TRUMPF

TruMatic

Punching and lasers in perfect harmony

The best of both worlds

Whether you are a puncher or laser cutter: your customers' quality requirements are on the increase. At the same time, cost pressure is on the increase and batch sizes are decreasing. It is therefore important to make precise calculations – which isn't exactly easy when a part is manufactured on several machines. Your in-house logistics is also becoming more complex. So how do you obtain an overview and reduce your costs? By combining two technologies on a single machine. This simplifies your scheduling as well as your logistics, reduces throughput time – and opens up a tremendous pool of potential orders.

"When I only operated 2D laser cutting machines, I was one of thousands. With my TruMatic, I'm a specialist in producing highly precise combined parts. I can produce these **on just one machine much more precisely than I used to on several different machines.**"

"Without combined machines, there were often problems with components requiring several formings. If we forgot a thread, for example, post-production was required. This interrupted our production processes – and didn't bring in any extra revenue either. Nowadays, **cutting and threading is carried out fully automatically and accurately on a single machine."**

- **Punching:**
  Process parts in 3D

- **Laser processing:**
  Complete freedom when it comes to contours

- **Logistics:**
  Automated and transparent solutions

"As a result of **secondary processes** it was previously difficult for us to make **full use of our machines** around the clock. The automation functions on the punch laser machines have solved these problems for us."

A combination that pays off

With a TruMatic machine, you combine all the benefits of punch and laser processing: The punching head reaches standard contours and formings, whereas the laser cuts more complex contours, allowing you to produce a wide range of parts and even complete challenging orders on a single machine – which definitely pays off.

Lean logistics – gain freedom

If you integrate the process steps cutting, punching and forming on a single machine, that will reduce your calculation risk and the floor space required. Reduced waiting times and workflows such as setup and handling allow you to make multiple savings – and win all the way.
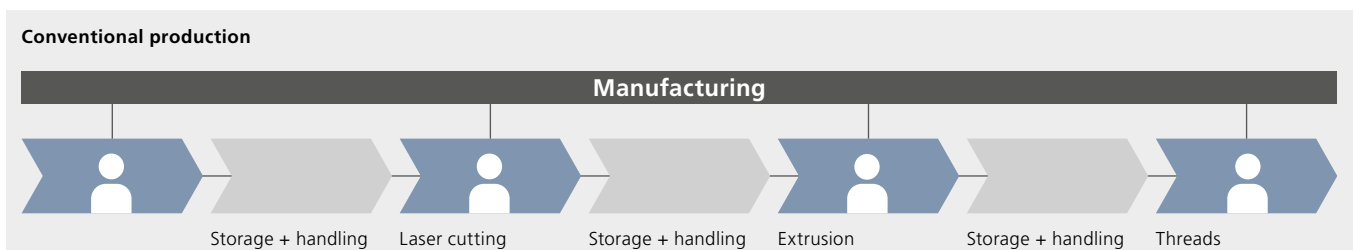
Combined processing – best quality

Combining fits or forming with laser cutting not only reduces the waste you produce, but allows you to manufacture high-precision components in a quality that wasn't possible to achieve when processing on several machines. And that pays off.

Short process chain – simple logistics

With the corresponding automation functions, your TruMatic can handle all parts fully automatically – it takes care of loading, manufacturing, sorting, stacking, unloading, and storage. There are virtually no limits to its loading and unloading capacity. Your machine therefore works round the clock as needed – and pays for itself that much sooner.

Processing on several machines or integrated in a single punch laser machine: Workflows compared

Conventional production

Manufacturing

Storage + handling | Laser cutting | Storage + handling | Extrusion | Storage + handling | Threads
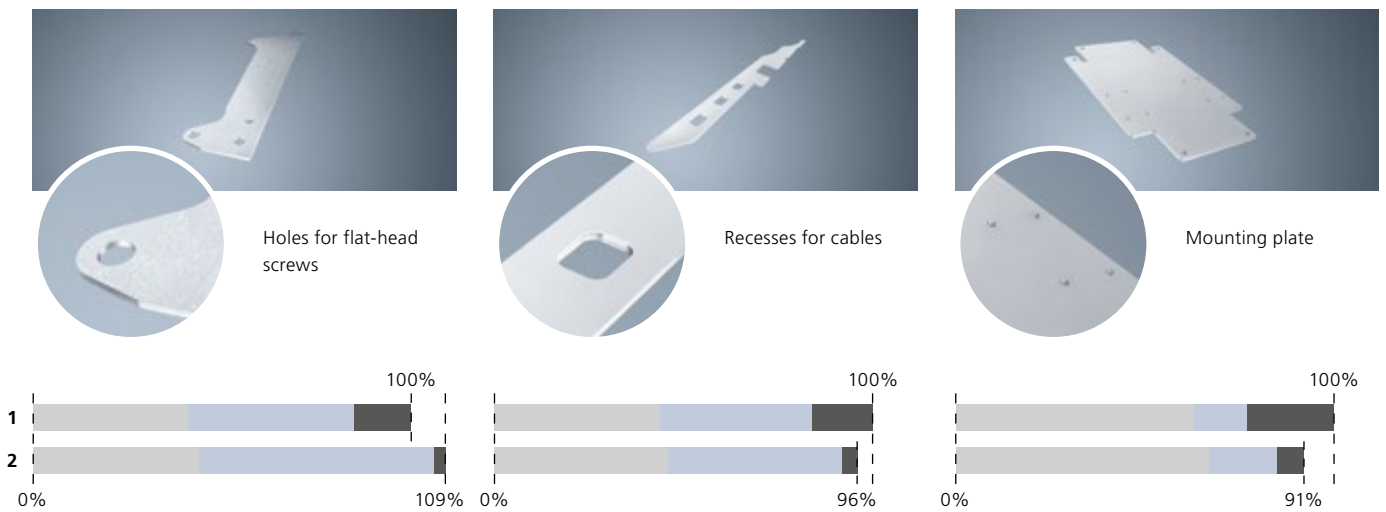
Studies have revealed that intralogistics takes up to 30% of the throughput time. The combined processing is causing this percentage to drop significantly.

Punch laser processing

Manufacturing
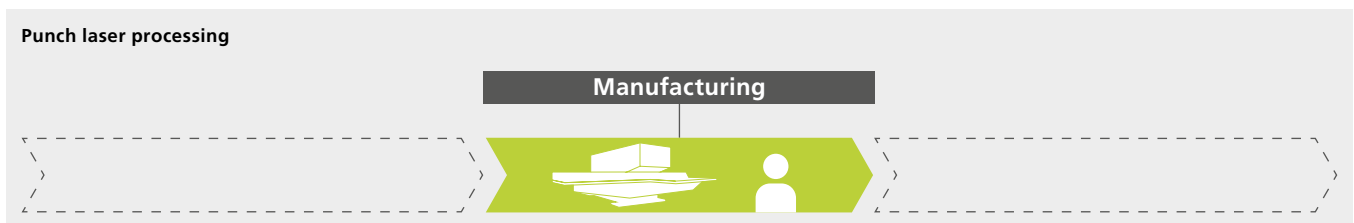
Even with just the laser cut

