



**TRUMPF**



TruServices

# Product Enhancements



# Contents



## Your machine can do more

General Information  
Functional enhancement categories

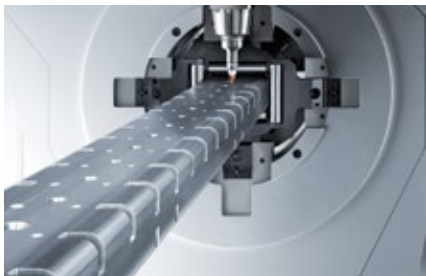
Page **4**



## Functional enhancements for your machine

TruLaser

Page **14**



TruLaser Tube

Page **36**



TruPunch / TruMatic

Page **48**



TruBend

Page **82**



Cross-technology

Page **106**

TruServices

# Your Partner in Performance

## What do you need for your success?

To be successful in the future, you need the right services to keep you on track for the long term. Do you want to create the perfect manufacturing environment or make the best use of your TRUMPF equipment and tailor it to your evolving needs? Whatever the case, we're on hand to help you maximize your added value and lock those benefits in. TRUMPF is the right choice if you're looking for a reliable partner that can support you with a wide range of custom solutions and service packages, ensuring that your manufacturing business continues to be a resounding success.

### **EMPOWER**

Looking to create the best conditions for successful manufacturing? We can give you the support you need.

### **SUPPORT**

Are flexibility and machine availability top priorities in your ongoing manufacturing activities? We're on hand to help.

### **IMPROVE**

Do you want to gradually shift your production processes towards maximum added value? We can achieve that together.





Cross-technology

TruBend

TruPunch / TruMatic

TruLaser Tube

TruLaser

Your machine can do more

# Keep growing

## Guiding the way towards new functions

What enhancements are, in principle, available for your machine? What can these functions do? And what added value can this generate for your company?

This catalog will provide you with a swift and targeted overview of product enhancements that will enable you to respond flexibly to new requirements. Are you keen to enhance your quality, switch to automated production and make your business more profitable? If so, we suggest you use this catalog as a simple orientation system for a large number of solutions that will enable you to further develop your machine at any time.

## Well advised from start to finish

One of our experienced consultants will guide you through the entire product enhancement process. Our consultants will check your machine configuration to see if it is possible to fulfill your enhancement requests. In doing so, they will take the specifications of your machine (i.e. electrics, mechanics, software and layout) into account and draw up a quotation for you. They will be there to assist and support you at any time, ensuring everything runs smoothly in accordance with a clearly defined schedule. And our specially-trained service engineers will take care of installation, startup and operation for machine operators on site.



Please feel free to contact us!

Are you interested in a particular product enhancement? Or are you wondering how you could make your production more cost-effective and efficient or how you could become more flexible in meeting demands? If so, please don't hesitate to contact us! Just imagine, you may be just a phone call away from getting the full potential of your TRUMPF machine!

**TRUMPF Werkzeugmaschinen GmbH + Co. KG**

**Telephone: +49(0) 7156 303-34140**

**Fax: +49(0) 7156 303-30309**

**E-mail: retrofit.tws@de.trumpf.com**

We recommend you having your machine number at hand when you contact us. This number will enable us to retrieve the technical specifications of your machine and to provide you with the relevant information and advice.

## Product enhancements: The sky is the limit

When you opted for TRUMPF machinery, you also signed up for flexibility, investment security and innovation reliability. And we are once again delivering on precisely this promise with the comprehensive range of product enhancements we provide. This is because product enhancements will enable you to benefit from technological advancements at any time and to respond flexibly to customer requirements without having to change machines.

To this end, we have developed a portfolio of retrofittable functions and useful accessories that will enable you to implement all your production optimization projects cost-effectively. You will have peace of mind, knowing that each technology in the TRUMPF portfolio will provide you with exactly the right solution to meet your specific needs.



## Setting profitable standards

It pays off:  
Up to 30 % more parts.

