



TRUMPF



Laser systems

The answer
to your
manufacturing
needs

The perfect solution

Thousands of satisfied customers place their trust in machinery made by the world's leading technologist in laser material processing. Laser systems from TRUMPF give you the security of knowing you have chosen a highly flexible and extremely productive solution for your processing needs. We will support you every step of the way, from developing your application to choosing the right technology, components, and software – and we even offer comprehensive after-sales services. Together we can boost your productivity.

Your industry partner: We want to share our expertise with you.

**In good hands no matter
what industry**
4–7

In our Laser Application Centers, we work together with you to develop your process right from the very beginning.

**We can help you
rise to the challenge**
8–9

TRUMPF delivers sophisticated complete solutions that have proven their mettle.

**Everything from a single
source**
10–11

Diverse solutions for varied tasks: Together we will find the right one for your production line.

**Your application,
our technologies**
12–13

Best conditions for a successful production.

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Everything goes quickly with this software solution.

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An overview of the intelligent functions of all machine series.

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Find out more about our product range here.

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manufacturing needs
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Our comprehensive services and unwavering support will give you a competitive advantage.

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Your Partner in Performance
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All the technical information you need at a glance.

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In good hands no matter what industry

What drives you drives us too. For many decades now, we have been offering customers from a wide range of industries help and advice on using laser technology. The knowledge we have acquired over this time gives us an edge that we aim to pass on to you: You can expect technology that is both state of the art and tailored to the specific needs and concerns of your industry. TRUMPF is always at the forefront of the latest trends, and is continually investing in the research and development of new technologies and potential applications to ensure we maintain this leading position in the future too.

Anywhere and everywhere

Laser material processing has been an integral part of numerous vehicle sub-assemblies for many years now. Almost every component – from the drivetrain through to custom decorations – has had a laser involved in its manufacture.



See the versatility that working with laser tools offers across all industries: www.trumpf.com/s/kecj9f

Automotive industry

Laser technology has been a part of contemporary car manufacture for many years now. The automotive industry is a global one – and TRUMPF is a global company: Customers around the world can rely on premium service, high spare parts availability, and an expert team of industry managers and product managers who are supported by sales staff with encyclopedic knowledge of products and industries. Our industry expertise has been acquired over decades and will take your production process to the next level.



Automobile body work

When working on car bodies, you always need very high speed and flexibility. With our laser systems, you can even process modern lightweight materials such as aluminum and hot-formed steel. With TRUMPF, you can bank on innovative, industry-adapted solutions for your welding, cutting, ablation, soldering and adhesive-preparation operations.



Electromobility

Use laser technology to turn your ideas for high-performance, compact components into reality. Or benefit from new joining geometries for conductive metals and the ultrafast welding of batteries and electrical components – with minimal spatter and heat input.



Lightweight design

Laser technology can open the door to modern-day lightweight construction, enabling you to process press-hardened and high-tensile steels, aluminum, fiber-reinforced materials, and hybrid material joins in a cost-effective way. Lasers even make it possible to use entirely new types of lightweight construction, such as intelligent structures or 3D-printed components, which will bring marked improvements to your product.



Powertrain

Working with drives often takes you to the limits of possible joining technology. To machine your drive components you need stable, spatter-free processes and deep, flawless seams that are long-lasting and can withstand harsh conditions. The laser technology from TRUMPF makes all of this possible.

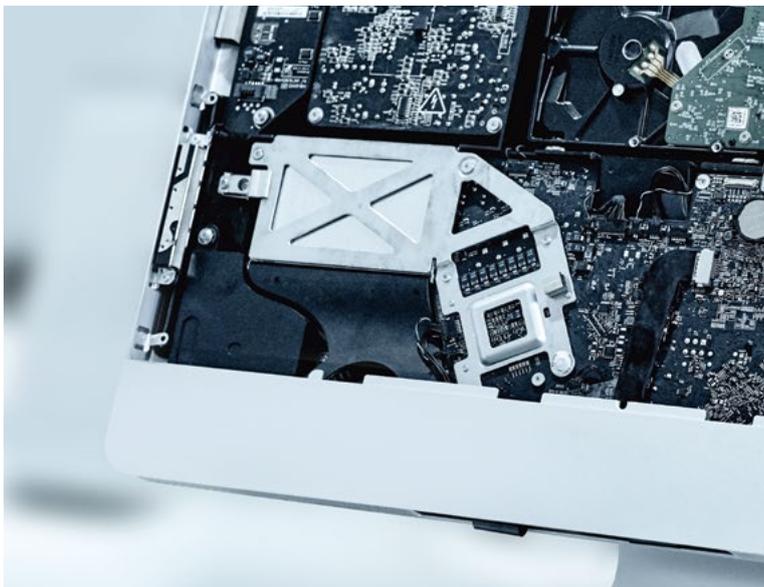
Medical engineering

Nowhere is having reliable processes more important than in medical engineering: With TRUMPF you can count on ultraprecise, reproducible results without the need for reworking, plus highly flexible production from batch size 1. The laser light works contactlessly, meaning that sterility is assured at all times. Being marked with a laser ensures that parts are traceable in accordance with UDI standards, while 3D printing offers maximum customization of artificial hips or dentures.



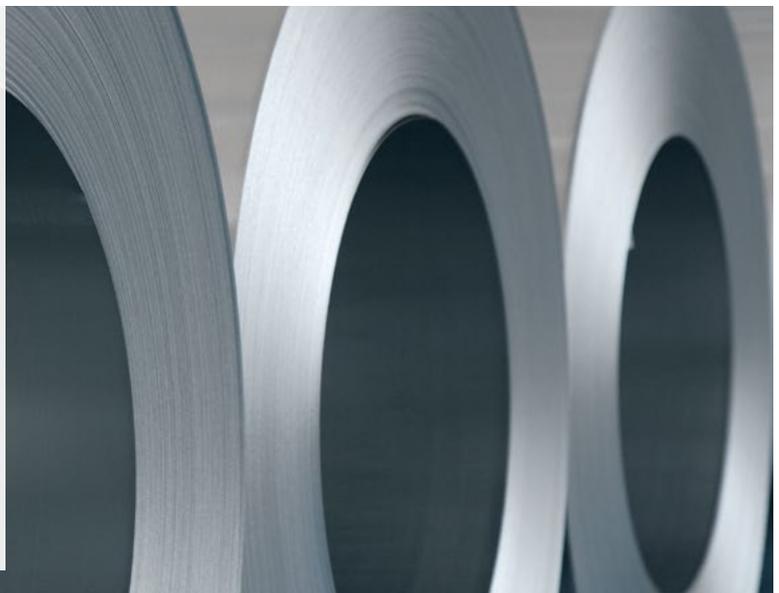
Electrics/electronics

Fast processes in fully automated production lines, high-precision processing and minimal exposure to heat for your workpiece: Laser systems from TRUMPF make achieving these things effortless. A laser also enables you to engrave an extremely high number of sensitive electronic components at the same time – without contact and free from wear.



Sheet metal working

Sheet metal working requires speed and flexibility. TRUMPF laser systems enable you to quickly and easily carry out retooling, welding, cutting, and deposition welding with a single machine, while also offering fast processing, an intuitive operating concept and assistance with application development.





Utility vehicles and transportation

Modern laser machines are consistently reliable and bring down the cost per part, for example when doing welding jobs or the laser cutting of automotive body parts. Procedures such as laser metal deposition help to repair components cost-effectively instead of having to replace them. In this regard, TRUMPF is a dependable partner for automatable solutions.

Aviation and aerospace industries

From expensive certification processes and premium part quality to reliable reproducibility, the demands made in the aviation and aerospace industries are enormous. But with engineering from TRUMPF, you don't have to worry about meeting them: we offer cutting-edge technologies such as laser deposition welding and 3D printing to the highest standards, and we are here to help you with a global service team.



Science

Are you conducting research into the properties of new or unusual materials? Or perhaps you're developing processing strategies for the industrial production line of the future? Then you need state-of-the-art laser systems that are reliable and offer flexible parameterization. TRUMPF is helping numerous universities and institutes to acquire new knowledge.

We can help you rise to the challenge

Whether you know exactly what you need or you're looking for a custom solution, we will be there for you every step of the way. We are fascinated by lasers and all the possibilities they offer. In our Laser Application Centers (LAC) we are ready and waiting to assist you – no matter when, no matter where. This is because we want you to find the right partner in the right place who always has the right technologies for your needs.

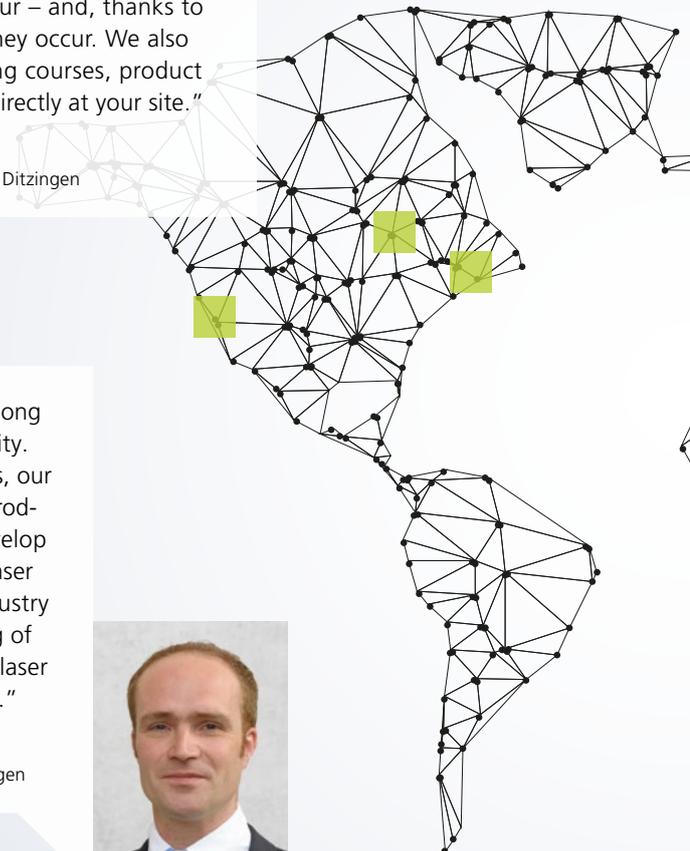


"With our tailor-made service packages, we are there at your side in the midst of your running operation. Our comprehensive remote services offer quick, uncomplicated help when errors occur – and, thanks to TRUMPF Condition Based Services, even before they occur. We also offer a broad spectrum of consulting with training courses, product enhancements and application services provided directly at your site."