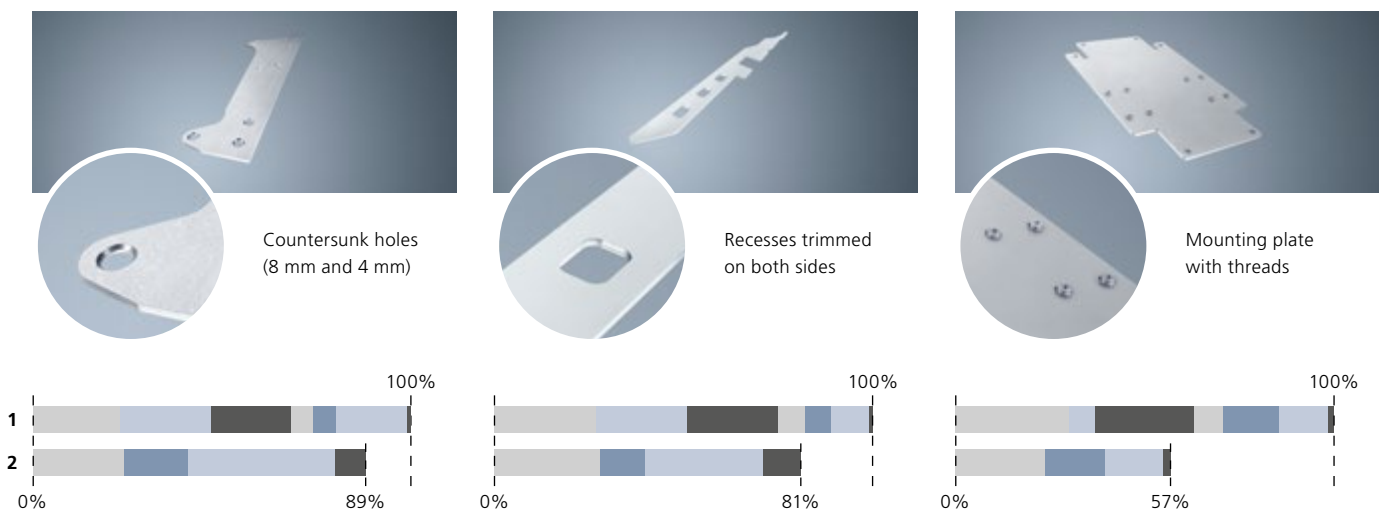**Laser-cut parts, produced on a 2D laser or punch laser machine**
The comparison of part costs shows: Even with traditional 2D parts, the punch laser machine is able to keep up with the pure laser machine, in addition she can remove parts independently.


Holes for flat-head screws

Recesses for cables

Mounting plate

	100%
1	
2	
0%	109%

	100%
1	
2	
0%	96%

	100%
1	
2	
0%	91%

1: 2D laser cutting with a 4-kW solid-state laser in a comparison of part costs with 2: TruMatic 1000 fiber; cost basis = Central Europe

Parts with formed sections: processing on a punch laser machine or 2D laser machine including follow-up process steps
Parts that require additional processing steps face a risk with regard to quality, calculation and expenditure with each change of process. Therefore, the punch laser machine achieves inbeatable part costs.

Countersunk holes (8 mm and 4 mm)

Recesses trimmed on both sides

Mounting plate with threads

	100%
1	
2	
0%	89%

	100%
1	
2	
0%	81%

	100%
1	
2	
0%	57%

1: 2D laser cutting with a 4-kW solid-state laser in a comparison of part costs with 2: TruMatic 1000 fiber; cost basis = Central Europe

- Work preparation
- Process
- Parts logistics
- Setup
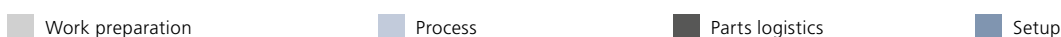
An ideal strategy for your success

Machine

With the aid of the unique machine concept, the tools demonstrate their strengths as comprehensively as possible: The punching head turns them at breakneck speed to any angle you wish – offering you maximum flexibility. The construction methods used by the TruMatic also avoid interfering contours in easily accessible processing space.

Laser tool

CO_2 or solid-state laser: Your intended use determines which laser is best suited to you. For best results, laser, optics, machine and software also need to harmonize perfectly. Which is why we develop and build all lasers ourselves – and provide you with comprehensive support.

Before anyone opts for punch laser processing, they often ask: Does the technology do what it promises to do? Make the right choice: Only TRUMPF offers you 100% integration. Leading worldwide, we develop harmonious overall concepts: Laser, tool system, material flow, sorting of parts, automation and software – all the components of a TruMatic work hand in hand for your success. Benefit from the greatest experience: back in 1979, we were the first suppliers to launch this combined technology onto the market.

Punching tool

Thanks to the large number of designs, polished sections and coatings, you are equipped to fulfill any order. With up to ten punch and die inserts in a single tool, the MultiTool is a true all-round solution – it lets you punch parts with different small punched holes in next to no time. But your TruMatic can do more than simply punch: 90° angles up to 90 mm, threads, a great variety of formings and even lettering can be performed directly on the machine.

The best manufacturing partner for you

Get to know the individual TruMatic machines on the next few pages and find out which is the right partner for you.

TruMatic 1000 fiber

The laser machine at an attractive price that punches, forms and threads –
using clever automation in the narrowest of spaces.

01

Delta Drive
allows the punching head to "fly"

02

Clever removal
of laser-cut small parts

03

Automatic
proper sorting

05

24%
floor space

04

Automated unloading
of parts up to 400 × 600 mm

01

Delta Drive
allows the punching head to "fly"

Compact and dynamic – the sophisticated drive system has been completely re-devised. The patented Delta Drive negates the need for the sheet and supporting table to move in the Y axis, by allowing the punching head to move back and forth. If needed, the punching head moves to the operator and – like the entire internal space – is easily accessible.
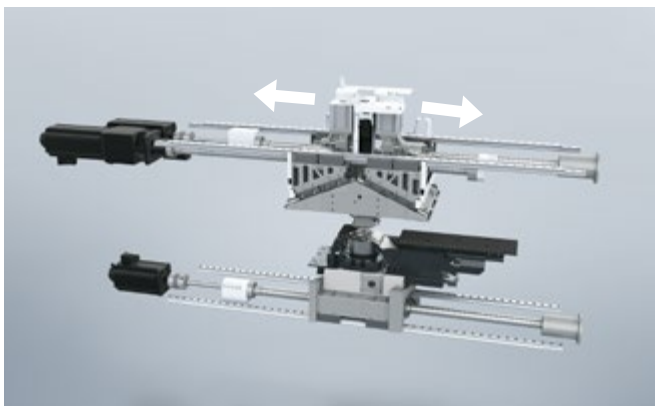
Sophisticated: Delta Drive.

See the Delta Drive in action:
www.trumpf.info/ki5t86

03

Automatic
proper sorting

Your machine sorts parts up to 180 x 180 mm in size automatically. Good parts travel along a chute into an intermediate buffer. Up to four different boxes are placed underneath the machine. The intermediate buffer arrives at the right box and deposits the parts into it. The SortMaster Compact automation also makes your machine more productive. Individually activated suction cups provide high suction cup capacity in the parts to be removed. It can apply suction to narrow tabs and small surfaces and reliably remove small parts.

Suction cup slats with individually activated suction cups.