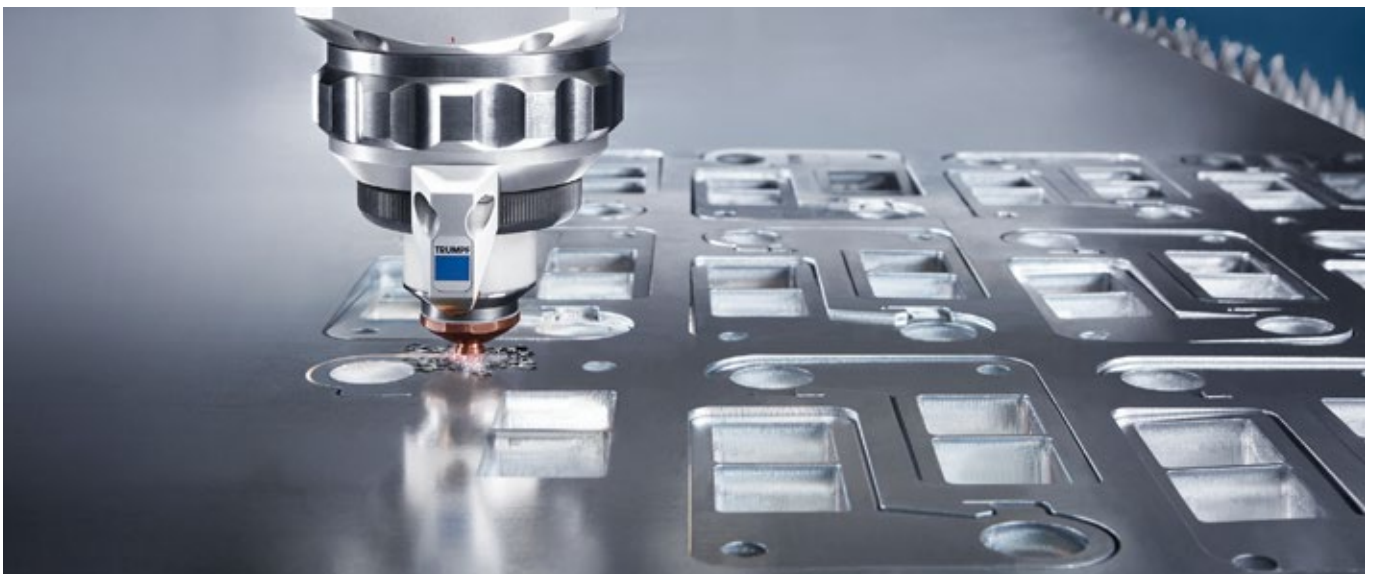


CoolLine, for example, proves that product enhancements improve the economic efficiency of your production in an intelligent and effective way.



## Standard product enhancements

Standard product enhancements are retrofittable machine functions. They are simply retrofitted to your existing machines if the need arises. The functions that can be added are defined at the very onset when the machine was designed. This gives rise to modular machine concepts that guarantee perfect functionality and easy installation further down the line. Each retrofit kit undergoes a broad range of tests and is adapted optimally to the machines.



### Take CoolLine as an example

The CoolLine function is a typical example of a standard product enhancement. The challenge behind the development of CoolLine is the rise in temperature in particularly thick steel during laser cutting. The common means of preventing the sheet from overheating owing to excessive temperature is to keep nested parts as far apart as possible. However, this inevitably creates a lot of material waste.

This is where CoolLine comes into play. During processing, a special nozzle sprays a water mist coaxially around the laser beam onto the workpiece. This has a significant local cooling effect and results in a nearly constant temperature during the cutting process.

This allows parts to be nested closer together than was previously possible, making much more efficient use of the material. This means up to 30% more parts can be produced from a single sheet.

# Automatically enhancing productivity

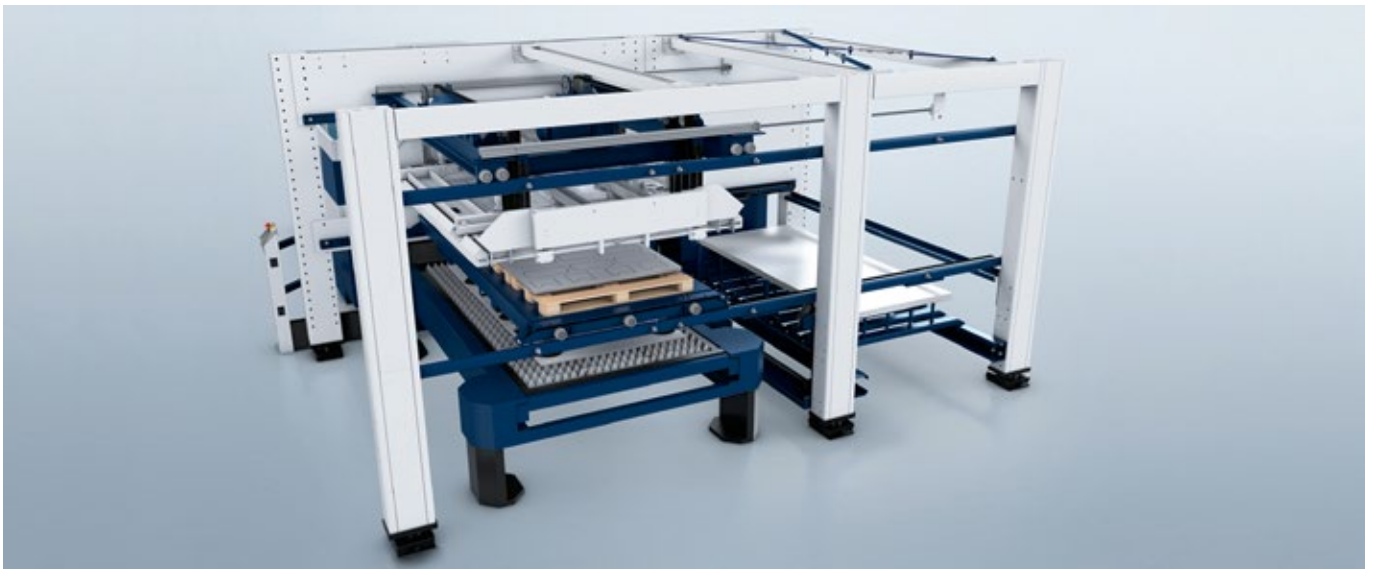
Load and unload in  
less than 90 seconds.



Automation components such as the LiftMaster Compact are good examples of how automation can increase productivity.

## Automation components

Automated machines pay themselves off quickly as they speed up the work steps, process a larger number of parts and can run 24/7. Make sure you seize these benefits with an automation solution that is tailored specifically to your machine, from semi-automated loading right up to fully-automated production cells.



## Take LiftMaster Compact as an example

Manual loading and unloading of sheets is one of the key drivers for throughput times in laser cutting. This is precisely where the LiftMaster Compact comes into play. LiftMaster Compact is the fastest and most compact unit for automatic loading and unloading for many TruLaser machines.