Benjamin Blocksdorf, Group Leader of Sales for Global Services, Ditzingen

"Our unique industry management provides you with support long before the laser is put into operation in your production facility. In industries such as automotive and entertainment electronics, our team of experts provide step-by-step support as early as the product development phase. Working together with you, we develop tailor-made solutions to ensure you get the full potential of laser technology in your plant. An example in the automotive industry would be the design specially adapted for the laser processing of high-strength materials, or in entertainment electronics, the laser soldering techniques of components for display technologies."

Marc Kirchhoff, Head of Branch and Global Key Account Management, Ditzingen



“TRUMPF helped us enter the market for 3D cutting high-strength steel grades. We received so many orders we soon had to purchase a second laser system.”

Gerardo Oaxaca, CEO of Superlaser & Fixtures, Puebla



Photo: Adam Wiseman

“TRUMPF’s technical expertise helped us finally find an automatable laser cutting solution. It’s done away with the need for two out of three work steps. Plus we can react more quickly to design changes in manufacture.”

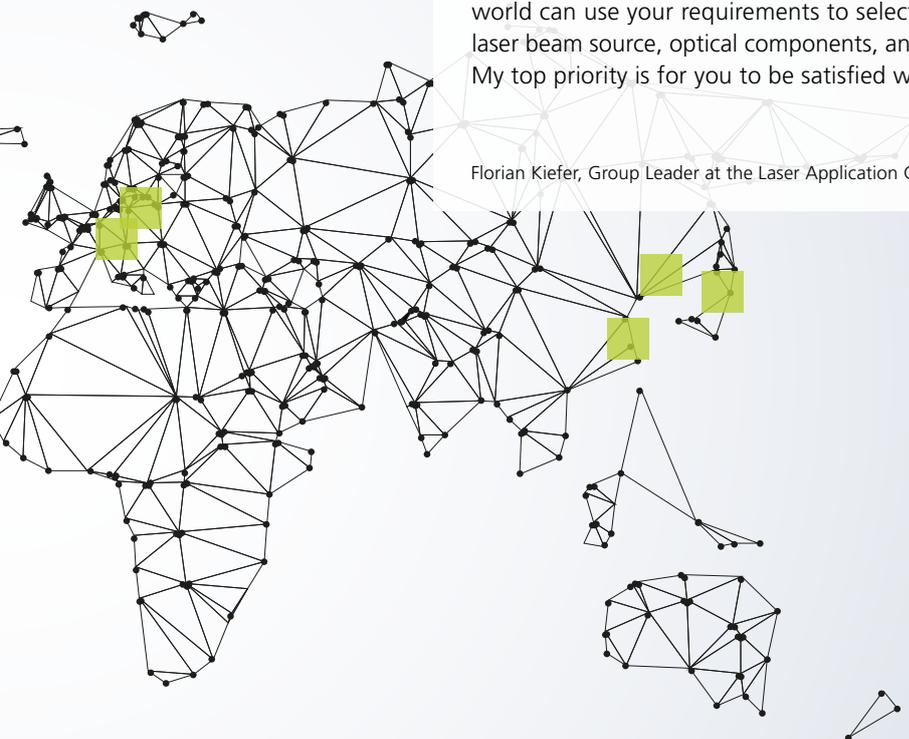
Ulrich Nieweg, Head of Prefabrication/Tool Making at Zwilling J. A. Henckels AG, Solingen



Photo: Ralf Kreuels

“The variety of applications in laser technology is growing all the time. If you’re looking for the right laser to meet your processing needs, you’re in the right place in one of our LACs. Our experts around the world can use your requirements to select the right combination of laser beam source, optical components, and process parameters for you. My top priority is for you to be satisfied with the results.”

Florian Kiefer, Group Leader at the Laser Application Center, Plymouth, Michigan



Find out more about how we can help you at our Laser Application Centers here: www.trumpf.com/s/7smpvy

Everything from a single source

TRUMPF gives you the security of knowing you have chosen a sophisticated and proven solution for your manufacturing system. Our numerous components – all of which we make ourselves – and our fully comprehensive global service make us a reliable partner for your production needs. You will also benefit from our knowledge of key issues for the future, such as Industry 4.0 and additive manufacturing.

Everything for your machine

- Machine
- Laser
- Procedure-specific processing optics
- Sensor technology
- Software
- Custom solutions



Everything for your manufacturing processes

- Automation solutions
- Construction of jigs and fixtures
- Part and powder management in additive manufacturing
- Laser network





Why choose TRUMPF laser systems?

- 1 Tailored solutions
- 2 Optimal for large-scale production and batch size 1
- 3 Consistently high component quality
- 4 Virtually warp-free processing
- 5 Highly precise results
- 6 No reworking needed
- 7 Maximum productivity minimizes cycle times
- 8 Process flexibility (cutting, welding, LMD)
- 9 Extremely robust and reliable
- 10 Maximum machine availability



TruServices. Your partner in performance

- Worldwide technical service
- Functional enhancements
- Monitoring and analysis
- Training
- Application advice



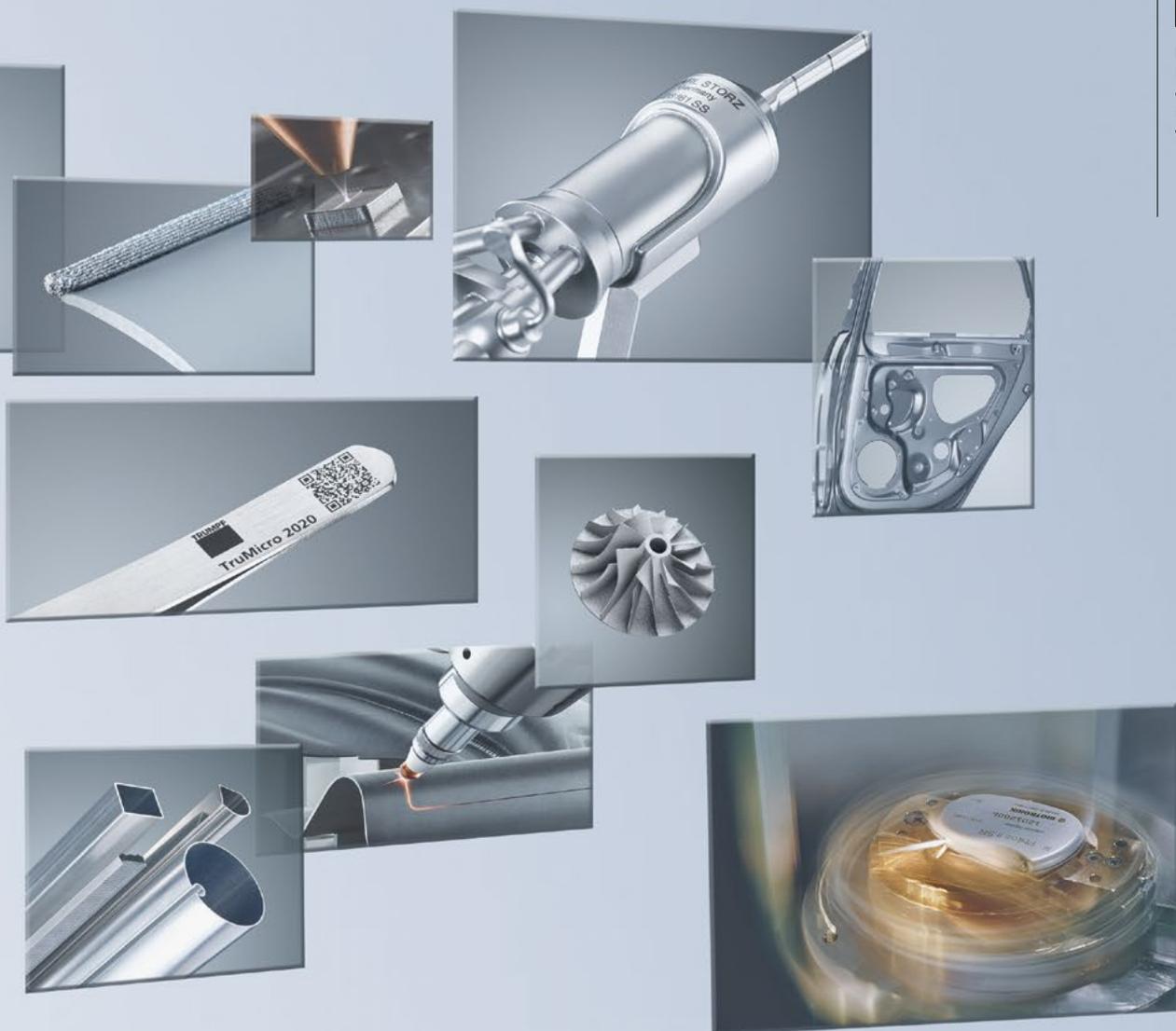
The best complete solution for your manufacturing process

We place extremely exacting demands on our products in terms of their technology, engineering, quality, and usability in practice. We guarantee you won't fail to notice this.