02

Clever removal
of laser-cut small parts

The Delta Drive uncouples punch and die, thereby enabling new punching applications. A highlight of the combined operation is the industry-safe discharge of small, laser-cut parts. The punch punches in a slightly misaligned manner, so small parts such as punched-out pieces slide along a parts chute into available boxes, rather than falling through the die into the scrap container.
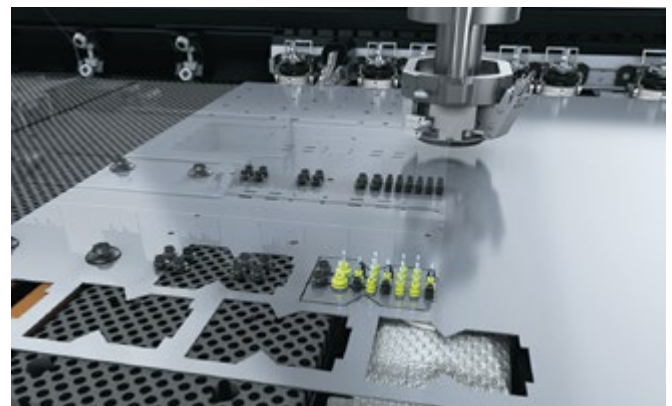

The benefit to you:
The machine automatically separates small parts into good parts and waste.

04

Automated unloading
of parts up to 400 × 600 mm

Thanks to the large parts flap, you can unload parts of up to 400 × 600 mm by automated means. A sensor checks whether the parts fall through the flap. It is therefore easy to remove parts during the punching and lasering process.

05

24 %
floor space

The most compact punch laser machine in the world requires 24% less installation surface than the previous model and even automates in an extremely space-saving manner. The cleverly arranged laser protection also plays a part in this.

▶ **Find out more about the SortMaster Compact:**
www.trumpf.info/yrgdb8

Technical data			
Working range		**Medium format**	**Large format**
Combined processing (X × Y)	mm	2535 × 1250	3000 × 1500[1]
Max. sheet thickness	mm	6.4	6.4
Max. workpiece weight	kg	150	230
Effective punching force	kN	165	165
Laser data			
Max. laser power	W	9	9
Mild steel	mm	3000	3000
Stainless steel	mm	6	6
Aluminium	mm	6	6
Copper	mm	6	6
Brass	mm	6	6
Speeds			
C-axis punching	U/min	180	180
C-axis tapping		M2 – M10	M2 – M10
Maximum punching stroke rate (in increments = 1 mm)	1/min	600	600
Maximum punching stroke rate (in increments = 25 mm)	1/min	310	310
Maximum marking stroke rate	1/min	1000	1000
Tools			
Linear magazine: Number of tools|clamps	Items	17|3	21|3
Rotatability of tools		All tools 360°	All tools 360°
Tool size for punching	mm	All tools 76.2	All tools 76.2
Programmable presser foot		Yes	Yes
Tool change time	s	2.4	2.4
MultiTool (5-station)|(10-station)		Tools (Ø 16 mm)|(Ø 10.5 mm), can be rotated 360°	Tools (Ø 16 mm)|(Ø 10.5 mm), can be rotated 360°
Accuracy: Positioning range	mm	± 0.03	± 0.03
Programmable part removal			
Size of part chute punching	mm	180 × 180	180 × 180
Size of part removal flap laser	mm	400 × 1250[2]	400 × 1250[2]

[1] With repositioning.   [2] Reliable removal up to a max. part size of 400 mm × 600 mm.
Content subject to change without notice. Only specifications in our offer and order confirmation are binding.

TruMatic 3000 fiber

The productive punch laser machine for your sheet metal processing –
forming and tapping included.

01

Scratch-free

thanks to descending die

02

Simple operation

with the new Touchpoint HMI

03

Automatic loading and unloading

with automation solutions

04

Dynamic and compact
thanks to Delta Drive and small footprint

01

Scratch-free
thanks to descending die

The descending die enables scratch-free punching and forming processes. If required, the die can be lowered during positioning, so the sheet does not have any contact with the die – for both punching as well as higher forming dies. When forming downwards, there is no longer the risk of things getting caught.

The descending die ensures scratch-free parts.

02

Simple operation
with the new Touchpoint HMI

It can be very easy to produce punching or punch laser parts – machine operation becomes as intuitive as when using a tablet or smartphone with the new Touchpoint HMI from TRUMPF. It helps you finish the part much more quickly – and even novices will quickly learn how to work with the software.

03

Automatic loading and unloading
with automation solutions

Removal and sorting solutions for small to large parts. The SheetMaster Compact takes over the process-reliable loading of sheets as well as the unloading of microjoint sheets and scrap skeletons. The SortMaster Compact removes and sorts the parts from your punch laser machine fully automatically. Individually controllable suction cups enable optimum part removal, especially for small and complex parts. Your machine automatically sorts parts up to a size of 180 × 180 mm.

Good parts enter an intermediate buffer via a part chute.

The touch display makes work pleasant and easy for the operator.

Equipment Manager Punch*

"With the Equipment Manager Punch, the time-consuming and error-prone process of setting up your punch laser machine by hand is a thing of the past. Our assistance system simplifies your entire setup process and paves the way to the Smart Factory thanks to a digital data flow and warehouse management."

Steffen Wagner, Product Manager – TruPunch and TruMatic

*This product range and information may vary depending on the country. Subject to changes to technology, equipment, price, and range of accessories. Please get in touch with your local contact person to find out whether the product is available in your country.

04

Dynamic and compact
thanks to Delta Drive and small footprint

With the powerful, dynamic Delta Drive, the TruMatic 3000 fiber works particularly productively. It eliminates the need to move the sheet and support table on the Y-axis, ensuring high productivity and process reliability. Compared to a sheet-mover machine, the new TruMatic 3000 fiber saves 25% of the installation area.

Small footprint thanks to compact design.

Technical data			
Working range		**Medium format**	**Large format**
Combined processing (X × Y)	mm	2535 × 1250	3050 × 1550[1]
Max. sheet thickness	mm	6.4	6.4
Max. workpiece weight	kg	150	230
Effective punching force	kN	180	180
Laser data			
Average power consumption during production	kW	8	8
Max. laser power	W	3000	3000
Mild steel	mm	6	6
Stainless steel	mm	6	6
Aluminum	mm	6	6
Copper	mm	6	6
Brass	mm	6	6
Speeds			
C-axis punching	U/min	350	350
C-axis tapping		M2 – M10	M2 – M10
Maximum punching stroke rate (in increments = 1 mm)	1/min	800	690
Maximum punching stroke rate (in increments = 25 mm)	1/min	400	400
Maximum marking stroke rate	1/min	1000	1000
Tools			
Linear magazine: Number of tools|clamps	Items	21|3	21|3
Rotatability of tools		All tools 360°	All tools 360°
Tool size for punching	mm	All tools 76.2	All tools 76.2
Programmable presser foot		Yes	Yes
Tool change time	s	0.3	0.3
MultiTool (5s)		Tools (Ø 16 mm), can be rotated 360°	Tools (Ø 16 mm), can be rotated 360°
MultiTool (10s)		Tools (Ø 10.5 mm), can be rotated 360°	Tools (Ø 10.5 mm), can be rotated 360°
Accuracy: Positioning range	mm	± 0.03	± 0.03
Programmable part removal			
Size of part chute punching	mm	180 × 180	180 × 180
Size of part removal flap laser	mm	400 × 600	400 × 600

[1] With repositioning.
Content subject to change without notice. Only specifications in our offer and order confirmation are binding.

TruMatic 5000

The highly productive punch laser production cell automates your material flow, including loading and unloading, palletizing and sorting.

01

Automatic loading, unloading and sorting

with the new SheetMaster

02

Improved process reliability

one cutting head for everything

05

Scrap skeleton disposal

is handled by the GripMaster

04

Autonomous production

with automatic tool
and nozzle changer

03

6 kW laser power

for maximum throughput
and quality

The TruFiber 6001 enables you to achieve an unprecedented level of productivity.

