TruLaser

Cost-effective cutting through thick and thin
There is a reason for the wide range of laser cutting machines available from TRUMPF: You should always be able to find the best solution for your application. In doing so, there are various considerations that affect your decision. What are your requirements regarding materials and quality? How high is your average capacity? What do you need to make your manufacturing as cost-effective as possible?

When developing our laser machines, we work on the basis of your requirements. This means more than simply concentrating on cutting time alone. With intelligent functions, we help you to get the best possible performance from your system. No matter which TRUMPF laser machine you choose – the bottom line is that what you will receive is a harmonious complete package: a machine, a laser, automation solutions, software – and the peace of mind that comes with a large, international service network.
Choose the laser that best suits your application.

**CO₂ or solid-state?**
4 – 7

With intelligent functions from TRUMPF, you can shorten your processes and make the best possible use of your machine.

**Go all out**
8 – 9

Well-positioned all-round – with the right laser machine.

**Our machines in detail**
10 – 31

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

**Technical data**
32 – 35

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

**Automation and TruLaser Center 7030**
36 – 41

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

**Take control**
42 – 43

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

**Everything from a single source**
44 – 47
CO₂ or solid-state?

The question of which type of laser is best is widely discussed. There is no right or wrong answer to this question. The only deciding factor determining which laser machine is right for you is your specific application. Which materials and sheet thicknesses do you machine? What are the quality requirements of your customers? With TRUMPF, you can obtain precisely the right laser for your requirements.

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.
Solid-state lasers: Highly productive all-rounders

TruDisk solid-state lasers enable you to work quickly, particularly in thin sheet metal. This is possible because they emit a beam with a wavelength of approximately 1.03 µm, which is absorbed significantly more intensely than the wavelength of CO₂ lasers: these lasers transfer more energy to the sheet metal, enabling cutting to be carried out more quickly.

Areas of application

Unlike CO₂ lasers, solid-state lasers are also suitable for cutting copper or brass. When integrated into a laser network, your TruDisk can supply multiple machines. This increases the capacity of your laser and enables you to economically expand your machinery.
Cut edges: Crucial 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**

<table>
<thead>
<tr>
<th>Material</th>
<th>CO₂ laser</th>
<th>Solid-state laser</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 mm</td>
<td>Fusion cutting with BrightLine</td>
<td>Fusion cutting with BrightLine fiber</td>
</tr>
<tr>
<td>8 mm</td>
<td>Fusion cutting with BrightLine</td>
<td>Fusion cutting with BrightLine fiber</td>
</tr>
<tr>
<td>3 mm</td>
<td>Fusion cutting</td>
<td>Fusion cutting</td>
</tr>
<tr>
<td>2.5 mm</td>
<td>Fusion cutting</td>
<td></td>
</tr>
</tbody>
</table>

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

- **25 mm**
  - Flame cutting with BrightLine
  - Flame cutting

- **12 mm**
  - Flame cutting
  - Flame cutting

- **6 mm**
  - Fusion cutting
  - Fusion cutting

- **3 mm**
  - Flame cutting
  - Flame cutting

**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.
Go all out

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.

Producing

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.

Is the focus of my laser set correctly?
Smart Beam Control checks this for you. If necessary, it adjusts the position of the focus. This saves time and ensures that the process is reliable. A further advantage of this system is that it enables remote diagnosis of the cutting system.

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 micro-joints.

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.

**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.

**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.

**Can I cut inferior material?**
AdjustLine automatically adjusts the cutting parameters to suit this situation. This enables you to cut even poor-quality material reliably, reducing reject parts and material costs.

**Warping at the entry point?**
No, thanks! With PierceLine you can achieve precise entry points with minimal warping and reduce the time required to pierce the material to the absolute minimum. This increases the quality of the parts, reduces strain on your machine and lowers the time per part.