Your application, our technologies

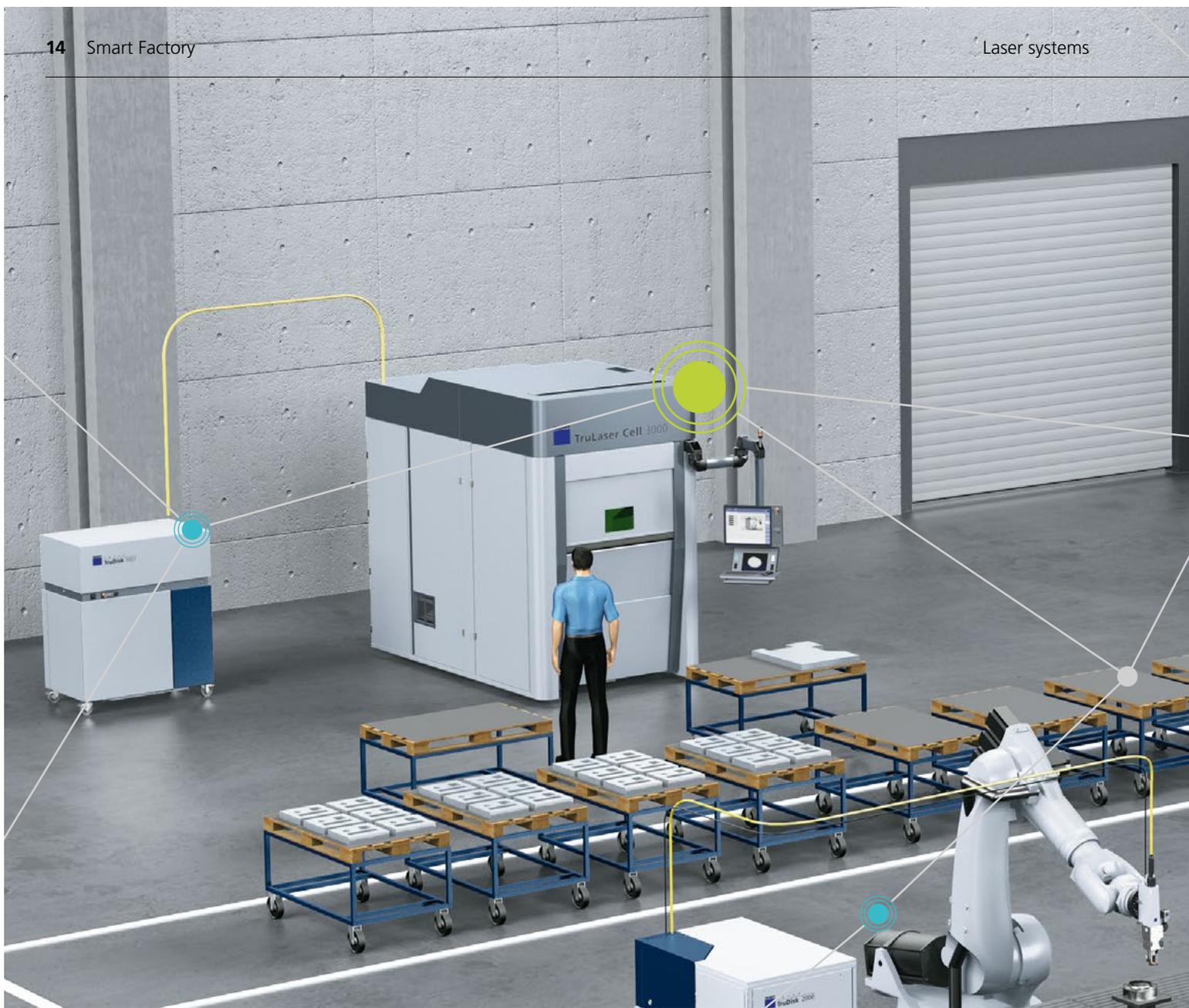
Our customers come from a wide variety of industries and they each have their own unique processing tasks, since every application places very specific demands on technology. TRUMPF offers laser systems that cater to all industrial applications, whether you work with rapid mass manufacture or batch size 1, from robust joining to fine separating: You will find the right solution for your manufacturing needs in our product range. You can obtain everything from a single source, from beam sources and system solutions through to beam guiding components, processing optics and intelligent sensor systems.



Find out more about what lasers can do and how you could use laser technology in your work here: www.trumpf.com/s/k4ivz1

	TruLaser Cell 1100	TruLaser Cell 3000	TruLaser Cell 5030	TruLaser Cell 7040	TruLaser Cell 8030	TruLaser Station 7000	TruMark Station 5000
Welding	■	■		■		■	
Deposition welding		■		■			
Plastic welding						■	
Cutting		■	■	■	■		
Drilling and removing material		■*					■
Hardening		■*		■*			
Generating		■		■			
Marking							■

* Upon request.



Condition Based Services

Would you like to sharpen your competitive edge? Digital networking offers numerous advantages: you see more, know more, and get the best out of your laser systems and your overall production. Condition Based Services already provide you with a full overview concerning the conditions of the beam source in your laser system. Additionally, TRUMPF Technical Service experts and algorithms support you in the timely detection and prevention of unplanned idle states.



Central Link

Central Link is an interface package for networking your machinery and preparing applications for Industry 4.0. With the OPC UA communication standard you can use machine data such as control variables, measured values, or parameters for individual applications.

Advantages of networking:

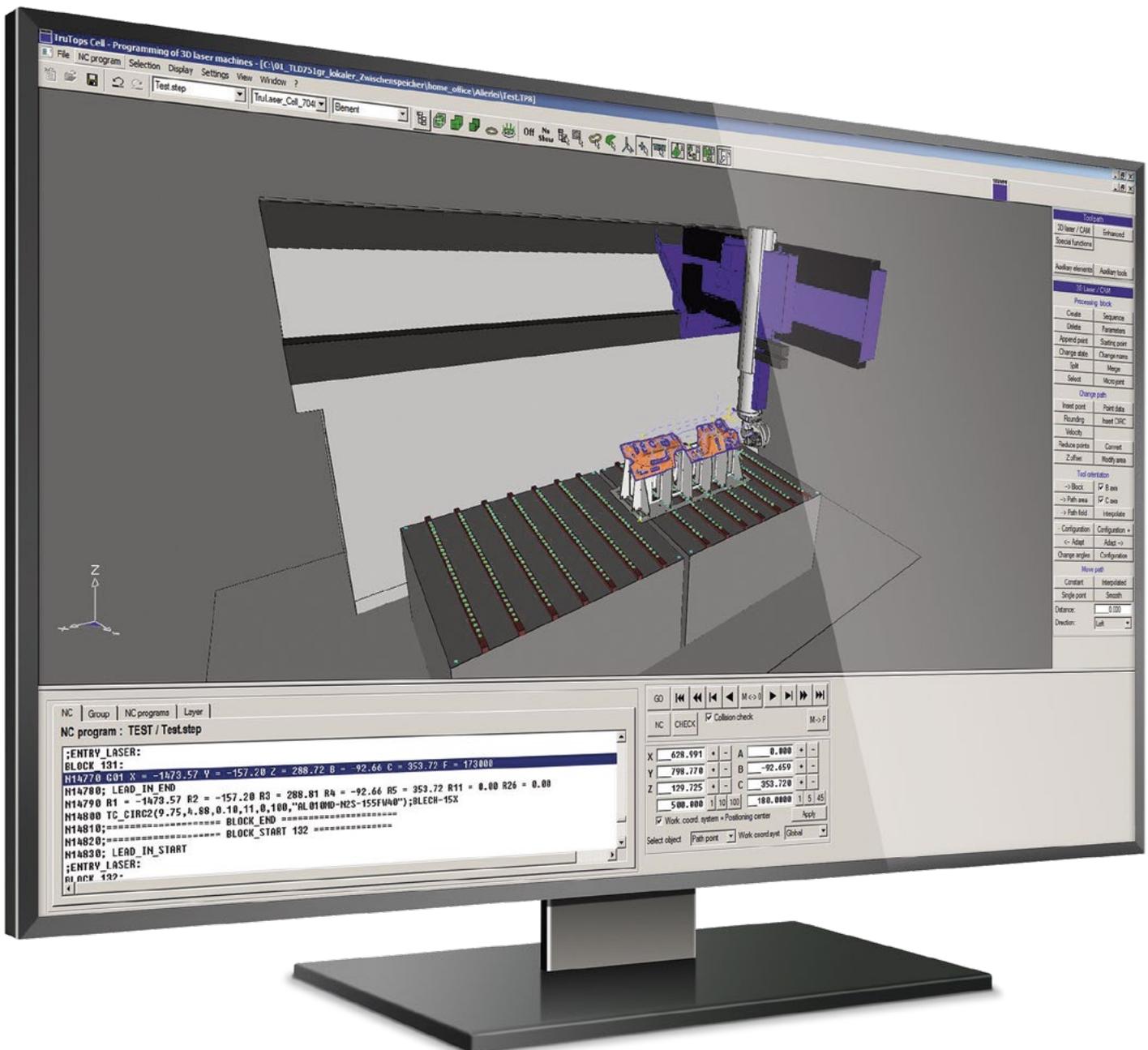
- Increase in productivity
- Increased availability through reduction of idle states
- Transparent overview concerning the statuses of your production
- Traceable process data



Uncover your production's hidden potential:
www.trumpf.com/s/d0w8vz

Easy programming

With TRUMPF software solutions, you can operate and program your laser machines in no time at all – easy to use and, being based on the entire TRUMPF know-how, with reliably good results. This is how you get the best results from your machine.



TruTops Cell Basic

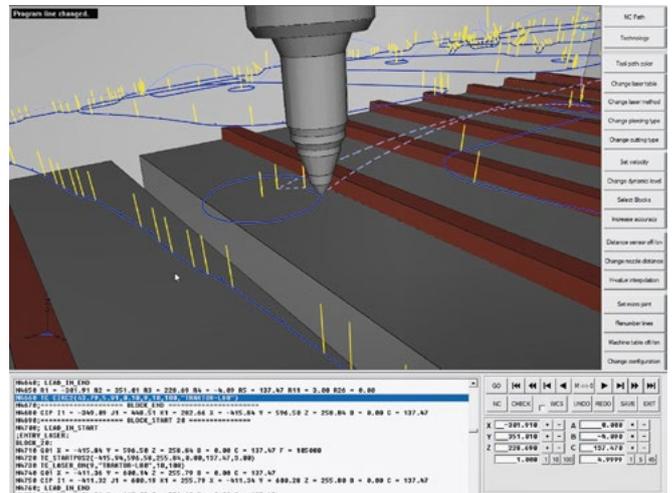
Check and modify processing programs directly at the machine.