01

Automatic loading, unloading and sorting
with the new SheetMaster

The SheetMaster (new generation) ensures the fast and reliable loading, unloading, separating, palletizing and sorting of your finished parts. Thanks to the flexible gripping unit with individually controllable suction cups, both simple and complex parts can be removed quickly and safely. This saves you from having to intervene manually.

The SheetMaster loads raw sheets and relieves the burden on specialist staff.

02

Improved process reliability
one cutting head for everything

Replacing a cutting head? Not necessary! The cutting head masters all material types and thicknesses – which reduces your downtime and increases your productivity.
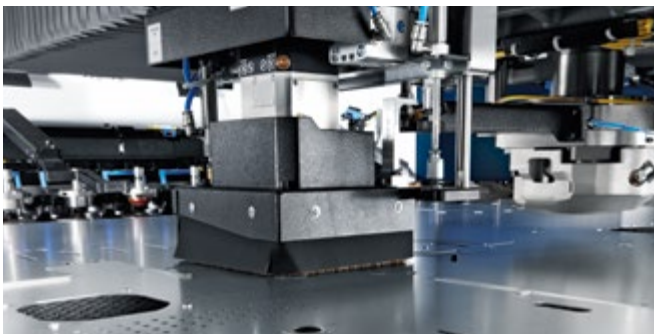
Maximum productivity with one cutting head.

03

6 kW laser power
for maximum throughput and quality

Maximize your throughput and part quality with the powerful solid-state laser. It guarantees a high level of efficiency and excellent energy efficiency.

04

Autonomous production
with automatic tool and nozzle changer

Whether you are changing a nozzle or a tool: thanks to a wide range of automation components, the TruMatic 5000 is ideal for multi-shift operation.

Production around the clock with high process reliability.

05

Scrap skeleton disposal
is handled by the GripMaster

The new GripMaster safely removes scrap skeletons and stacks them automatically on a scissor table. This increases your machine runtime and speeds up order processing.

The GripMaster takes the strain off your personnel.

Technical data			
Dimensions		**Medium format**	**Large format**
Width	mm	17132	18880
Depth	mm	10760	11260
Height	mm	3700	3700
Max. stroke rate			
Punching (E = 1 mm)	1/min	800	690
Marking	1/min	1000	1000
Working area			
Punching mode X-axis	mm	2500	3000
Punching mode Y-axis	mm	1250	1550
Laser operation X-axis	mm	2500	3000
Laser operation Y-axis	mm	1250	1550
Combined operation X-axis	mm	2535	2535
Combined operation Y-axis	mm	1250	1550
Max. sheet thickness	mm	6.4[1]	6.4[1]
Max. workpiece weight	kg	150	230
Max. punching force	kN	180	180
Tools			
MultiTool tool changing time	s	0.5	0.5
Number of tools|clamps	Items	21|3	21|3
Laser-specific data – TruFiber 6001			
Max. laser power	W	6000	6000
Max. sheet thickness mild steel	mm	8	6
Max. sheet thickness stainless steel	mm	8	6
Max. sheet thickness aluminum	mm	5	5
Max. sheet thickness copper	mm	6	6
Max. sheet thickness brass	mm	6	6
Part removal			
Max. part size fixed chute, punching (with moving table)	mm	180 × 180	180 × 180
Max. part size part removal flap laser	mm	400 × 600	400 × 600
Loading the SheetMaster			
Min. sheet size	mm	800 × 800	800 × 800
Max. sheet size	mm	2500 × 1250	3067 × 1532
Min. sheet thickness	mm	0.5	0.5
Max. sheet thickness	mm	0.8	6.4|8.0[2]
Max. sheet weight	kg	240	240|300[2]
Unloading with SheetMaster			
Min. part size (punching parts)	mm	140 × 120	140 × 120
Min. part size (laser cut parts)	mm	70 × 30	70 × 30
Max. stacking height (unloading platform)	mm²	340[3]	340[3]

[1] 8 mm machining expected to be possible from fall 2024.　[2] Additional suction package needed.　[3] Without load carrier.
Content subject to change without notice. Only specifications in our offer and order confirmation are binding.