LiftMaster Compact owes its extremely short cycle time of less than 90 seconds, among other things, to the fact that loading and unloading are carried out in parallel. This is achieved by using the so-called synchronous loader. The automation unit transports raw sheets onto the pallet changer of the laser machine while a separate rake frame removes the finished cut parts and places them on top of the suction frame. This saves time, money and space.

Depending on your requirements, you can combine the LiftMaster Compact with additional components such as the PartMaster. In this case, the cut blanks are automatically conveyed to the PartMaster sorting station. The blanks are moved along the two conveyor belts until they arrive at the machine operator's ergonomic sorting station.

# Fulfilling individual wishes

Flexibility is the key competency



Customized solutions are every bit as unique as your company.  
As customized concepts, they will certainly give you a competitive edge.



## Customized solutions

Do you have an idea or a specific request that cannot be implemented with standard product enhancements or automation components from this catalog? If so, we will try to find a customized solution that is tailored specifically to your needs. Depending on your requirements, we cooperate closely with experts from other relevant areas, i.e. developers, suppliers and manufacturers.



## Take storage connections as an example

As the name indicates, “customized solutions” are as unique as the manufacturing companies themselves. So the implementation scenarios that could be, and indeed have been, implemented are just as diverse.

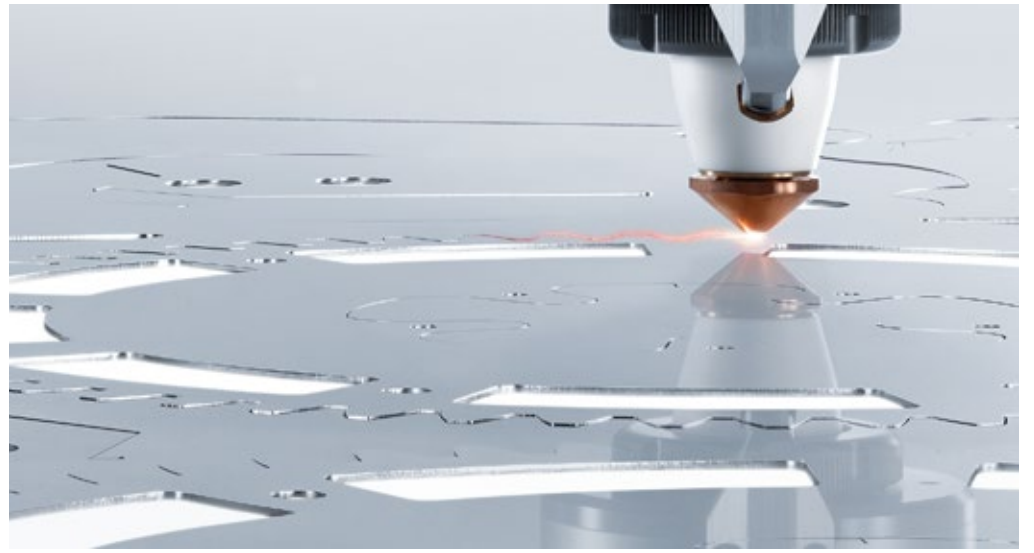
Automatic storage connections are an impressive example of the potential benefits customized solutions can offer. It is not possible to define standardized retrofit kits to do this. Rather, the customer's specific conditions and all the interfaces need to undergo comprehensive technical tests so that existing non-automated or semi-automated machines can be connected to storage systems. Machine safety is also of paramount importance in this context. After all, every storage system has its own layout. In fact, no two storage systems are the same.

In our example illustrated above, a fully-automated TruLaser 5030 fiber with the LiftMaster Compact has been combined with the TRUMPF TruStore 3030 storage system. This means the raw sheets are automatically removed from the compact storage and are conveyed to the laser cutting machine.