Optimal process reliability thanks to visual feedback

The program visually simulates the individual programmed processing steps. This way, you can quickly check if you will get the result you want. Every program change is immediately visible.

Easy optimization of existing programs

Besides the direct programming of the NC program, you can make direct changes with the intuitive graphic user interface of the machine control. This way you save a lot of time in the midst of ongoing operations.



TruTops Cell for 3D processing

Comprehensive solution for cutting, welding and laser metal deposition

Offline programming

The machine continues to run while you are already generating or adapting new NC programs at your computer. The processing program can predict possible collisions, automatically preventing them and optimizing processing trajectories. The modifications you make at the machine control are immediately adopted by TruTops Cell.

Automatic optimization

With just a few clicks, you can select the most suitable stored technology settings and use them to perfect your machining process. The entire TRUMPF know-how has flowed into the

program, and it automatically prepares for you the right process parameters for your application.

Integrated fixture module option

With TruTops Cell, you can generate a CAD model of the suitable cutting fixture with just a couple of clicks. Clever additional functions then optimize it further.

Compatible with all data formats

TruTops Cell can be used with all current data formats. Being equipped for cutting, welding and laser metal deposition, the program also supports all TruLaser Cell machines.

TruTops Boost for efficient 2D laser cutting

Get even more out of your machine.

Efficient machine utilization thanks to algorithms

A common pool of orders and the Lean Nest nesting processor provide what you need for optimal material utilization. The software also shows you an overview of the statuses of your orders.

Automatic part tracking

Equip your production unit for Industry 4.0. With a great number of other optional functions, this program will open up whole new perspectives for modern production control.

Automatic and interactive operation

The intuitive operation of this software enables you to work with even greater productivity. The choice is yours as to whether you program interactively or leave it up to the automatic functions of the software.



Intelligent functions

Which intelligent functions are available with which machine series?
This table gives you a quick overview.



TruLaser Station 7000



TruLaser Cell 3000

Technologies		
Cutting		■
Welding	■	■
Laser metal deposition		■
Functions		
X-Blast Greater machine availability and better edge quality when laser cutting 3D parts because you double the clearance between the nozzle and sheet		
BrightLine Weld Low-spatter, energy-efficient laser welding using the revolutionary BrightLine Weld technology with patented 2-in-1 LLK	■	■
ObserveLine Patented check system for the automatic check of axis precision and automatic check for fallen cut-out waste at an unprecedented speed		■
Dynamic cutting optics Highly dynamic extra axis in the optics for the fastest distance regulation possible and maximum performance		
VisionLine Intelligent process viewing with a digital camera image in the laser focal point and many additional functions	■	■
Smart Optics Setup Test station which can be swiveled into the working area for fast and reliable execution of typical setup tasks		
CalibrationLine Power Automatic inspection of your laser power to ensure constant processing quality	■	■
FocusLine Automatic correction of the focus point while processing		■
FocusLine Professional Optical system for continuous spot diameter and focal diameter variation		■
FastLine Cell Piercing on-the-fly for higher productivity		
Smart Approach Patented system for faster and more reliable approach to the outer edge of the component, for the shortest possible cycle time with outer cuts		
TruTops Cell Basic Graphical user interface on the machine control for the convenient checking and modification of programs, with visual simulation		■



TruLaser Cell 5030



TruLaserCell 7040 CO₂



TruLaser Cell 7040 Fiber



TruLaser Cell 8030

Function Overview			
Function	TruLaser Cell 5030	TruLaserCell 7040 CO ₂	TruLaser Cell 7040 Fiber
1. Laser system	■	■	■
2. Laser control	■	■	■
3. Laser safety	■	■ ¹⁾	■ ¹⁾
4. Laser maintenance	■	■ ¹⁾	■
5. Laser operation	■	■	■
6. Laser integration	■	■	■
7. Laser application	■	■	■
8. Laser support	■	■	■
9. Laser training	■	■	■
10. Laser documentation	■	■	■
11. Laser spare parts	■	■	■
12. Laser service	■	■	■
13. Laser warranty	■	■	■
14. Laser financing	■	■	■
15. Laser leasing	■	■	■
16. Laser rental	■	■	■
17. Laser purchase	■	■	■
18. Laser upgrade	■	■	■
19. Laser replacement	■	■	■
20. Laser disposal	■	■	■

¹⁾ Upon request.

TruLaser Cell 1100

With its flexible beam guidance system, this is your specialist machine for the endless welding of a variety of seam geometries on bands, tubes and profiles.

01

Easy to integrate

thanks to a flexible, compact structure

02

Extremely efficient

thanks to state-of-the-art beam sources and calibrated sensors

03

Perfectly accessible

through variable adjustable axes

04

Fully customized

Optional extras offer solutions for every application



01

Easy to integrate

thanks to a flexible, compact structure

Make life easy for yourself: The compact and modular TruLaser Cell 1100 can be integrated into your production lines with the utmost ease. You can configure the beam guidance system to meet your specific needs in terms of the linear axes, the working height or process path. This makes it possible to weld in two different places at the same time.



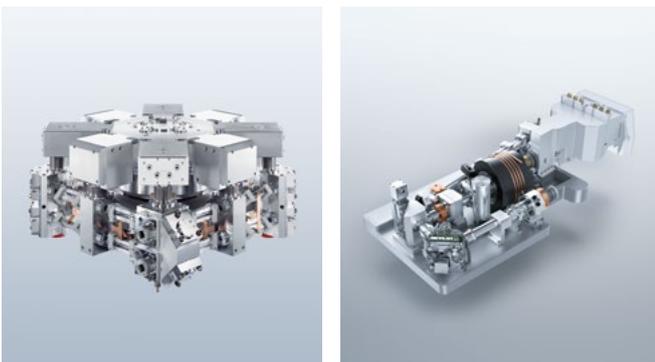
Non-stop manufacture – the system for endless welding professionals.

02

Extremely efficient

thanks to state-of-the-art beam sources and calibrated sensors

With the TruLaser Cell 1100, you can step your production process up a gear. Simply choose the right beam source for your application – CO₂ laser or solid-state laser – and the system is highly flexible when it comes to positioning the beam and optics. The perfectly calibrated sensors guarantee optimum welding results. All of these factors together cut your operating costs and increase your production speed.



Use the beam source you need: The TruFlow CO₂ laser (left) or the TruDisk disk laser – the choice is yours.

03

Perfectly accessible

through variable adjustable axes

The variable setting axes offer ideal adjustment options, for both tubes and profiles. Thanks to its compact design, the variable beam guidance can be integrated into all current profile systems. The sophisticated beam forming feature enables top welding quality at maximum feed even with high requirements and the most diverse of seam geometries.



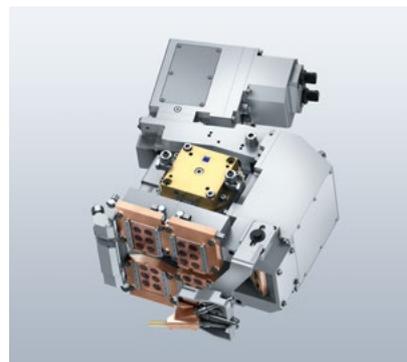
Equipped with the most modern process technology for demanding tasks.

04

Fully customized

Optional extras offer solutions for every application

Be more flexible thanks to a wide range of welding optics with linear or swivel axes. Sensor systems for finding and tracking seams together with functions such as SeamLine and SeamLine Pro guarantee maximum quality, reliability and productivity.



You too can achieve the perfect seam with the right process monitoring system.



You can find still more information about the TruLaser Cell 1100 here: www.trumpf.com/s/20q1n3

TruLaser Cell 3000



01

Unique process flexibility

Welding, cutting, laser metal deposition

02

Highly productive processing

due to customized automation solutions and a dynamic axis system

Laser welding, laser cutting and – the technology of the future – laser deposition welding: The compact TruLaser Cell 3000 is a true all-rounder, delivering premium-quality processing results with unrivaled flexibility and paving the way to new manufacturing techniques.



05

Spacious and most flexible work area

with compact machine design

04

Reliable processing

due to intelligent image processing and laser power sensor system

03

Cost-efficient production

with top component quality



You can find anything else you would like to know about the TruLaser Cell 3000 here: www.trumpf.com/s/woxy9

01

Unique process flexibility

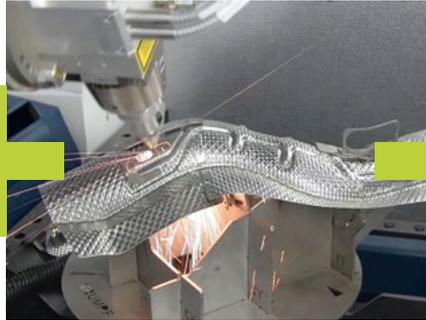
Welding, cutting, laser metal deposition

Trend-setting flexibility without compromise. Having a broad variety of functions available, the machine can be equipped for every application. With the flexible optical interface, even scanner optics of the PFO series can be attached, for example, to weld e-mobility components.

Welding



Cutting



Deposition welding

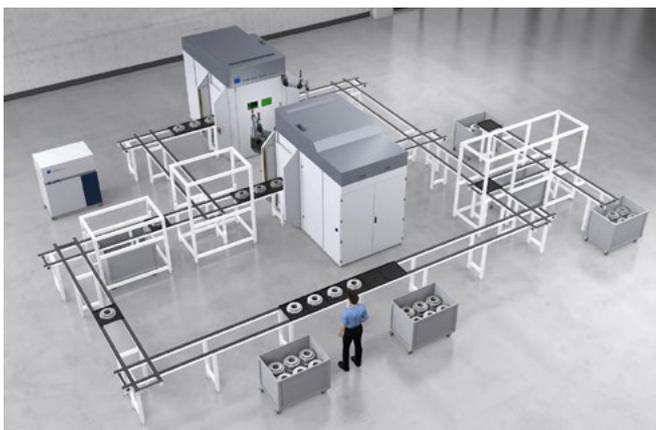


02

Highly productive processing

due to customized automation solutions and a dynamic axis system

High quantities? No problem. Using a rotary table for loading and unloading parallel to production, and a highly dynamic axis system with a linear drive, you will cut down your production times considerably. The automatic lateral lifting doors enable the system to be connected to a transfer system and loaded by robots. The ability to automate the TruLaser Cell 3000 makes it easy to integrate into complete production lines.