To find out which intelligent functions are available with which machine series, have a look at page 34 and 35.
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. For this reason, with TRUMPF you can get the right solution for your needs: coherent, unbeatably powerful, and built with exceptional passion.
TruLaser Series 2000

01 Compact setup
thanks to low space requirements

02 Simple automation
for loading and unloading

03 Productive cutting
thanks to the TruDisk disk laser
The compact TruLaser Series 2000 laser cutting machines combine minimum space requirements and ease of operation with high performance.

Intuitive operation
with touch control

Cost-effective growth
with the LaserNetwork
**01 Compact setup**
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.

![Compact setup](image1)

**02 Simple automation**
for loading and unloading

If automated processing is appealing for your manufacturing processes, the LiftMaster Shuttle automatically loads and unloads your TruLaser 2030 fiber machine. Thanks to the wide variety of setup variants, you can adjust the system to suit not only the available space, but also the preferred material flow in your manufacturing.

![Simple automation](image2)

**03 Productive cutting**
thanks to the TruDisk disk laser

The TruLaser Series 2000 combines the benefits of a compact machine with the performance of higher machine classes: With the TruDisk disk laser, you can enjoy the benefits of highly productive and reliable cutting over the long term. Depending on how much power you need, select the TruDisk laser 2001, 3001 or 4001, with 2, 3 or 4 kW respectively.

![Productive cutting](image3)

With its wide variety of setup variants, the LiftMaster Shuttle is an ideal addition for your automated manufacturing. More information on the topic of automation is available on pages 36 and 37.
04

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.

Collision protection

“Even if a collision occurs, your cutting head will remain undamaged, because it deflects upon contact. In the event of minor collisions, the cutting head moves back to the starting position automatically – this provides you with exceptional reliability and safety for your production processes.”

Martin Klevenhagen, TruLaser Product Manager

05

Cost-effective growth
with the laser network

If you wish, your TruLaser 2030 fiber can open the door to other manufacturing processes for you. For example, it can make it much easier to get started with laser welding, as you can use your TruDisk as a beam source for other machines in a laser network. This feature even makes it possible to switch between applications every hour or every shift.

Your TruDisk can supply multiple machines in the laser network if required. This enables you to get started with laser welding, for example.
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.

**Go full throttle** while saving cutting gas

**Versatile automation** for an uninterrupted process chain
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 x 1.5 m), max-format (4 x 2 m) or even oversize format (6 x 2.5 m). A transverse setup is also possible. You can likewise choose the laser power: 3 kW, 4 kW or 6 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.

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%.

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.
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.

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
TruLaser
Series 5000

01
Maximum dynamics
even with complex contours

02
Producing with process reliability
even with 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.

**Top part quality**
thanks to BrightLine fiber

**Unrivaled economical**
in terms of power and gas consumption
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 8001 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.

Producing with process reliability

even with 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.
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.

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 high-quality cut edges ensure that your parts do not get caught during removal, saving you a great deal of time.

Unrivaled economical
in terms of power and gas consumption

With an efficiency rate of over 30%, the energy consumption of a TruDisk solid-state laser is exceptional. The Highspeed Eco function helps you to achieve cutting gas savings of up to 70% – thanks to a patented nozzle design.

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
TruLaser Series 7000

01
Twice as productive
with a second cutting head

02
As dynamic as possible
thanks to linear drives on all axes
The machines in the TruLaser Series 7000 are designed for top performance in terms of productivity and precision.

**Uncompromising precision**

thanks to high-resolution measuring systems in all axes
**Twice as productive**

with a second cutting head

Do you want to use a single cutting head or two cutting heads at once for your production? You decide! Simultaneous cutting with two cutting heads enables you to increase your productivity by up to 100%. Each cutting head is supplied by a separate TruFlow laser. Depending on your requirements, a design with a single cutting head is of course also possible.

**As dynamic as possible**

thanks to linear drives on all axes

Maintenance-free linear drives on all three axes make your machine highly dynamic and yet extremely precise. In specific terms, this results in positioning deviations of just 0.03 mm and an average positioning scatter band of just 0.02 mm, providing you with maximum contour accuracy. With this feature, your machine provides the same precision as the day it was first used, even after a long operating life – thanks to the combination of the drive, the measuring system, and exceptionally sturdy engineering.
Uncompromising precision
thanks to high-resolution measuring systems in all axes

Get ready to push the limits of contour precision: High-resolution direct measuring systems in all axes and precise laser control ensure maximum precision. As a result, these machines are perfectly suited for cutting delicate parts such as electrical sheets.