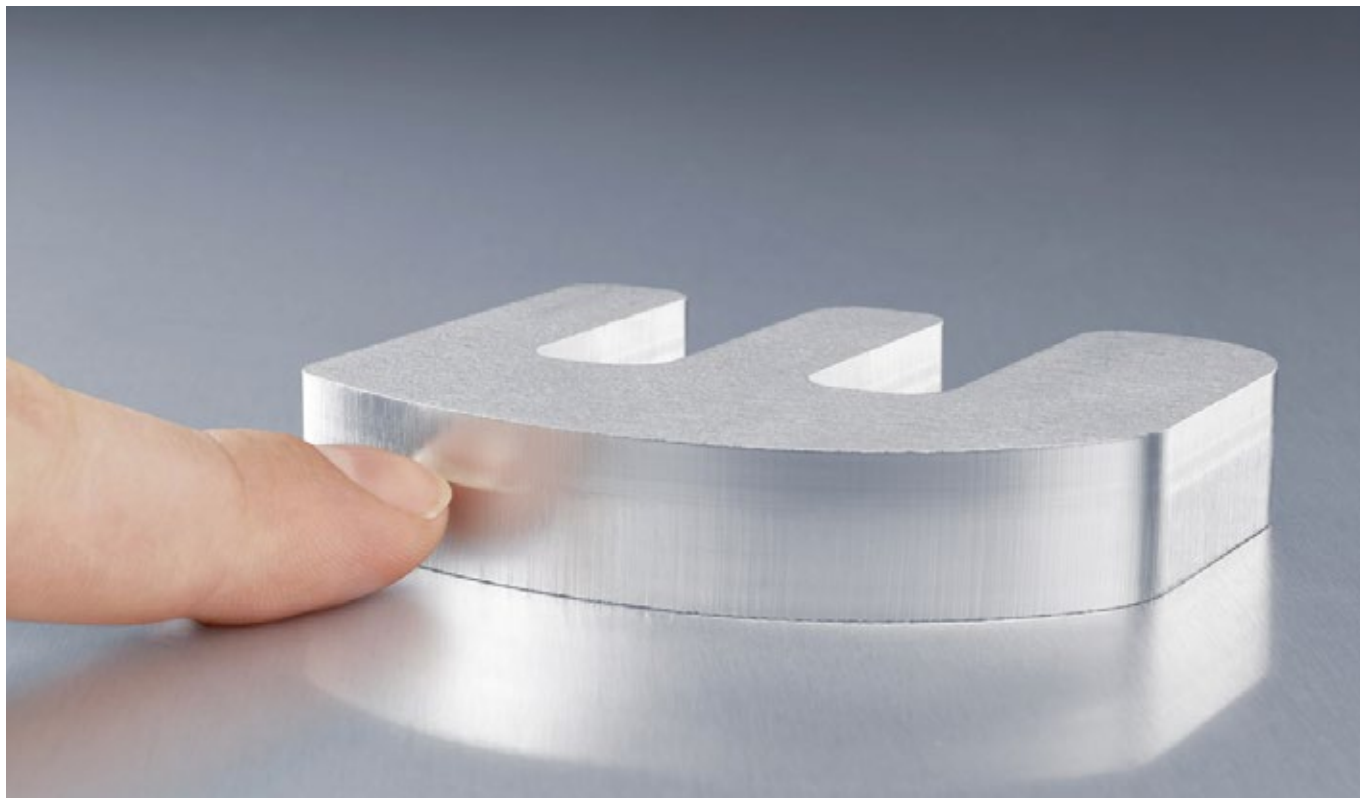
This storage system can be combined effortlessly both with your TRUMPF 2D laser cutting machine and your punching or punch laser machine. The TruStore 3000 series comes with a storage tower and pallet picker crane as standard features.

# TruLaser

		TruLaser									
		1030 fiber	2030 fiber	2030 fiber	3030 fiber	3030 Lean Edition	3030	3040 fiber	3040	3060 fiber	
		(L88)	(L72)	(L82)	(L49)		(L20)	(L50)	(L32)	(L66)	
	Page										
<b>Standard product enhancements</b>	<b>16</b>										
BrightLine	16					■	■		■		
CoolLine	17				■	■	■	■	■	■	
Highspeed / Highspeed Eco	18				■			■		■	
DetectLine	19	■			■	■	■	■	■	■	
Active Speed Control	20										
Integrated camera for process monitoring	21				■	■	■	■	■	■	
Drop&Cut	22				■	■	■	■	■	■	
Compressed air cutting	23	■	■	■	■	■	■	■	■	■	
Smart Collision Prevention	24				■	■	■	■	■	■	
Smart Beam Control	25										
Dot Matrix Code	26				■	■	■	■	■	■	
Nozzle changer	27	■	■	■	■		■	■	■	■	
RotoLas	28				■		■	■	■	■	
Transverse conveyor belt with tipping container	29				■	■	■	■	■	■	
Pallet changer	30	■		■		■					
<b>Automation components</b>	<b>31</b>										
LoadMaster	31				■	■	■	■	■	■	
LiftMaster Compact	32	■			■		■	■	■		
LiftMaster / LiftMaster Sort	33				■		■	■	■		
<b>Accessories</b>	<b>34</b>										



	3060 fiber (L81)	5030 fiber (L41)	5030 fiber (L56)	5030 fiber (L68)	5030 fiber (L76)	5030 (L52)	5040 fiber (L47)	5040 fiber (L57)	5040 fiber (L69)	5040 fiber (L76)	5040 (L53)	5060 (L54)	7040 (L62)	8000 (L63)
						■					■	■	■	■
	■			■	■	■			■		■	■	■	■
	■			■	■				■		■			
	■	■	■	■	■	■	■	■	■		■	■		
	■			■	■				■		■			
	■			■	■	■			■		■			
	■			■	■	■			■		■			
	■	■	■	■	■	■	■	■	■		■	■	■	■
	■			■	■				■		■			
	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	■			■	■	■			■		■			
	■			■	■	■			■	■	■			



## Optimum edge quality with thick stainless steel

### Description and application

BrightLine is a cutting system used to process thick steel sheet. Special cutting data and the BrightLine nozzle with adjusted cutting gas flow greatly enhance the quality of cut edges. Compared to standard cuts, optimum results are achieved in terms of surface roughness and perpendicularity of cut edges, especially when processing stainless steel.

### Your benefits at a glance

- Optimum quality of thick sheet edges owing to lower roughness values
- Lower production tolerances thanks to improved perpendicularity of cut edges
- Increased productivity as there is no need for refinishing work

### Machine type

TruLaser	3030 Lean Edition, 3030 (L20)
	3040 (L32)
	5030 (L52)
	5040 (L53)
	5060 (L54)
	7040 (L62)
	8000 (L63)

## Possible sheet thicknesses

The specified sheet thicknesses relate to the maximum laser power with a lens cutting head.

