uses its pins to push the parts out of the scrap skeleton. The finely structured suction plates of the SortMaster Speed **(07)** remove the cut parts, and sort and stack them on the parts deposit. The suction plates and pins prevent any tilting of the parts.

Unloading finished parts and scrap skeletons

The parts **(08)** are removed from the machine, sorted, and stacked parallel to production. The clamping unit unloads the scrap skeleton onto the sheet skeleton cart **(09)**. A forklift truck can empty this unrushed while the machine is operating.

TruConnect. Your Smart Factory



80%

Indirect processes make up 80% of your production time – this represents the greatest potential for savings.



Discover the potential networked production could unlock for you with these two example scenarios:
www.trumpf.com/s/smart-factory





Networking brings considerable freedom: You see more, know more, and are able to use your production facility to its full potential. With TruConnect, TRUMPF's synonym for Industry 4.0, you can develop your own Smart Factory step by step. TRUMPF solutions take you along the way to networked production, and help you to make your overall process more transparent, more flexible and especially more profitable.

For companies of all sizes: from simple production solutions to an entirely interconnected facility

- **Getting started** with machines that are fundamentally equipped for networks.
- **Gradually changing** with automated machines or autonomous processing cells embedded in a production solution.
- **Networking everything** with a continuous production solution going from the incoming order to dispatch.

Smart functions and Industry 4.0

With the MobileControl app you can operate and monitor your machine easily and flexibly: It transfers the standard control panel interface to the touchscreen of your tablet. Thanks to the Central Link interface, your TruLaser machine is ready for Industry 4.0.



Lines marked with Dot Matrix Code simplify your processes.



You can monitor and control your machine in the machine environment with the MobileControl app.



You can find more information about networked production here:
www.trumpf.com/smart-factory

TruServices. Your Partner in Performance

For a successful future, choose services that will help you progress in the long term: Whether you want to create the best conditions for successful manufacturing, make the most of your TRUMPF laser systems, or have the flexibility to adapt them to changing requirements – together we will find opportunities to maximize your value creation long-term. We will provide you with all-round support as a reliable partner with solutions and service packages for your needs – enabling you to manufacture economically and at a constantly high level.



Training – reach your full potential with professional development

EMPOWER: If you want to create the best conditions for successful production, we will support you in this.

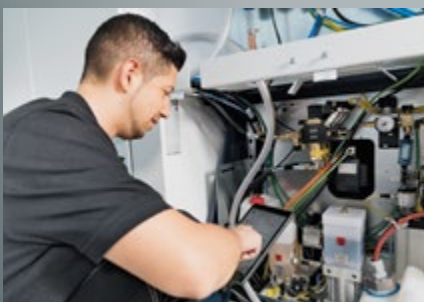
If you are well trained, you can fully utilize the potential of your lasers, laser systems, machines and software, and secure key competitive advantages. In the laser cutting technology course, for example, you learn how to obtain the best possible cutting quality and determine piercing parameters for special materials.



TRUMPF protective glass – for a safe cutting process

SUPPORT: If flexibility and availability of equipment in day-to-day operations are essential to you, we can help.

Obtain the best cutting and welding results with original protective glass from TRUMPF. The special coating and especially pure raw materials allow for a lower degree of reflection, and prevent thermal changes to the glass. So you can provide optimal protection for the beam path of your machine.



Service agreements – get just the service you need

IMPROVE: If you want to gradually focus your production on maximum value creation, we can help you achieve your goal.

Where system maintenance and servicing are concerned, you will benefit from expert support of the highest quality. Ensure constant maximum machine availability, consistently high production quality, and low operating costs with service agreements from TRUMPF.



Financing

Training

Technical Service

Genuine parts

Tools

Service agreements

Design and programming software

Process optimization

Monitoring & analysis

Product enhancements

Pre-owned machines



You can learn more about our complete and comprehensive package of useful services here: www.trumpf.com/s/services



Your suitable total package

From the machine to the optical system through to the technology data: At TRUMPF, we develop our products ourselves. Our sales representatives are product experts with many years of experience. Our developers have thought through every function deeply and in detail. This makes TRUMPF laser cutting machines the basis of your success.

The result



You receive a coordinated production system that is always available.

TruServices

With comprehensive services and a global service network, we are always there for you.

Software

You optimize your production processes with software solutions from TRUMPF. The TruTops Boost programming system is perfectly adapted to your TruLaser machine.

Automation

There is a large range of modular automation components available for your TruLaser machine.

Process expertise

Every machine includes up-to-date technology data for laser cutting checked by TRUMPF – this enables you to get started easily.

Optical system

We develop lasers, fiber optic laser cables, and cutting heads for each specific set of requirements and for every series. The benefit to you: you can make the best possible use of the power of your tool.

Machine

All TruLaser machines are developed and produced at TRUMPF – they provide you with a robust solution for your day-to-day industrial operations.

The passion that drives us

From production and manufacturing technology to laser systems and material processing, we develop highly innovative products and services to meet your needs. Our solutions are superbly reliable and ready for industrial use. We do everything we can to give you a powerful competitive edge, drawing on our expertise, experience, and a genuine passion for what we do.



Visit our YouTube channel:
www.youtube.com/TRUMPFtube



Lasers for manufacturing technology

Whether macro, micro or nano: We have the right laser and the right technology for any industrial application, allowing you to manufacture in an innovative yet cost-efficient manner. As well as the technology, we will also support you with system solutions, knowledge of applications, and advice.



Power-supply systems for high-tech processes

From semiconductor production to manufacturing solar cells: Our high- and medium-frequency generators give electricity for induction heating, plasma and laser excitation a defined form based on frequency and demand – highly reliable and for repeat accuracy.



Machine tools for flexible sheet metal and pipe work

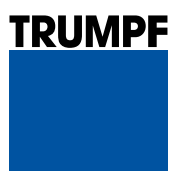
Laser cutting, punching, bending, laser welding: For all processes in flexible sheet production, we offer you custom-fit machines and automation solutions, including consultancy, software, and services – enabling you to produce your products reliably and in high quality.

Industry 4.0

The TruConnect range of solutions connects man and machine through information. It covers all steps of the production process – from offer to shipping your parts.



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



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