TruMatic 7000

Productive high-end machine combining the benefits of punch and laser processing while maximizing value for money.
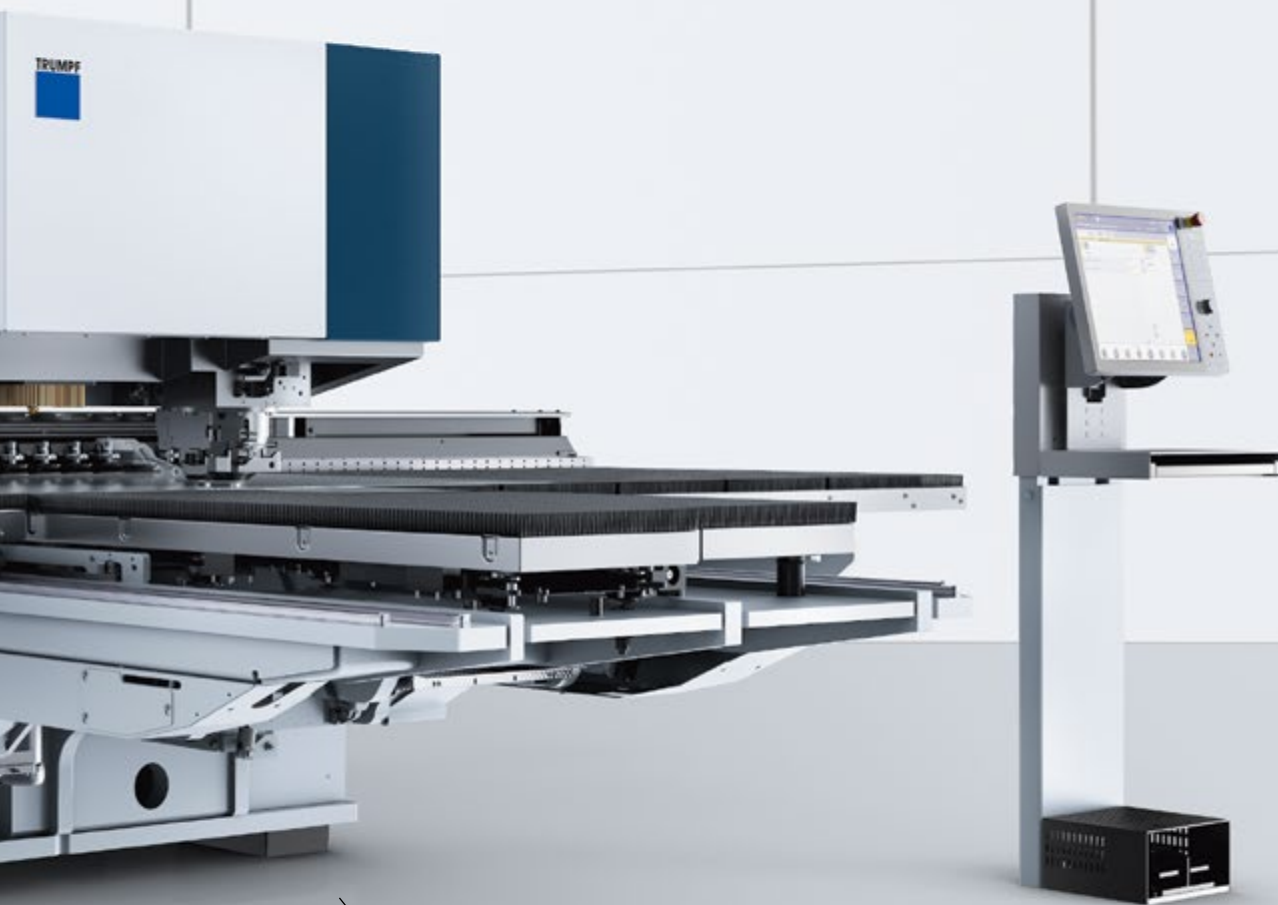
01
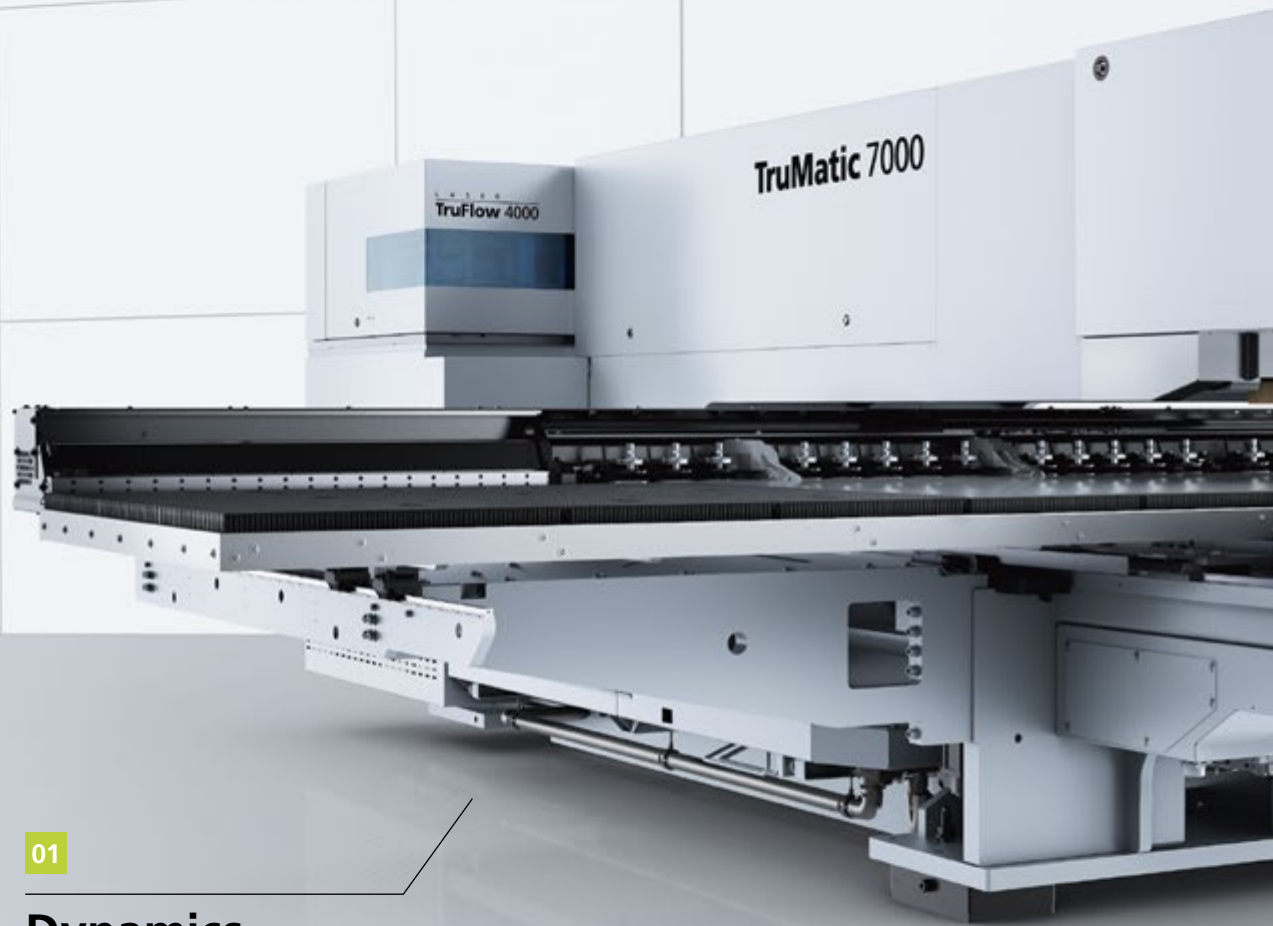
Dynamics

due to additional axes

02

Quality

reliable and convincing

04

Automation
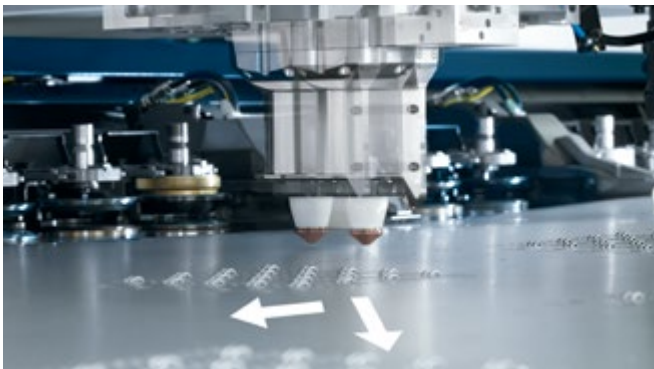
highly productive and intelligent

03

Forming

high-quality and versatile

01

Dynamics
due to additional axes

The TruMatic 7000 is an extremely fast and dynamic machine, particularly if there are frequent changes of direction. Even with delicates, small parts and corners, it plays off its strengths and cuts quickly and economically.

You can even cut small parts and corners in an extremely dynamic manner.

02

Quality
reliable and convincing

From combined processing to parts disposal: Due to the descending die, brush tables, and part removal flaps, the machine processes and transports your material particularly gently. The CO_2 laser TruFlow provides a high-quality edge without flash.
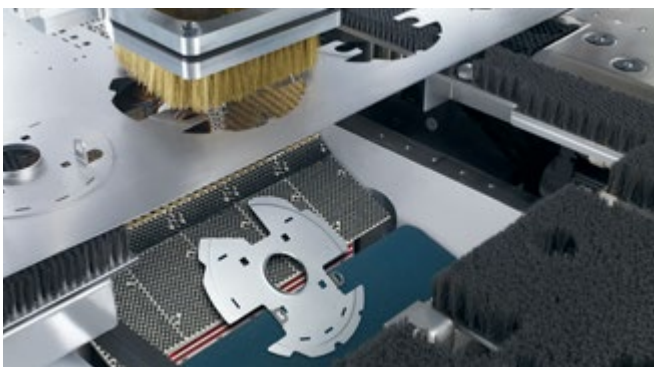
Brush beds gently remove your parts.