		TruLaser 3030 (L20) 3040 (L32)	TruLaser 3030 Lean Edition	TruLaser 5030 (L16) 5040 (L53) 5060 (L19)	TruLaser 5030 (L52) 5040 (L53) 5060 (L54)	TruLaser 7040 (L62) 8000 (L63)
Stainless steel	mm	15 - 20 / 12* - 25*	15 / 12* - 16*	15 - 20	8 - 25	15 - 20
Mild steel	mm	–	–	15 - 25	15 - 25	–
Aluminium	mm	–	–	–	8 - 15	–

\* From version S07.00 with KL55



Experience the **BrightLine**  
in action  
[www.trumpf.info/odqitj](http://www.trumpf.info/odqitj)







## Intricate contours in thick mild steel

### Description and application

CoolLine is a cutting system with which the CoolLine nozzle sprays a water mist around the laser beam onto the workpiece. The vaporization of the water results in the cooling of the material around the laser beam. Thus, the temperature remains nearly constant during the cutting process – new geometries become possible, and the machine can cut previously critical applications offering greater process reliability.

### Your benefits at a glance

- Greater contour flexibility thanks to lower heat input into the material
- Higher material efficiency owing to closer sheet layout
- Greater process reliability owing to stabilization of the cutting process with thick mild steel
- Enhanced material tolerance means critical mild steel qualities can be cut

### Machine type

TruLaser	3030 fiber (L49), 3030 Lean Edition, 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L66, L81)
	5030 fiber (L68, L76), 5030 (L52)
	5040 fiber (L69), 5040 (L53)
	5060 (L54)
	7040 (L62)
	8000 (L63)

## Possible sheet thicknesses

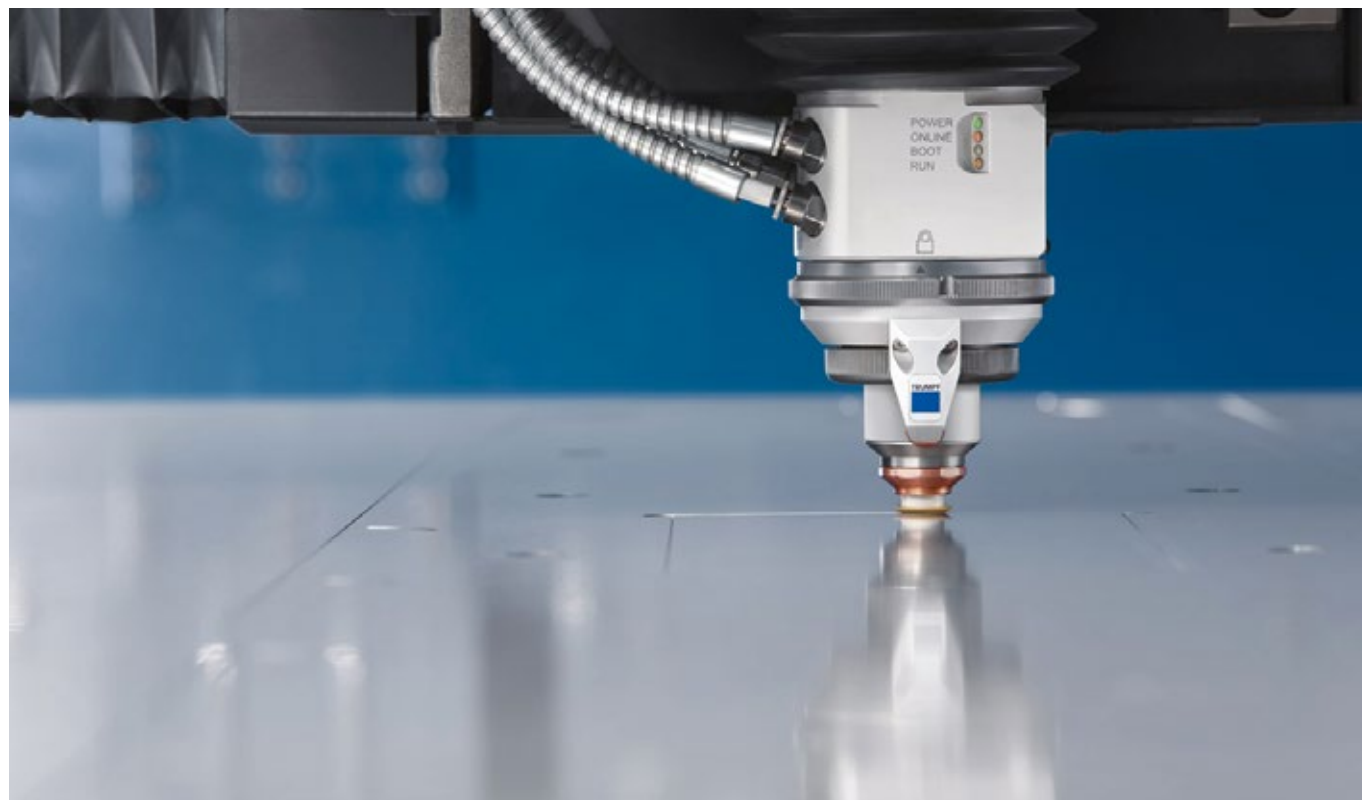
Lasers	TruLaser 3030 (L20) 3030 Lean Edition 3040 (L32) 7040 (L62) 8000 (L63)	TruLaser 3030 (L20) 3040 (L32) 5030 (L16, L52) 5040 (L18, L53) 5060 (L19, L54) 7040 (L62) 8000 (L63)	TruLaser 3030 fiber (L49) 3040 fiber (L50) 3060 fiber (L66, L81) 5030 fiber (L68)* 5040 fiber (L69)*
Mild steel	TruFlow 3200/4000 15 - 20	TruFlow 5000/6000/7000 15 - 25	TruDisk 4001/5001/6001/8001 15 - 25

\* With BrightLine fiber.