In combination with the LiftMaster, your TruLaser 7040 can also automatically process sheets up to 4 x 2.5 m. You can find out more about automation on pages 36 and 37.
TruLaser Series 8000

01

Cut oversize formats
up to 16 m in length
The flexible laser machines in the TruLaser Series 8000 guarantee you maximum cost-effectiveness and excellent part quality in processing oversize formats.

**02**
No misalignment when cutting
with sheet cycling

**03**
Double your productivity
with two cutting heads

**04**
Variable pallet concept
adjusts to meet your needs
Cut oversize formats
up to 16 m in length

Break through into new dimensions: With the TruLaser Series 8000 you can process sheets up to 16 m x 2.5 m in size. These machines also offer all the benefits of a machine for standard sheets, particularly in terms of flexibility. For sheets of up to 16 m in length, you can use the unique additional pallet concept – which cycles the sheet through the machine in multiple steps.

No misalignment when cutting
with sheet cycling

With the additional pallet concept, you can cut sheets up to 16 m in length: Your sheet is cycled through the machine in multiple steps. Intelligent processes ensure that this concept provides the best possible part quality and a cutting result with no misalignment. At the same time, your machine works with the same flexibility and productivity of a machine for standard formats.

Double your productivity
with two cutting heads

You can achieve peak productivity with two cutting heads working simultaneously – productivity increases of up to 100% are possible. With this concept, each cutting head of your CO₂ machine is supplied by a separate TruFlow laser and can be switched on and off independently.
Variable pallet concept
adjusts to meet your needs

Various options are available for the pallet concept, tailored to your proportion of oversize formats: Select the oversize format additional pallet for high productivity in standard formats and maximum flexibility for oversize format sheets up to 16 m in length. Or select the oversize format pallet changer, which provides you with maximum productivity with oversize formats up to 12 m in length thanks to loading and unloading while production is in progress.
Technical data


### Technical data

<table>
<thead>
<tr>
<th>Maximum format size that can be processed</th>
<th>TruLaser 2030 fiber</th>
<th>TruLaser 3030</th>
<th>TruLaser 3040</th>
<th>TruLaser 3030 Lean Edition</th>
<th>TruLaser 3030 fiber</th>
<th>TruLaser 3040 fiber</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-axis (mm)</td>
<td>3000</td>
<td>3000</td>
<td>4000</td>
<td>3000</td>
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<td>Y-axis (mm)</td>
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<td>Z-axis (mm)</td>
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#### Workpiece

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<tr>
<th>Max. weight</th>
<th>kg</th>
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<tr>
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<td>900</td>
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<td>900</td>
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<td>1700</td>
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#### Max. speed

<table>
<thead>
<tr>
<th>Simultaneous</th>
<th>m/min</th>
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#### Accuracy

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<th>Positioning deviation P&lt;sub&gt;a&lt;/sub&gt;</th>
<th>mm</th>
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<table>
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<th>Average positioning scatter band P&lt;sub&gt;max&lt;/sub&gt;</th>
<th>mm</th>
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<table>
<thead>
<tr>
<th>Cycling repeat accuracy</th>
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<table>
<thead>
<tr>
<th>Positioning accuracy</th>
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<table>
<thead>
<tr>
<th>Available lasers</th>
<th>TruDisk 2001 / 3001 / 4001</th>
<th>TruFlow 3200 / 4000 / 5000 / 6000</th>
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<table>
<thead>
<tr>
<th>Laser data</th>
<th>TruLaser Series 2030 fiber</th>
<th>TruLaser Series 3000 / 5000</th>
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<tbody>
<tr>
<td></td>
<td>TruDisk 2001</td>
<td>TruDisk 3001</td>
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<tr>
<td>Max. power (W)</td>
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<tr>
<td>Wavelength (µm)</td>
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</table>