03

Forming
high-quality and versatile

The active die ensures the best possible part quality, as it can move both up and down. This enables you to produce previously unheard of sizes and heights – all while increasing your added value by offering complete processing of parts. At the same time, the downward travel motion prevents scratches.
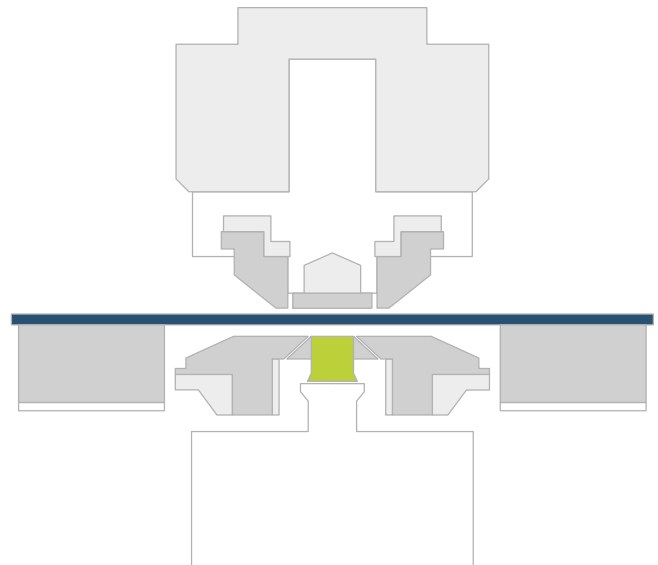
The active die increases your added value.

04

Automation
highly productive and intelligent

Together with the SheetMaster and ToolMaster, the TruMatic 7000 becomes a really fast and reliable solution. The dynamic SheetMaster, for example, unloads up to four parts simultaneously, possesses a flexible suction device positioner and an additional longitudinal axis. What's more, the one-cutting-head strategy and nozzle changer mean your machine is also ready for running in automated mode.

Together with the SheetMaster and ToolMaster, the TruMatic 7000 becomes a fully automated solution that can run around the clock.

Technical data			
Working range		**Medium format**	**Large format**
Combined processing (X × Y)	mm	2500 × 1250	3050 × 1550[1]
Max. sheet thickness	mm	8	8
Max. workpiece weight	kg	200	280
Effective punching force	kN	220	220
Laser data			
Max. laser power	W	4000	
Mild steel	mm	8	
Stainless steel	mm	8	
Aluminum	mm	6	
Speeds			
C-axis punching	U/min	500	500
C-axis tapping		M2 – M10	M2 – M10
Maximum punching stroke rate (in increments = 1 mm)	1/min	1200	1200
Maximum punching stroke rate (in increments = 25 mm)	1/min	540	540
Maximum marking stroke rate	1/min	3000	3000
Tools			
Linear magazine: Number of tools|clamps	Items	22|3	21|4
Rotatability of tools		All tools 360°	All tools 360°
Tool size for punching	mm	All tools 76.2	All tools 76.2
Programmable presser foot		Yes	Yes
Tool change time	s	0.3	0.3
MultiTool (5s)		Tools (Ø 16 mm), can be rotated 360°	Tools (Ø 16 mm), can be rotated 360°
MultiTool (10s)		Tools (Ø 10.5 mm), can be rotated 360°	Tools (Ø 10.5 mm), can be rotated 360°
Accuracy: Positioning range	mm	± 0.03	± 0.03
Programmable part removal			
Size of part removal flap punching	mm	500 × 500	500 × 500
Size of part removal flap laser	mm	500 × 500	500 × 500
Additional axes for the highest dynamics			
X parallel high speed axis Xp		Yes	Yes
Y parallel high speed axis Yp		Yes	Yes

[1] With repositioning.
Content subject to change without notice. Only specifications in our offer and order confirmation are binding.

Earn more automatically

Automated, your TruMatic works even more productively – round the clock if necessary. The special thing about it is: You can upgrade any automation components at any time, as TRUMPF machines are designed in such a way that they literally grow with your tasks.

Loading and unloading

With the SheetMaster Compact, you can load raw sheets or pre-cut parts in an automated and reliable manner. You can also unload microjoint tables and scrap skeletons easily and safely.

Loading and unloading + sorting

The SheetMaster doesn't just load and unload your machine, it also sorts the parts reliably.

Sorting

The SortMaster Box and the SortMaster Box Linear sort small parts by automated means. With the SortMaster Compact you can sort parts and stack them.

Potential Machines	SheetMaster	SheetMaster Compact	Cart systems	SortMaster Palett	SortMaster Box
TruMatic 1000 fiber		■			
TruMatic 3000 fiber		■			
TruMatic 5000	■	■	■		
TruMatic 7000	■		■	■	■
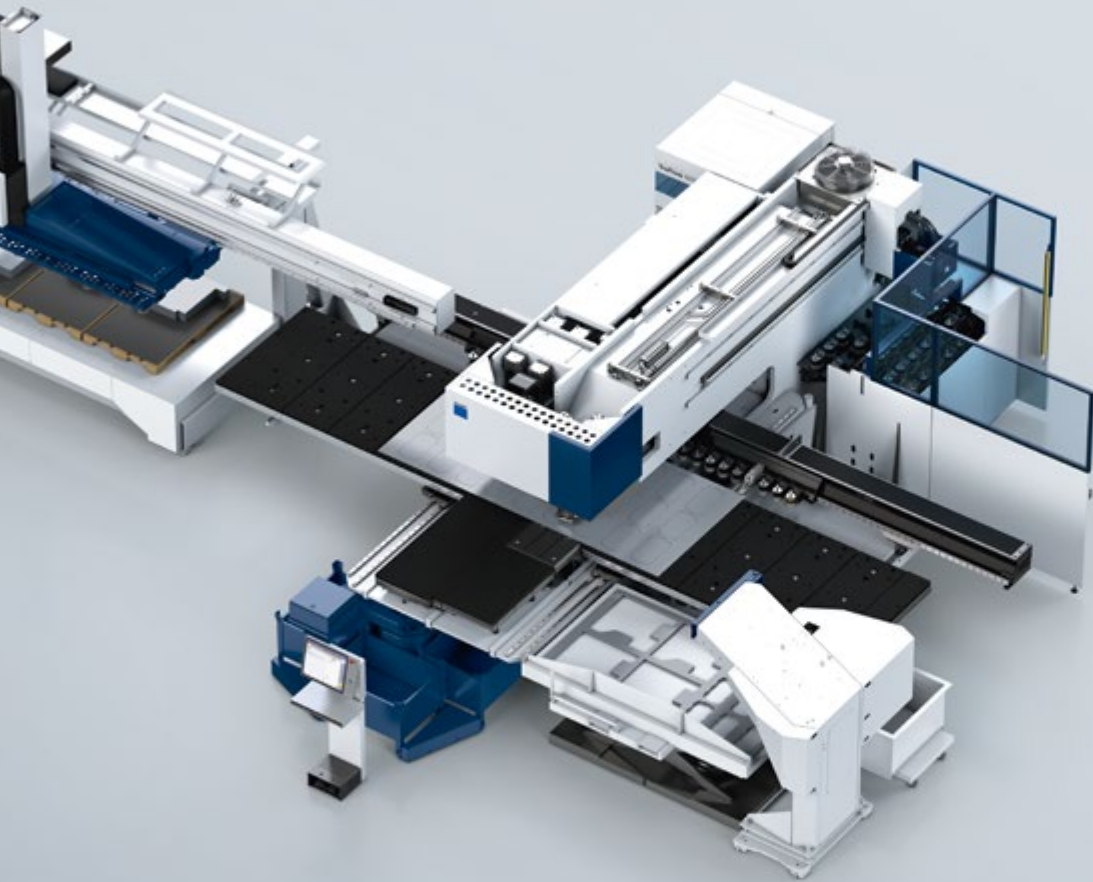
Disposal

With the GripMaster and SheetMaster Compact, you can keep a firm handle on scrap skeletons and remainder strips. The ShearMaster disposes of scrap in handy strips.