Experience the CoolLine  
in action  
[www.trumpf.info/jqhu4b](http://www.trumpf.info/jqhu4b)





## Increase productivity and save gas

### Description and application

With the Highspeed and Highspeed Eco cutting processes, flow-optimized nozzles are used that ensure that the cutting gas is blown optimally into the cutting gap. This boosts productivity by up to 100% and gas consumption is significantly reduced. Gas savings of up to 40% can be achieved when cutting with Highspeed. With the capping nozzle, Highspeed Eco even offers savings of up to 70% over the standard cut. In addition, the capping nozzle's tilting sleeve allows spots of slag to be run over and it always rests optimally on the sheet, even if the sheet has curvatures or is corrugated.

### Your benefits at a glance

- The optimal gas flow increases productivity by up to 100% and saves an enormous amount of gas
- Lower parts costs thanks to decreased gas costs
- Higher productivity and consequently higher part throughput
- Multi-part nozzle concept with Highspeed Eco nozzle reduces the cost of consumables
- Run over uneven spots with the tilting sleeve when using Highspeed Eco

### Machine type

TruLaser	3030 fiber (L49)
	3040 fiber (L50)
	3060 fiber (L66, L81)
	5030 fiber (L68, L76)
	5040 fiber (L69)

## Possible sheet thicknesses

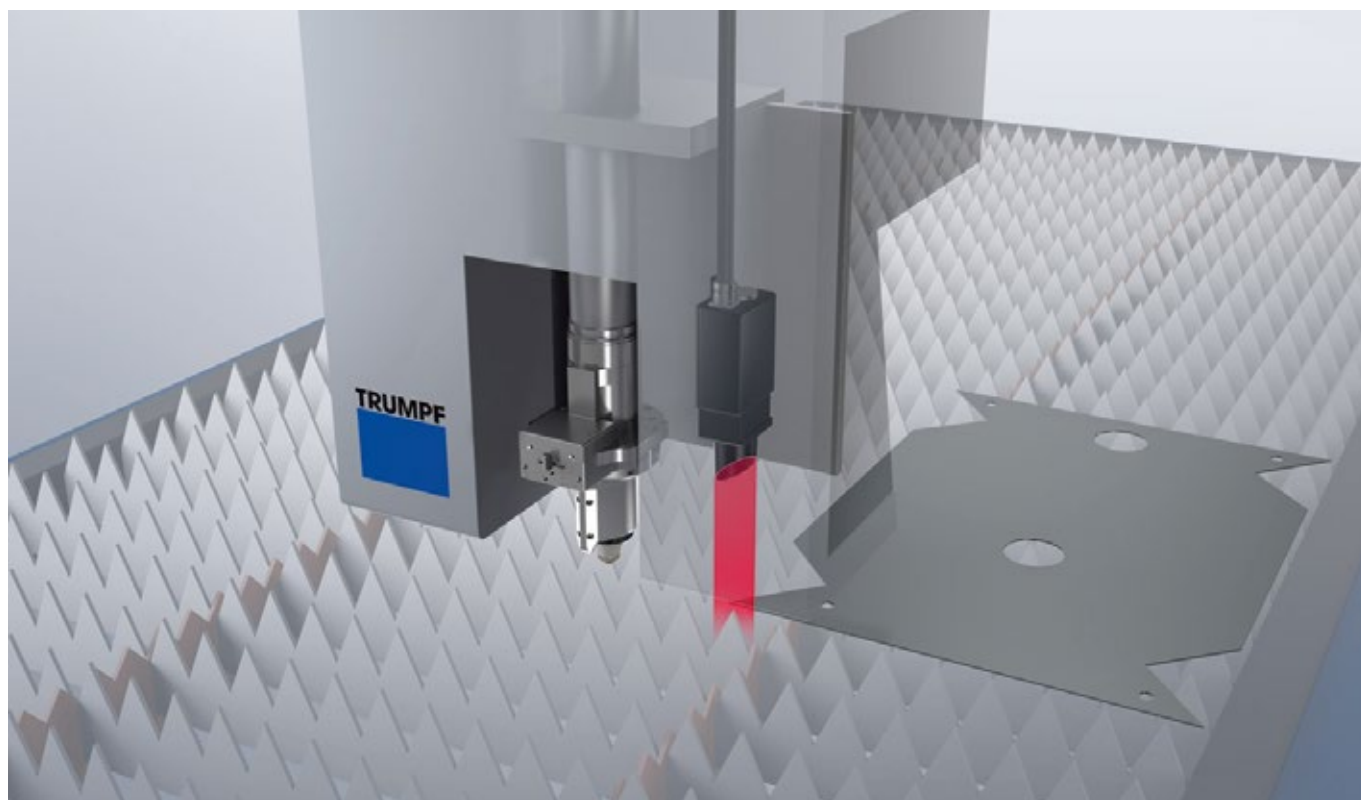
		TruLaser 3030 fiber (L49)* 3040 fiber (L50)* 3060 fiber (L66, L81)	TruLaser 3030 fiber (L49)* 3040 fiber (L50)* 3060 fiber (L66, L81)	TruLaser 5030 fiber (L68, L76) 5040 fiber (L69, L76)	TruLaser 5030 fiber (L68, L76) 5040 fiber (L69, L76)	TruLaser 5030 fiber (L68, L76) 5040 fiber (L69, L76)
Laser		TruDisk 4001	TruDisk 6001	TruDisk 4001	TruDisk 6001	TruDisk 8001
<b>Highspeed</b>						
Structural steel	mm	4 - 6	4 - 8	4 - 6	4 - 10	4 - 12,7
Stainless steel	mm	4 - 20	4 - 20	4 - 20	4 - 20	4 - 25
<b>Highspeed Eco</b>						
Structural steel	mm	-	4 - 10	-	4 - 10	4 - 12,7
Stainless steel	mm	-	4 - 25	-	4 - 25	4 - 25