#### Max. sheet thickness

| Structural steel | mm | 15 | 20 | 20 / 25<sup>1)</sup> | 20 | 20 | 25 | 25 |
| Stainless steel  | mm | 8  | 15 | 20                      | 12 | 15 | 20 | 25 |
| Aluminum         | mm | 6  | 12 | 15 / 20<sup>2)</sup>    | 8  | 10 | 12 | 15 |
| Copper           | mm | 3  | 6  | 8                        | –  | –  | –  | –  |
| Brass            | mm | 3  | 6  | 8                        | –  | –  | –  | –  |

#### Power consumption

| Average power consumption during production (kW) | 12 | 13 | 14 | 29 | 31 | 35 | 38 |

<sup>1)</sup> 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.

<sup>2)</sup> Data relates to a single pallet. The maximum weight for two pallets deviates from the data given here.

<sup>3)</sup> With BrightLine fiber.

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

<table>
<thead>
<tr>
<th>TruLaser 3060 fiber</th>
<th>TruLaser 5030</th>
<th>TruLaser 5040</th>
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<td>TruDisk 3001 / 4001 / 6001</td>
<td>TruDisk 3001 / 4001 / 6001</td>
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<table>
<thead>
<tr>
<th>TruLaser Series 3000 / 5000 fiber</th>
<th>TruLaser Series 7000</th>
<th>TruLaser Series 8000</th>
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</table>
## Intelligent functions

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

<table>
<thead>
<tr>
<th>Laser</th>
<th>TruLaser Series 2000</th>
<th>TruLaser Series 3000</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Solid-state</td>
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<tr>
<td>AdjustLine</td>
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<tr>
<td>BrightLine</td>
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<tr>
<td>BrightLine fiber</td>
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<tr>
<td>Condition Guide</td>
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<td>DetectLine</td>
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<td>Dot Matrix Code</td>
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<td>Drop &amp; Cut</td>
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<td>Single cutting head strategy</td>
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<tr>
<td>Highspeed</td>
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<tr>
<td>Highspeed Eco</td>
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<td>Collision protection</td>
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<tr>
<td>LensLine</td>
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<tr>
<td>Online protective gas status check</td>
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<tr>
<td>PierceLine</td>
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<tr>
<td>Smart Beam Control</td>
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<td>Smart Collision Prevention</td>
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<td>Smart Nozzle Automation</td>
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<td>TruLaser Series 7000</td>
<td>TruLaser Series 8000</td>
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<td>CO₂</td>
<td>Solid-state</td>
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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.

<table>
<thead>
<tr>
<th>Automation functions</th>
<th>Loading</th>
<th>Loading and unloading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LoadMaster</td>
<td>LiftMaster Shuttle</td>
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<tr>
<td>Combinable machines</td>
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<tr>
<td>TruLaser Series 2000</td>
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<tr>
<td>TruLaser Series 3000</td>
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<tr>
<td>TruLaser Series 8000</td>
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</tbody>
</table>
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
TruLaser
Center 7030

The first fully automatic laser. Takes care of everything – from the drawing to the sorted part.

Thinking outside the box
We have fundamentally questioned the entire process of laser processing. The result? A groundbreaking machine concept combining productivity and process reliability.

Hitting the ground running
Unlike conventional 2D laser machines, the TruLaser Center 7030 moves the sheet as well as the cutting head. With the additional axis on the cutting head, this machine achieves peak values in terms of cutting dynamics. The result of this is overlapping axis movements that make your machine extremely powerful. Equipped with a laser power of 6000 W, this enables you to cut through sheets with a thickness of up to 12.7 mm in a highly dynamic manner.

Intelligent automation
This fully automatic machine guarantees reliable part handling thanks to in-built intelligence with automation solutions such as SmartGate, SmartLift and SortMaster Speed. This eliminates the possibility of workpieces tipping over or tilting and the need to use microjoints.