Changing tools

Automated, your TruMatic changes tools quickly, safely and comfortably – with the ToolMaster, the ToolMaster Linear or a tool changer integrated in the SheetMaster.

Storage connection

With the right storage system, you can simplify the material transfer and production process. Utilize your machines more effectively and save space, time and money.

SortMaster Box Linear	SortMaster Compact	GripMaster	ShearMaster	ToolMaster Linear	TruStore and Large storage
	■				
	■				
		■		■	■
■		■	■	■[3]	■

[1] SheetMaster with integrated tool changer.   [2] ToolMaster.   [3] ToolMaster Linear.

Punching process chain

The punching process is a decisive process when creating sheet metal parts. Careful planning, state-of-the-art technologies and continuous optimization make the process unbeatable in many cases. TRUMPF offers you seamless support for the entire punching process chain: from design and work preparation through to production and optimization.
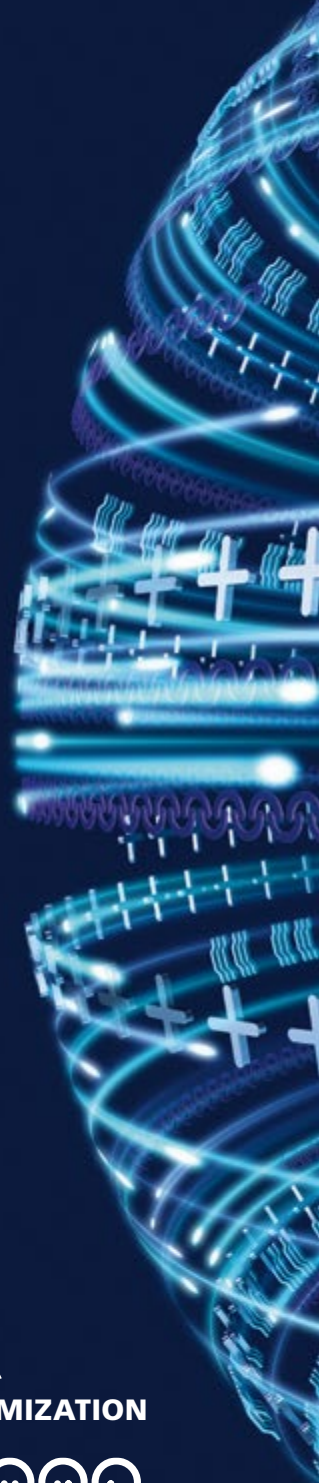
DESIGN

More know-how
through real and digital knowledge transfer.

WORK PREPARATION

More efficiency
through simple and quick setup processes.

PRODUCTION

More performance
of punching, forming, laser cutting and automation.

OPTIMIZATION

More perfection
through digital optimization solutions.

BEYOND THE PUNCH

More information on the punching process chain
can be found at www.trumpf.com/en_INT/products/
machines-systems/punching-machines/beyond-the-punch/

Increase productivity with know-how

Benefit from years of experience! Seminars, workshops or application support get you ready for punch and laser processing. The PunchGuide also provides you with exclusive, freely accessible tips on punch and laser processing and includes a number of practical examples. Maybe you will even discover new opportunities for future orders?

Our support for your design

Benefit from unique knowledge and extensive experience in punching technology. We offer you successful software solutions and AI applications for design verification and optimization. In addition, our offer includes an extensive range of training sessions and workshops on sheet metal construction along with personal support in the event of queries. Your benefits at a glance:

⊕ **Experts in sheet metal design:** Access expert knowledge through training courses, workshops and TRUMPF customer support.

⊕ **Knowledge and AI:** Reliably check your designs with our software and AI solutions.

⊕ **Higher part quality:** With our practical tips and tricks, you can produce parts cost-efficiently and to a high standard of quality right from the start.

PunchGuide: Online punching knowledge

⊕ **Simply get started:** Discover creative design ideas that are easy to implement, even for beginners.

⊕ **Save time and money:** Gain knowledge and punching expertise to design parts in a way that saves both time and costs.

⊕ **Improve part quality:** Thanks to practical tips and tricks, you can implement new components reliably – right from the start.

⊕ **Use templates:** You can easily download CAD data from virtual sample parts based on practical punching applications and use it as inspiration for your design.

❯ **Sounds interesting?**
This way to our PunchGuide:
www.trumpf.com/s/punchguide

More efficient work preparation

Prepare your work easily with the right tools for programming and setup.

Create your NC programs with TruTops Boost.

Quick and simple programming

Speed up your work preparation with NC programming with the TruTops Boost software from TRUMPF.

Fast and efficient measurement and setup

Minimize sources of error and increase process reliability during setup with the Punch Equipment Manager and QuickSet from TRUMPF.

Programming as a service

Have your NC programming created as a service from ScaleNC.

Optimum programming process

Optimize your part quality, process reliability and cost-effectiveness.

A boost of power at the touch of a button: With the Boost button, you can control and program your tasks interactively, in next to no time. TruTops Boost revolutionizes your work with automated processes, regardless of the technology being used. Thus, the innovative software very easily provides you with suggestions for solutions. Recurring orders are recognized and can be optimally programmed to a consistently high quality.

Your Smart Factory

80%

Indirect processes make up 80% of your production time – this is where the greatest potential for saving lies.

Discover what potential networked production offers for you with two example scenarios: www.trumpf.com/s/smart-factory

Gain more freedom with networking: You see more, know more, and get the best out of your production system. With TruConnect, the synonym for Industry 4.0 at TRUMPF, you can design your Smart Factory step by step. The pragmatic solutions from TRUMPF support you on your path towards networked production, helping you to make your entire process more transparent, more flexible, and above all more cost-effective.

For companies big and small: From the simple product solution right through to fully networked production

- **Start simply** with machines that are equipped for networking as standard.

- **Customize step by step** with automated machines or autonomous processing cells embedded in a production solution.

- **Enjoy full networking** with a continuous production solution, from order to delivery.

Production flow with Oseon

Integrate your punch laser machines into Oseon – a comprehensive solution for production and material flow control. You have an overview and control of all the relevant processes in your sheet metal processing in just one system: with Oseon, you can optimize your workflows and unleash the potential of your production.

You can find **further information** on networked production here:
www.trumpf.com/s/smart-factory
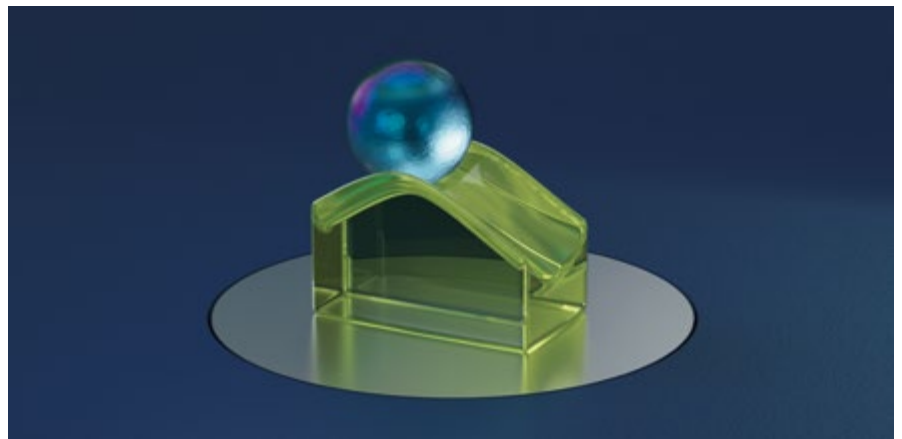
TruServices.
Your Partner in Performance

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

EMPOWER

If you want to create the best conditions for successful production, we will support you in this.
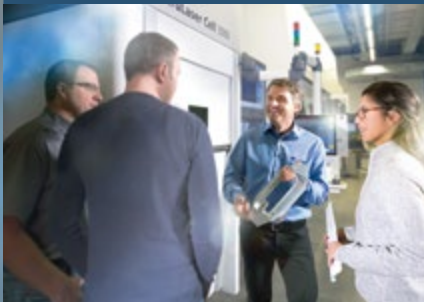
Training – reach your full potential with professional development

If you are well trained, you can fully utilize the potential of your lasers, laser systems, machines and software, and secure key competitive advantages. In the seminar on fixture design, for example, you will learn how to manufacture fixtures economically from sheet metal.