\* From version S07.00



Experience the **Highspeed / Highspeed Eco** in action  
[www.trumpf.info/gl10kr](http://www.trumpf.info/gl10kr)





## Precise position detection with automatic focal position correction

### Description and application

DetectLine is an optical measuring system that uses several test points to determine the position of individual blanks and automatically determines the optimum focal position. To this end, contours are cut in a small area of the sheet using different focal positions. The camera system checks the width of the gaps and transmits the correction value for the focal position to the control unit. This means the loaded blank can be further processed with the laser, offering a high degree of precision.

### Your benefits at a glance

- High level of process reliability as the exact workpiece position is known
- Precise processing of blanks, even blanks that have not been laid straight
- Increased quality of parts thanks to automatic correction of the focal position

### Machine type

TruLaser	1030 fiber (L88)
	3030 fiber (L49), 3030 Lean Edition, 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L66, L81)
	5030 fiber (L41, L56, L68, L76), 5030 (L52)
	5040 fiber (L47, L57, L69), 5040 (L53)
	5060 (L54)



Experience the DetectLine  
in action  
[www.trumpf.info/4e93iz](http://www.trumpf.info/4e93iz)



## Active Speed Control



### Sees through the process, regulates the cut

**Description and application**

Sensor system in the cutting head enables view through the nozzle into the kerf during cutting. Important process parameters are continuously analyzed. The feed rate is checked several hundred times per second and adjusted if necessary, thus compensating for fluctuations in process reliability.

**Your benefits at a glance**

- Significant increase in process reliability.
- Fewer rejects due to influence of material and machine condition
- Reduction in operator workload in critical situations and during setting work
- Range of application: mild/stainless steel from 4 mm

**Machine type**

TruLaser	5030 fiber (L76)
----------	------------------



Experience the **Active Speed Control** in action  
[www.trumpf.info/mxkwwd](http://www.trumpf.info/mxkwwd)





## Integrated camera for process monitoring



### Have the cutting process in view at all times

#### Description and application

The camera integrated into the machine interior transmits a live image of the cutting process directly onto the user interface at the control. This enables you to monitor the process and to roughly assess the cutting result. Individual images can be stored in a network folder at defined intervals. In addition, live images can be transmitted via the MobileControl app.

#### Your benefits at a glance

- Faster recognition of deviations in the cut quality results in fewer rejects
- This frees up operators as they can use the MobileControl app to monitor processes

#### Machine type

TruLaser	3030 fiber (L49), 3030 Lean Edition, 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L66, L81)
	5030 fiber (L56, L68, L76), 5030 (L52)
	5040 fiber (L57, L69), 5040 (L53)
	5060 (L54)
	7040 (L62)
	8000 (L63)

### Camera range

	TruLaser 3030 (L20) 3030 Lean Edition 3030 fiber (L49) 5030 (L52) 5030 fiber (L56, L68)	TruLaser 3040 (L32) 3040 fiber (L50) 5040 (L53) 5040 fiber (L57, L69)	TruLaser 3060 fiber (L66, L81)	TruLaser 5060 (L54)	TruLaser 7040 (L62) 8000 (L63)
Working range	mm 3000 x 1500	4000 x 2000	6000 x 2500	6000 x 2000	4000 x 2500
Camera 1	mm 0 - 2500	0 - 2500	0 - 2500	0 - 2500	0 - 2500
Camera 2*	mm 2501 - 3000	2501 - 4000	2501 - 4000	2501 - 4000	2501 - 4000

\* Not for TruLaser 5030 fiber (L56) and TruLaser 5040 fiber (L57).



## Easy post-production, efficient utilization of remainder sheets

### Description and application

Drop&Cut is a function with which a camera projects the live image of the machine interior directly onto your control panel. The operator positions the part to be post-produced virtually on the live image of the remainder sheet using the touch screen or mouse click. This means process steps such as aligning the sheet, measuring the sheet position or zero point offset can be eliminated. This function facilitates user-friendly and cost-effective post-production.

### Your benefits at a glance

- Maximum material efficiency when using remainder sheets owing to exact positioning
- High process reliability thanks to the cutting preview with live images
- Time savings in the post-production of parts as there is no need for time-consuming process steps

### Machine type

TruLaser	3030 fiber (L49), 3030 Lean Edition, 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L66, L81)
	5030 fiber (L56, L68, L76), 5030 (L52)
	5040 fiber (L57, L69), 5040 (L53)
	5060 (L54)
	7040 (L62)
	8000 (L63)



Experience the **Drop&Cut**  
in action  
[www.trumpf.info/kuswjf](http://www.trumpf.info/kuswjf)





## Cut thin sheets cost-effectively

### Description and application

In addition to cutting with oxygen and nitrogen, this function also allows pressurized air to be used as a cutting gas. This increases the sheet's surface roughness and decreases the cut quality. This application is possible up to a sheet thickness of 3 mm, depending on the laser output and material type.