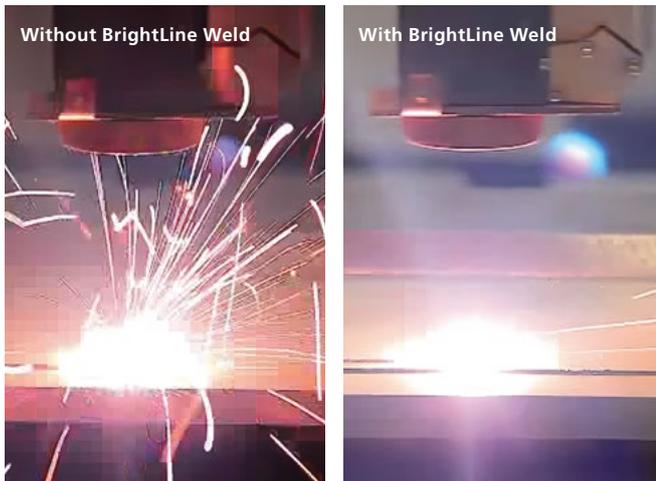
The TruLaser Cell 3000 can be automated very easily, for example from the front with robots, or laterally with a coil connection or to a flow line.

03

Cost-efficient production

with top component quality

When it comes to laser welding, BrightLine Weld sets new standards with regard to the welding speed and quality. Depending on the material concerned, it enables an increase in the feed rate of up to 300% or a reduction in energy consumption of up to 40% whilst ensuring the same welding depth. In combination with the highly precise axis system, this ensures the very best component quality at all times.



With BrightLine Weld, materials such as mild steel, stainless steel, or even copper and aluminum can be welded virtually spatter-free.

05

Spacious and most flexible work area

with compact machine design

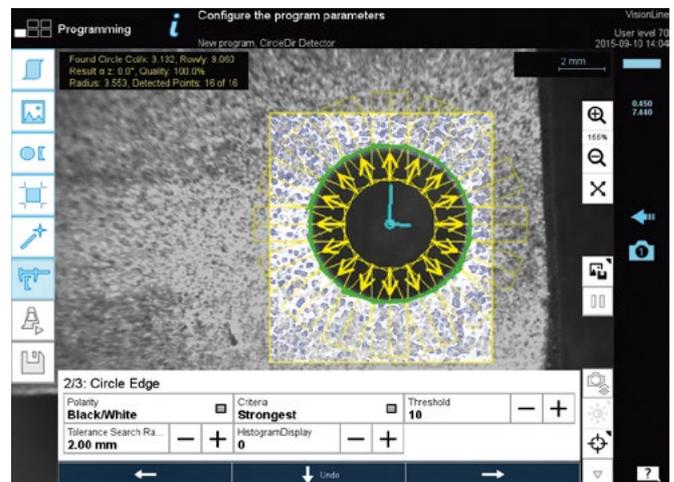
More for your money: Boasting the largest and most flexible work area in its class, the TruLaser Cell 3000 not only offers space for large installations and comprehensive fixtures and automation systems. With an additional motor-driven workpiece axis, you can also process 3D components which are up to 50% larger.

04

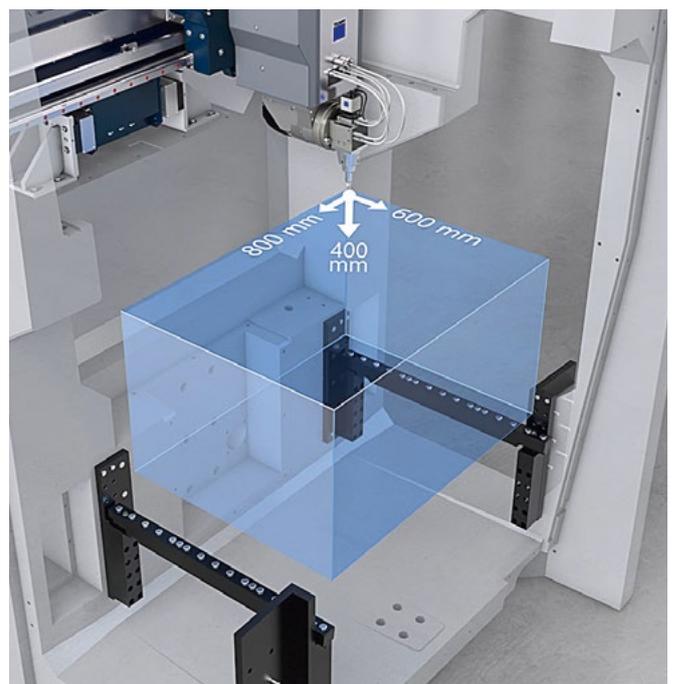
Reliable processing

due to intelligent image processing and laser power sensor system

Powerful sensor systems ensure comprehensive process monitoring and fault-free machining processes. VisionLine image processing automatically detects the position of the component, forwards the information to the controls, and ensures that the weld seam is always positioned in the right place. CalibrationLine guarantees a constant laser power on the workpiece.



The image processing automatically measures the component, ensures safe and reliable processes during welding, and prevents the production of faulty parts.



The large work area can also be accessed from the side and enables large components to be processed in a minimal installation area.

TruLaser Cell 5030

Having flying optics and a solid-state laser, the machine performs with good machine dynamics and optimal precision.



01

Low-cost introduction

to 3D laser cutting

02

Top operator convenience

due to intuitive software support



03

Dynamic and precise
with flying optics

04

Top quality
due to unique features

05

**2D, 3D or
tube processing**
thanks to its universal usability



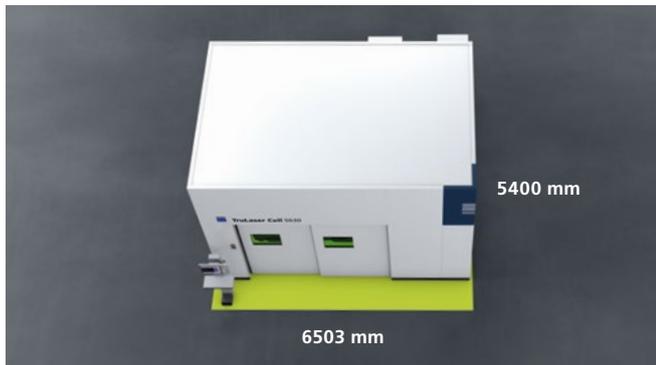
More information about
the TruLaser Cell 5030 can
be found here:
www.trumpf.com/s/j5ra70

01

Low-cost introduction

to 3D laser cutting

Cost-efficient processing starting with the very first part: Compared to hybrid and sheet mover machines with CO₂ lasers, the TruLaser Cell 5030 achieves up to 300% higher performance with a machine-hour rate reduction of up to 20%. Its clever design reduces the installation area of the system to a minimum.



The system impresses with low maintenance costs.

02

Top operator convenience

due to intuitive software support

The TruLaser Cell 5030 is optimal for the processing of frequently changing orders with small lot sizes. The running-in of new parts is supported by clever features like, for example, the stored technology parameters for all currently used materials, the TruTops Cell Basic program for quick program modifications or the automatic focus setting. The front doors of the machine are made of light CFRP material, enabling quick and convenient access to the work area.



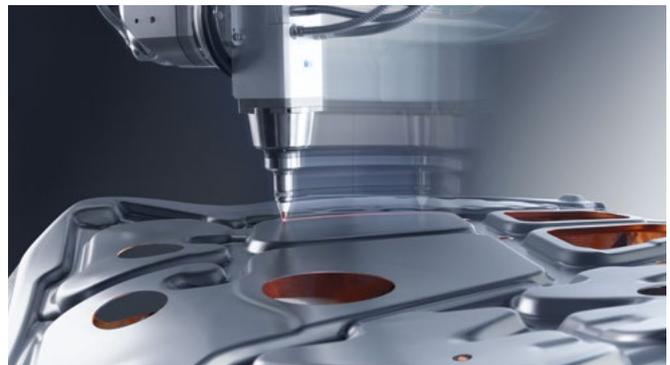
The teachbox allows you to operate your machines easily and with flexibility.

03

Dynamic and precise

with flying optics

With X-Blast Technology you work at a greater distance to the sheet metal. This reduces nozzle collisions and increases the quality of the 3D cutting edges. Flying optics also contribute to precise results. Nevertheless, in the event of a collision, the magnetic coupling prevents damage to the machine.



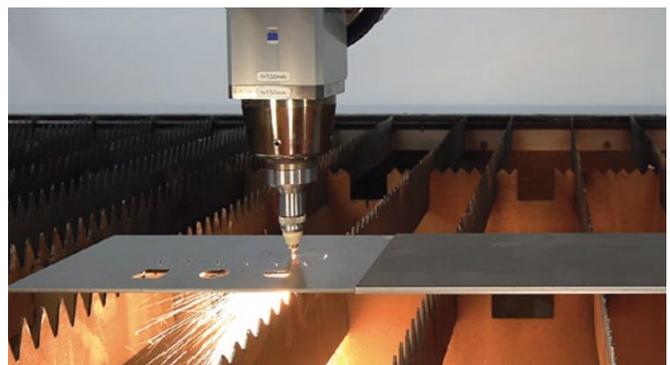
Extremely high processing speeds are enabled by the same optical setup and drive principle as in 3D high-end machines.

04

Top quality

due to unique features

Optimal coordination between laser, machine, and software forms the foundation for excellent processing quality. With the TruLaser Cell 5030 you have all three building blocks from TRUMPF. Machine operators are supported by the latest functions such as Smart Optics Setup, for a quick and convenient setup. The precision of the machine can be automatically tested during the production process with ObserveLine Professional. This reduces the production of faulty parts to a minimum.



With FocusLine, the automatic focus position adjustment, you always cut with ideal parameters regardless of the sheet thickness.