Producing around the clock
Connect the TruLaser Center 7030 to your store and profit from a higher machine utilization rate because of the optimized material flow and lower material accessing time.
Quick
Reliable
Intelligent
Independent

Short film: Simple explanation
Waiting until parts and grid residue are sorted out of the pallet? Downtimes due to parts tipping over? Reworking?
With this fully automatic machine, these typical challenges are a thing of the past. www.trumpf.info/bsxpf

Conventional 2D laser cutting
TruLaser Center 7030

| 0% | Cutting | Maintenance | Unloading/sorting | Reworking |
| 100% | Cutting and unloading/sorting |

The result? Processing costs are reduced by up to 30%¹

¹ In comparison to an automated solid-state laser machine; two-shift operation; from blank sheets to sorted panels, ready for further processing.

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. You can find more information in the brochure “TruLaser Center 7030: The first fully automatic laser“.

Intelligent
This fully automated complete concept reduces your processing costs by up to 30% and opens up unprecedented opportunities for you.

Make short work of your laser production processes

Programming a job
At the press of a button, the TruTops Boost programming system calculates a comprehensive suggestion for cutting, removal, sorting and storing your parts, fully automatically.

Loading blank sheets
The loading trolley (01) can be loaded with blank sheets while production is in progress. The LoadMaster Center (02) places blank sheets on the brush bed into the clamping unit. Powerful peeling technologies reliably separate sheets 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 processes it highly dynamically in the Y-direction via an additional axis. The SmartGate provides assistance for cutting.
The TruLaser Center 7030 integrates for the first time ever all of the laser cutting processes in one single machine. Your advantage: The throughput times and the processing costs go down drastically. You get the maximum profitability out of your laser machining process.

**Discharging parts and scrap**
The intelligent SmartGate (04) reliably discharges slugs, scrap and small parts. The sorting diverter separates good parts from scrap. Good parts are sorted into up to eight containers (05). Scrap and slugs fall into a slag trolley (06).

**Unloading stacked parts**
With its pins, the SmartLift pushes parts out of the grid residue. The delicately structured suction plates of the SortMaster Speed (07) take in finished cut parts, sort them and stack them on the parts tray. Suction plates and pins prevent parts tilting.

**Unloading good parts and grid residue**
The sorted and stacked parts (08) are unloaded from the machine while production is in progress. The clamping unit unloads the grid residue onto the grid residue trolley (09). This can be emptied conveniently while operation is in progress using a forklift truck.

See for yourself:
How the TruLaser Center 7030 functions.
www.trumpf.info/bcq8zp

You can find further information and technical data here:
www.trumpf.com/s/xoltpe
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. The pragmatic 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.
TruServices.
Your Partner in Performance

To secure your future success, capitalize on services that will move you forward not just short-term but in the long run too: 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.

**Comprehensive training program**
**EMPOWER:** When you would like to create optimal conditions for production success: We will help you in that. Take advantage of our comprehensive training program, to deepen your knowledge and ensure competitive advantages. In the laser cutting technology course, you learn, for example, how to achieve the best cutting quality possible and how to determine the piercing parameters for special materials.

**Water reconditioning with the Easy Filter**
**SUPPORT:** If flexibility and system availability are essential to your operation: We are here for you. Save time and money. With the Easy Filter, you can do one cooling circuit service a year quickly and easily without ever needing to change the cooling water.

**The Highspeed Eco cutting system**
**IMPROVE:** If you want to gradually focus your manufacturing on maximum value creation: We will work together to reach your goal. With Highspeed Eco, for instance, you can double your throughput for laser cutting – the surface-mounted nozzle also reduces cutting gas consumption by up to 70%.
You can learn more about our complete and comprehensive package of useful services here: www.trumpf.com/services
Perfect interaction for your success

From the machine to the optical system through to the technology data: Intelligent machine functions are based on the interaction between different components. This is why we develop and manufacture them ourselves. The result? Consistent solutions down to the details – the ideal basis for your success.

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.

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)