SUPPORT

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

Service app – the app for your service messages

Whether it's a technical problem, software, a spare part or a question concerning maintenance: with the Service app and your free MyTRUMPF account, you can send your service messages quickly and easily to our Technical Service team at any time.

IMPROVE

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

Service agreements – get just the service you need

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

Financing	Training	Technical Service	Genuine parts	Tools	Service agreements

|				
Software	Process optimization	Monitoring & analysis	Product enhancements	Pre-owned machines

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

Working in perfect harmony for your success

From the machine to the laser and the optical system, to the technology data: Intelligent machine functions are based on the interaction of different components. This is why we focus on integrated solutions down to the last detail – the best basis for your success.

Result
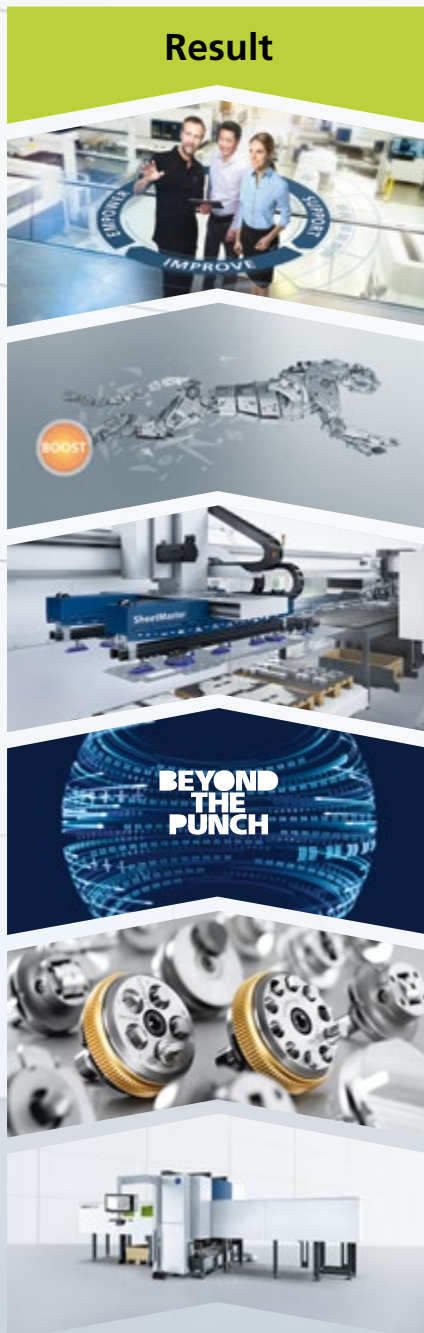
You have an optimally available production system.

TruServices

We are always there for you with our comprehensive range of services and a global service network.

Software

With software solutions from TRUMPF, you can optimize your manufacturing process. The TruTops Boost programming system enables you to perfectly coordinate your software and machine.

Automation

Turn your punch laser machine into a fully automated production center – using turnkey concepts and modular components from a one-stop supplier.

Process expertise

Make the most of all the advantages of punching: we support you along the entire process chain, including design, work preparation, production and optimization.

Punching tools

Always choose the right option from the world's largest range of punching tools – plus expert advice and custom-made products that work right the first time.

Machine

TruMatic machines combine the benefits of punch and laser processing. Be it a small lot size or large series: produce a wide range of parts and solve demanding tasks.

Passion is what drives us

Whether it's production and manufacturing technology, laser technology, or material processing – we develop highly innovative products and services for you which are tailored to your industry and which are absolutely proven and reliable. We put everything we've got into giving you a compelling, competitive edge: expertise, experience, and above all passion.

**Check out our YouTube channel:** www.youtube.com/ @TRUMPFtube

Machines & systems
Laser cutting, punching, bending, laser welding: With custom-fit machine tools, laser systems and automation from TRUMPF, you can master flexible sheet metal and tube processing. Not forgetting our solutions for additive manufacturing.

Lasers
Whether you are cutting, welding, marking or processing surfaces, lasers from TRUMPF are the universal tools for industrial applications – in the macro, micro and nano ranges. In addition, you will get software solutions and benefit from application knowledge and consulting.
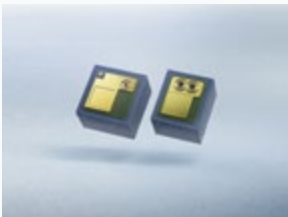
VCSEL solutions & photodiodes
Laser and photodiodes from TRUMPF Photonic Components come into their own in numerous applications: in both the industrial and consumer markets and even in optical data communication. In the TruHeat VCSEL systems, millions of VCSELs (Vertical Cavity Surface Emitting Laser) generate infrared heat, which is used for laser heat treatment.

Power electronics
Nothing's hi-tech without a process power supply: With generators for plasma technology, industrial heating, battery inverter systems or microwave amplifiers, you get power at the frequency and performance you need.

Solutions for your future
Take advantage of digital networking opportunities: we partner with you on the path to networked production, delivering pragmatic, economical solutions that make your processes both more transparent and flexible.
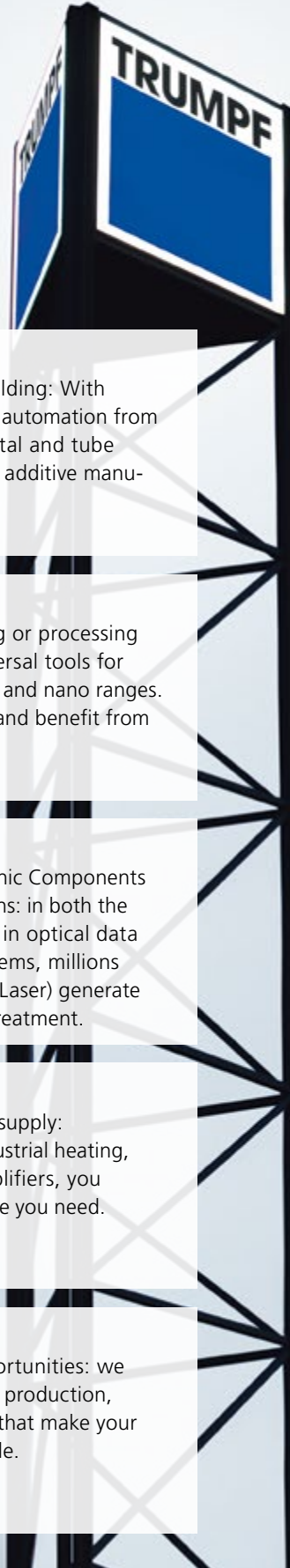
TRUMPF

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