05

2D, 3D or tube processing

thanks to its universal usability

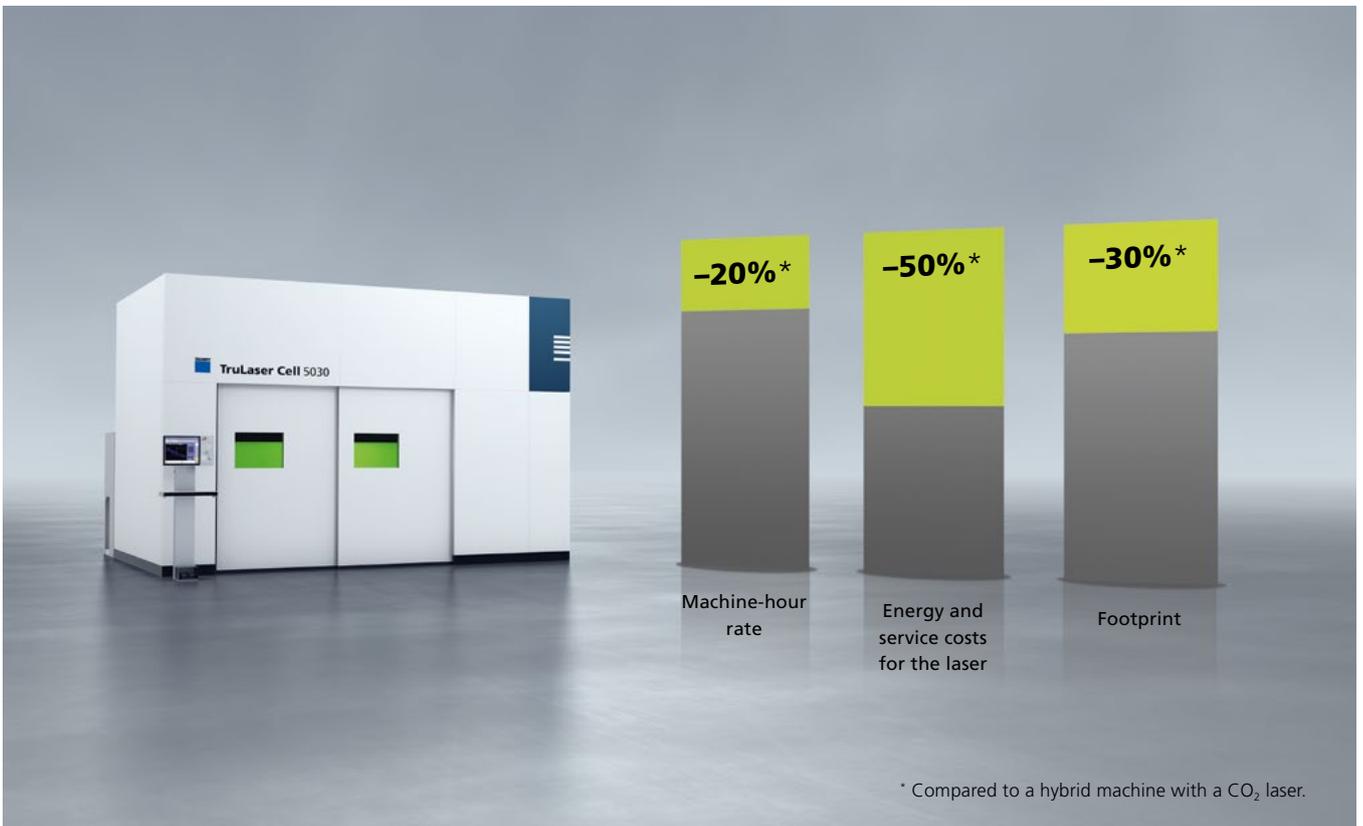
Keep flexible while processing very diverse materials with sheet thicknesses of up to 12 mm. Beside the universally usable standard processing table, there are optional 3D worktables available whose compact design are optimally accessible – within the same work area size of course.



Integrated 2D slats and a flexible fastening system for fixtures make the 2D/3D worktables universally versatile.



The compact 3D worktables offer optimal accessibility for 3D parts and in doing so facilitate quick and precise setup and running-in of the machine.



300% higher productivity, efficient solid-state laser and compact design – the TruLaser Cell 5030 offers great benefits compared to hybrid machines with a CO₂ laser.

TruLaser Cell 7040



01

Unique flexibility

in 3D processing with
solid-state or CO₂ lasers

02

Top productivity

with frequently changing series
and lot sizes

Do you wish to process two- or three-dimensional components?
With TruLaser Cell 7040, you will be perfectly equipped to do so.
Switch between cutting and welding quickly and easily.

05

Quick part setup

using teach panel, MobileControl App
and TruTops Cell Basic

04

Perfectly ergonomic

with the movable control panel and
evenly illuminated work area

03

Top process reliability and quality

due to X-Blast Technology and
low-spatter welding



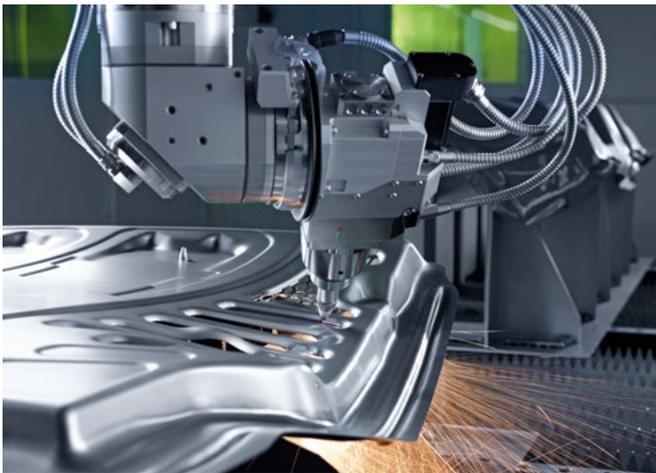
More information about
the TruLaser Cell 7040 can
be found here:
www.trumpf.com/s/weoethn

01

Unique flexibility

in 3D processing with solid-state or CO₂ lasers

The TruLaser Cell 7040 was specially developed for a flexible production environment. You can switch between 3D cutting and welding on the same machine. The 2in1 fiber also automatically adjusts the laser beam optimally to suit the respective processing task. This means you are always perfectly equipped.



With the additional axis integrated in the optics, you can get perfect cutting results with high cutting speeds, even with complex 3D geometries. The X-Blast Technology makes the process extremely robust.



Perfect cutting results and high seam quality thanks to the almost spatter-free processing with BrightLine Weld, even at high processing speeds.

02

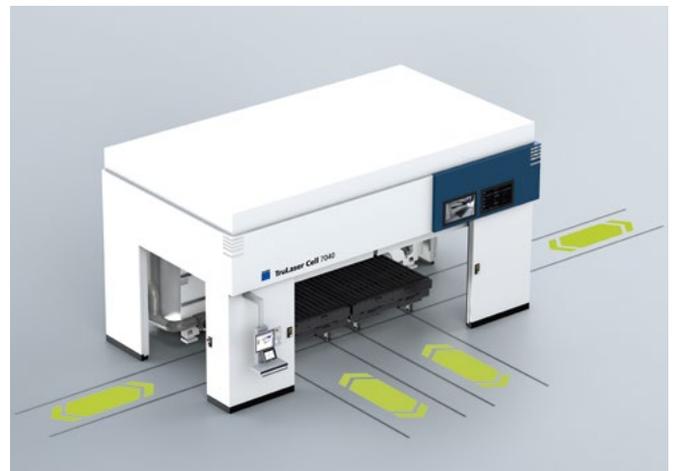
Top productivity

with frequently changing series and lot sizes

High positioning speeds and axis dynamics allow for low production times. On-the-fly piercing with FastLine Cell reduces your nonproductive times by up to 40% when cutting. The front doors made of light GFRP material cut your time opening and closing doors by 35%. And you save even more time with loading and unloading parallel to production in 2-station operation and with an extremely fast rotary table which revolves the part into the work area in only 4 s. You manufacture more profitably than ever before, and that with absolute reliability.



You can load and unload parallel to production with the quick-turning rotary table. User-friendly component handling outside the machine is also possible. This saves money and time.



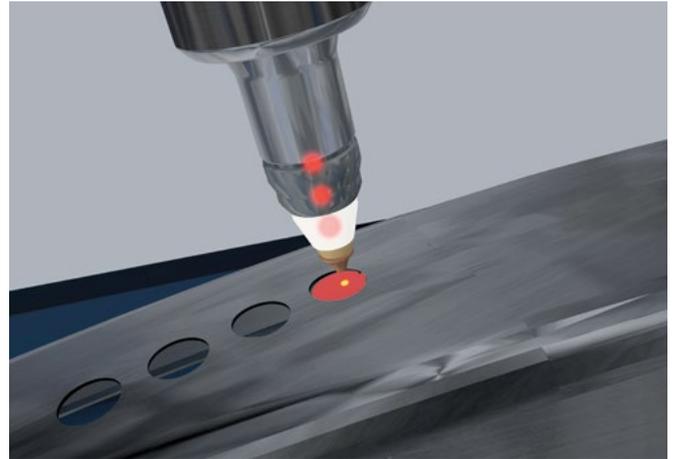
Quick setup with heavy components using tables which are movable in the X and Y directions.

03

Top process reliability and quality

due to X-Blast Technology and low-spatter welding

The X-Blast nozzle technology ensures consistently good 3D cutting quality due to the greater nozzle-sheet distance. The ObserveLine sensor system inspects the cut contour at lightning speed. Additionally, low-spatter welding with BrightLine Weld achieves outstanding weld seam quality, as well as feed rates which are up to three times higher. This noticeably increases the quality of your components, and saves time and money.



Patented ObserveLine testing system for automated inspection of cut contours.

04

Perfectly ergonomic

with the movable control panel and evenly illuminated work area

The ergonomic control panel can be moved along the entire machine, ensuring a perfect view of the work area from every angle. The bright and optimally illuminated work area guarantees constant comfort while working. The Smart Optics Setup station also ensures that setting the optics is quick and reliable.



Smart Optics Setup ensures quick and reliable setting and adjustment work on the optics.

05

Quick part setup

using teach panel, MobileControl App and TruTops Cell Basic

The compact teach panel with 6D mouse makes it easier to run in, teach and traverse the axes. With the TruTops Cell Basic software, the programs can be adapted directly at the machine – without making changes to the offline programming system. In addition, the control automatically detects which optics are installed, allowing for a quick and error-proof change of optics.



Quick program creation directly at the workpiece with the MobileControl App and teach panel.

TruLaser Cell 8030

01

Top productivity

in series production

02

More efficient production

thanks to the economical TruDisk 2000

03

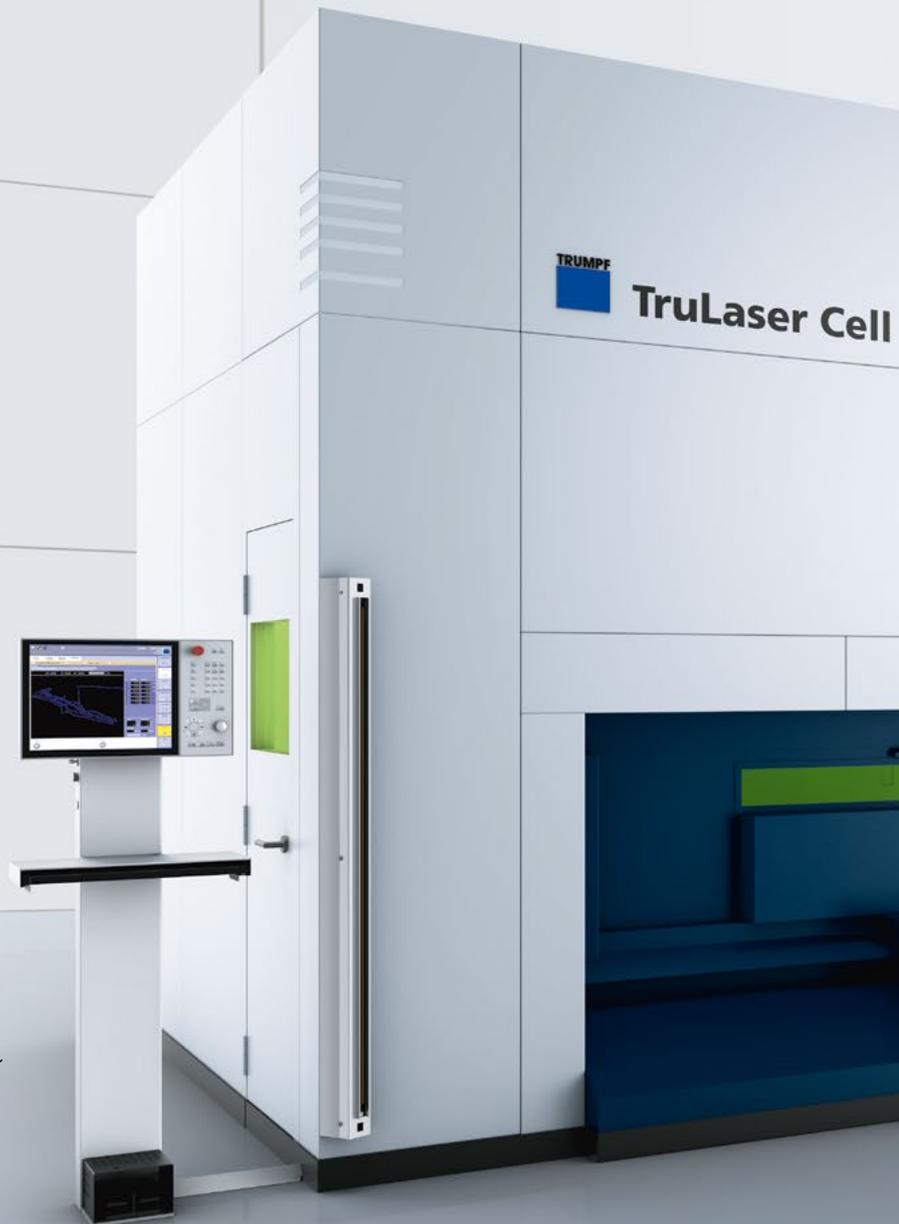
Clever functions

for high processing dynamics and safety

04

Save space

due to the compact installation area



The second-generation TruLaser Cell 8030 sets new standards in the 3D cutting of hot-formed components. New options and optimized details ensure ultimate productivity and reliability.



06

Stable cutting process

with the X-Blast nozzle

05

Large components

processed efficiently



You can find out even more about the TruLaser Cell 8030 here: www.trumpf.com/s/uv11d5

01

Top productivity

in series production

You process at maximum productivity with the TruLaser Cell 8030. Part times are reduced up to 7% using dynamic level 3. The numerous functions like, for example, the optimized rotary table, provide process reliability and shortened nonproductive times. The 20% reduced rotation time of 1.8 s is the fastest on the market. Intelligent automation solutions ensure that there are no bottlenecks, even with manual loading and unloading. You can optimize cycle times and achieve greater productivity using a rotary indexing table or a robot for part automation. With ObserveLine Comfort, the improved slug check is 4 times as fast as the competition.



A rotary indexing table and robots keep cycle times to a minimum.



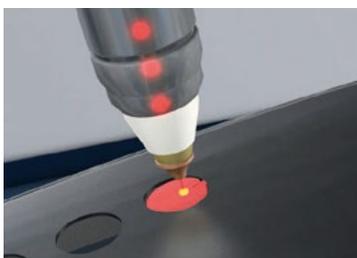
The remaining time display lets you know at a glance how the component, and indeed the entire order, is progressing.

03

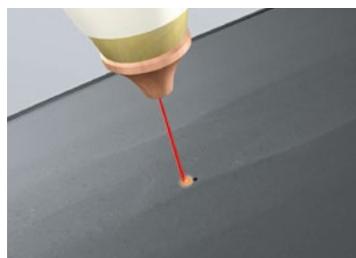
Clever functions

for high processing dynamics and safety

Two optical measuring processes ensure greater reliability on the TruLaser Cell 8030: ObserveLine Comfort checks with lightning speed whether a contour has been fully cut out, thereby preventing cutting the cut-out scrap from remaining in the finished part. ObserveLine Professional monitors the positioning accuracy of the machine and can detect even the tiniest of positioning errors of the optics. The precise and secure magnetic coupling enables you to carry on working in no time at all, even in the event of a collision. With assistants like these, you save money by producing faster and reducing rejects.



The ObserveLine Comfort measuring system ensures that every cutout is indeed cut out and gone.



The ObserveLine Professional measuring system monitors the correct positioning of the optics.

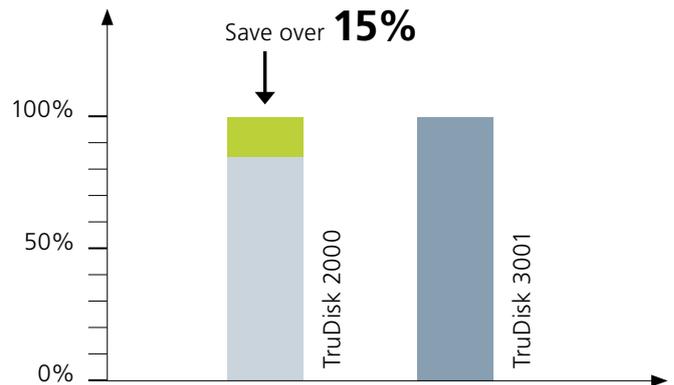
02

More efficient production

thanks to the economical TruDisk 2000

The choice is yours: No matter what your application, you have a wide range of lasers at your disposal. Using the TruLaser Cell 8030 with a compact fiber-guided TruDisk 2000 laser, for example, would make your production process especially efficient. This system boasts unsurpassed beam quality and exceptional focusability, which saves electricity and thereby reduces the cost per part – and even has a positive effect on the size of your investment.

Energy consumption



You also save on power input with TRUMPF solid-state lasers.

04

Save space

due to the compact installation area

Lacking space in your production facility? No problem! The compact TruLaser Cell 8030 has a very small footprint, meaning you have the flexibility to plan multiple machines into your workspace according to your specific needs. A further advantage of the system is that it is ergonomic and extremely easy to use. The rotating changer can be loaded and unloaded from the front as well as the sides.



The compact, easy-to-use laser cell fits into any production line.

05

Large components

processed efficiently

Produce large parts with top productivity. The working area of the TruLaser Cell 8030 can be extended as desired. With this concept, you can process door rings or other large hot-formed parts efficiently and completely.



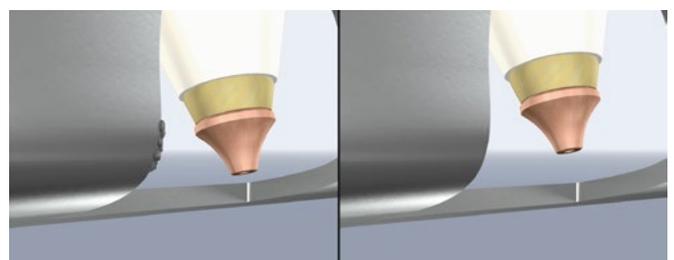
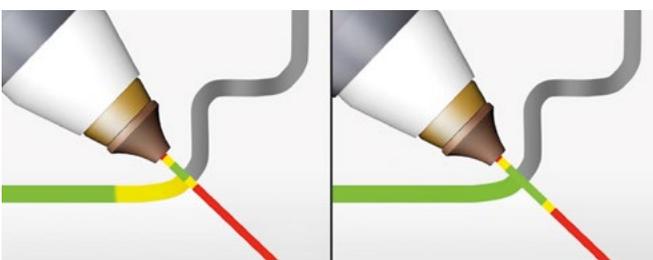
You can even process very large hot-formed parts with the TruLaser Cell 8030.

06

Stable cutting process

with the X-Blast nozzle

The optimized cutting nozzle processes at a greater clearance from the sheet – this reduces downtimes caused by nozzle collisions by 90%. Profit not just from the greater machine availability, but also from a 10% drop in nozzle wear and from optimal cutting edges, especially when tackling highly demanding 3D geometries.



Even small radii can be cut with great quality with X-Blast thanks to a doubled processing spectrum.

TruLaser Station 7000



01

Spacious work area on a minimized footprint

offering room even for larger components

02

Profitable laser welding

thanks to the best price-
performance ratio of its class

03

Constant high part quality

with fully integrated
image processing

The perfect system for cost-efficient 3D laser welding. This machine boasts a flexible selection of beam sources, automation and supporting sensor systems – and even with these it is cheaper than other comparable machines.



06

Optimal for complex processing jobs

thanks to its highly developed 3D processing technology

05

High processing flexibility

guarantees a variety of welding applications

04

Ideal for large quantities

thanks to its rotary table



You can find more information about the TruLaser Station 7000 here:
www.trumpf.com/s/trulaser-station-7000

01

Spacious work area on a minimized footprint

offering room even for larger components

The TruLaser Station 7000 offers the perfect balance between work area and footprint. A broad spectrum of parts can be processed in the generously designed work area of the machine – including larger parts and even complex fixtures. The exhaust system is integrated in the machine.



The machine design has been optimized to provide the maximum work area despite its minimized footprint.

02

Profitable laser welding

thanks to the best price-performance ratio of its class

The modular design of the TruLaser Station 7000 will keep your investment costs down. This modern machine concept is perfectly designed for welding assemblies such as sensor systems, rotationally symmetrical parts and medical instruments. You will also be impressed by the low cost per part.



Welding seams on a power sensor module.

03

Constant high part quality

with fully integrated image processing

The integrated image processing feature detects component geometries. This means that you always weld at the right point and save time and money as you produce with unchanging high quality. The intuitive user interface takes the operator quickly through the individual work steps on the spacious touchscreen.



The height and angle of the ergonomic operating panel can be freely adjusted to the operator's preference. It can be positioned left or right of the machine.

04

Ideal for large quantities

thanks to its rotary table

The TruLaser Station 7000 can be optimally equipped with a rotary table. This enables loading and unloading parallel to production, even when automated with a robot. High-power lasers of the latest generation enable optimal processing times, making the machine perfectly suited for highly productive series production.



The 2 stations of the rotary table make loading possible even when the machine is operating. With this, you maximize your productivity.

05

High processing flexibility

guarantees a variety of welding applications

Weld very diverse seam geometries at a constantly high level of quality. No matter whether you are using heat conduction or deep penetration welding, whether it's with thin or thick sheet – the TruLaser Station 7000 offers high performance. You can choose between swiveling welding optics and scanner optics and select among a wide variety of beam sources.



Whether you want to weld electrical contacts for control units, medical instruments or ultrasonic sensors – the TruLaser Station 7000 can be adapted to your requirements.

06

Optimal for complex processing jobs

thanks to its highly developed 3D processing technology

With up to 5 interpolating axes you can handle complex 3D components and seam geometries without any problem. The machine is optimally designed for welding assemblies such as sensor systems, rotationally symmetrical parts and medical devices.



3D laser welding in the medical technology field.

TruServices. Your Partner in Performance

For a successful future, rely on services which will carry you forward in the long term, and use them to create the best conditions for the success of your production. We create opportunities together, so that you can use your TRUMPF laser systems optimally at all times and adjust to changes with flexibility. In us you will find a reliable partner who supports you with tailor-made solutions and service packages – so that you can produce economically and at a consistently high level, thus optimizing your value creation sustainably.



EMPOWER

If you wish to create the best conditions for successful manufacturing: We will support you in this.

SUPPORT

If flexibility and availability of equipment in day-to-day operations are essential to you: We are there for you.

IMPROVE

If you want to gradually focus your manufacturing on maximum value creation: We will work together to reach your goal.

Service Agreements



Select the right scope of services for you with predictable costs – technical hotline, remote support, on-schedule maintenance, repairs including spare parts. You benefit from inexpensive package prices and lower processing outlay.

Technical Service



Our global service network helps you with quick, technical support, and preventively ensures the availability of your TRUMPF system. We support you from installation to maintenance all the way to system repairs. Customer service specialists advise you on which solution is the most efficient in your case – in-person support on-site or problem-solving via remote support.

Process Optimization



With our help you'll be well on your way to finding your production's hidden potential. For example, analyzing the design of your parts, your subprocesses, or your entire production. The results give us the data we need to help you develop selective or holistic solutions, for example for networked production.

Genuine Parts



Produce with as much reliability and precision as possible – genuine TRUMPF spare parts and consumables are ideally suited for your system, and meet top quality requirements. Our global logistics network ensures that you receive the required parts as quickly as possible.



Find out about our comprehensive complete package of helpful services here:
www.trumpf.com/s/services

Technical data

TruLaser Station 7000
TruLaser Cell 3000, 5030, 7040, 8030

Technical data						
		TruLaser Station 7000	TruLaser Cell 3000	TruLaser Cell 5030	TruLaser Cell 7040	TruLaser Cell 8030
Axis positioning range						
X	mm	650	800	3000 (+ 300)	4000	3000
Y	mm	350	600	1500	1500/2000	1300/2100 ⁶⁾
Z	mm	500	400 (+300) ¹⁾	700	750/1000	600/650 ⁶⁾
B/C ²⁾	°	± 120/n x 360	± 135/n x 360	± 135/n x 360	± 135/n x 360	± 135/n x 360
Max. payload	kg	50	400	250 (3D work table), 800 (2D/3D work table)	1600	300 (700 ⁶⁾)
Speed						
X/Y/Z	m/min	6	50	60	100	100
Simultaneous	m/min	10	85	104	173	173
B/C ³⁾	1/min	15/200	120/400	60	90/90	90/90
Acceleration						
X/Y/Z	m/s	1	10	5	9/10/10	11 (10 ⁶⁾)
B/C ³⁾	rad/s	63/157	125/500	200/100	200/100	200/100
Positioning accuracy						
Linear axes X/Y/Z	mm	0.08	0.015	0.08	0.08	0.08
Rotational axes B/C ³⁾	°	0.1/0.2	0.02/0.02	0.015	0.015	0.015
Repeatability						
Linear axes X/Y/Z	mm	0.03	0.02	0.03	0.03	0.03
Rotational axes B/C ³⁾	°	0.03/0.06	0.006/0.02	0.005	0.005	0.005

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

You can find more information at www.trumpf.com

- Technical datasheets available to download
- Ability to clearly compare up to three products
- Displays perfectly on any end device

TruLaser Station 7000 TruLaser Cell 3000, 5030, 7040, 8030

Technical data						
		TruLaser Station 7000	TruLaser Cell 3000	TruLaser Cell 5030	TruLaser Cell 7040	TruLaser Cell 8030
Laser						
Max. laser power	W	2000 ⁴⁾	8000 ⁴⁾	4000	6000 ⁴⁾	4000
Available lasers		TruDisk, TruPulse, TruDiode, TruFiber, TruMicro ²⁾	TruDisk, TruPulse, TruDiode, TruFiber, TruMicro ²⁾	TruDisk	TruFlow, TruDisk	TruDisk
Available technologies		Laser welding	Laser welding, laser cutting, laser deposition welding	Laser cutting	Laser welding, laser cutting, laser metal deposition on request	Laser cutting
Rotating changer						
Diameter	mm	770	1070		4600 (5400 ⁵⁾)	4000 (5000 ⁵⁾)
Max. payload per side	kg	35	95		750/1000	300 (700 ⁶⁾)
Stations	Number	2	2		2	2
Rotation time	s	On request	3		3	1.8 (3.0 ⁶⁾)
Total typical nonproductive time	s	On request	5.2		6	4.3 (5.5 ⁶⁾)

¹⁾ With additional W1 axis. ²⁾ Fiber optic cable guided. ³⁾ C180 rotational axis. ⁴⁾ Higher laser power upon request.

⁵⁾ Dimensions are listed in the standard layout of the custom machine. ⁶⁾ Applies for large variants.

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

TruLaser Cell 1100

Technical data		
		TruLaser Cell 1100
Axis positioning range		
X	mm	300 x 500
Z	mm	300 x 500
Q	mm	± 25
Positioning accuracy X/Z	mm	± 0.1
Positioning accuracy Q	mm	± 0.05
Max. laser power	W	15,000
Available lasers		TruFlow, TruDisk, TruDiode

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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.

Industry 4.0 – solutions for your future

The fourth industrial revolution is changing the world of manufacturing. Is it possible to stay competitive internationally with all this change? Yes – with the opportunities offered by digital networking. With our pragmatic solutions, we will support you every step of the way on your networked manufacturing journey, helping you make your processes more transparent, more flexible and, first and foremost, more cost-effective. This will enable you to make the most of your resources and ensure your production process is fit for the future.

TruConnect is synonymous with Industry 4.0 at TRUMPF. The range of solutions connects man and machine through information while covering all steps of the production process – from quotation through to shipping your parts.



TruConnect
Your Smart Factory

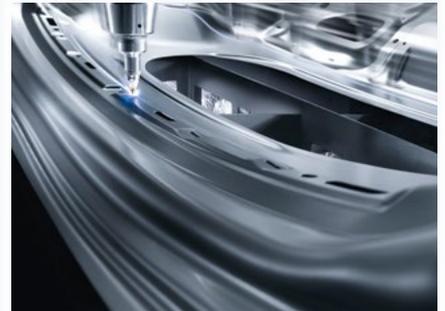


Check out our
YouTube page:
[www.youtube.com/
TRUMPFtube](http://www.youtube.com/TRUMPFtube)



Lasers for manufacturing technology

Whether on a macro, micro, or nano scale, we can offer you the right laser and the right technology to create an innovative and cost-efficient production environment for any industrial application. We can also provide you with appropriate system solutions, application know-how, and consulting services.



Power-supply systems for high-tech processes

From semiconductor manufacturing to solar cell production, our MF and RF generators supply electrical power for induction heating-, as well as plasma and laser excitation at a clearly defined frequency and output, with high levels of reliability and repeatability.



Machine tools for flexible sheet metal and pipe work

From laser cutting and punching to bending and laser welding, we provide our customers with tailor-made machines and automation solutions for a versatile array of sheet machining processes. That includes advice, software, and services – in short, everything you need to achieve reliable production of high-quality products.



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



TRUMPF Laser- und Systemtechnik GmbH
www.trumpf.com