### Your benefits at a glance

- Reduced cutting gas costs being a more cost-effective alternative
- More flexible laser cutting processes with an additional cutting gas

### Machine type

TruLaser	1030 fiber (L88)
	2030 fiber (L72, L82)
	3030 fiber (L49), 3030 Lean Edition, 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L66, L81)
	5030 fiber (L41, L56, L68, L76), 5030 (L52)
	5040 fiber (L47, L57, L69), 5040 (L53)
	5060 (L54)
	7040 (L62)
	8000 (L63)



## Actively preventing collisions

### Description and application

Smart Collision Prevention minimizes the risk of collision while laser cutting. Thanks to an optimized work sequencing strategy which calculates in the tilting of parts that have been cut out, collisions can be effectively prevented. This enables the user to process almost entirely without microjoints. That means that operators do not need to monitor the process.

### Your benefits at a glance

- Higher productivity and enhanced process reliability owing to effective collision prevention
- Minimum operator presence required as the machine does not need to be monitored continuously
- Reduction in programming effort thanks to optimization at the press of a button
- Greater material efficiency thanks to closer nesting

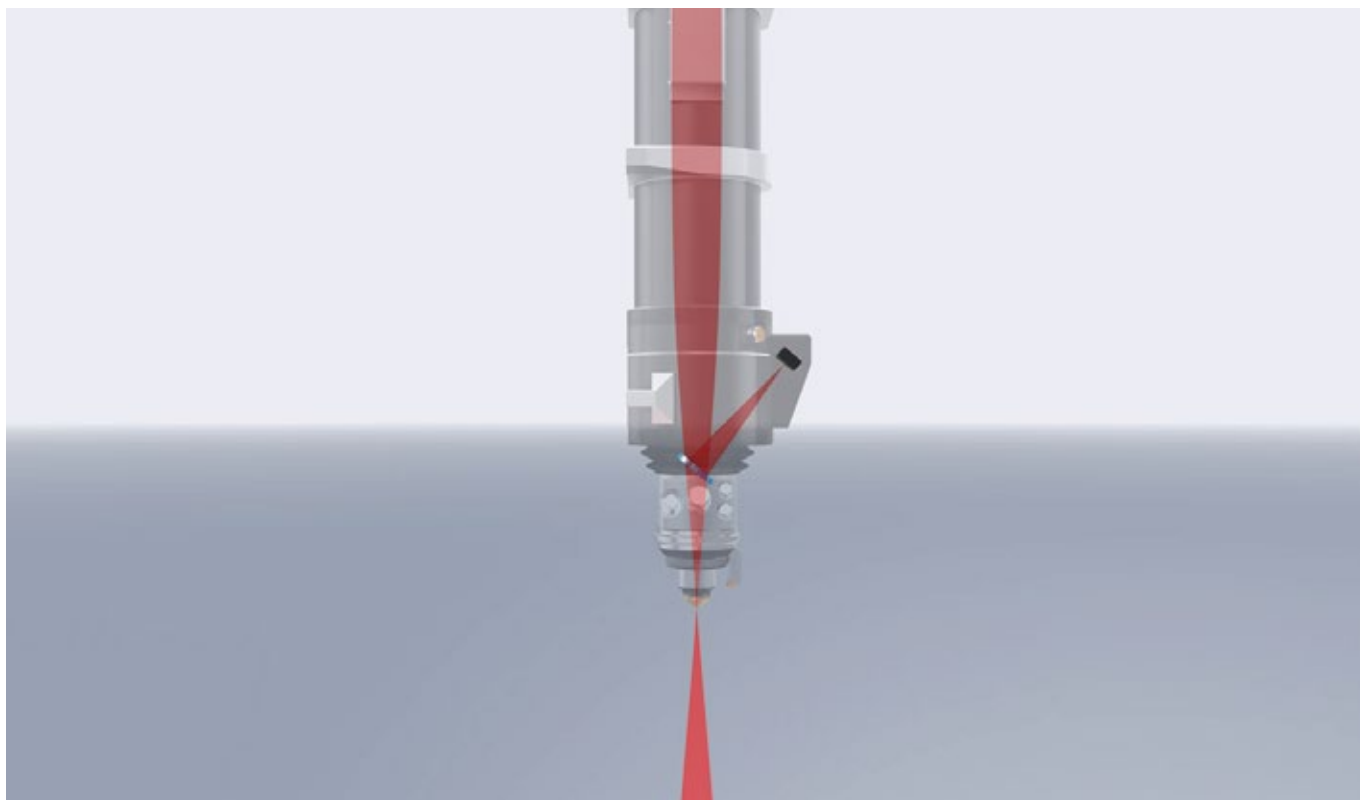
### Machine type

TruLaser	3030 fiber (L49), 3030 Lean Edition, 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L66, L81)
	5030 fiber (L56, L68, L76), 5030 (L52)
	5040 fiber (L57, L69), 5040 (L53)
	5060 (L54)



Experience the **Smart Collision Prevention** in action  
[www.trumpf.info/2ef4yv](http://www.trumpf.info/2ef4yv)





## Continuous recording of the laser beam

### Description and application

Smart Beam Control keeps the cutting process at the optimum level. The laser beam is recorded continuously by means of a sensor integrated in the cutting head. The machine creates a laser beam profile, which is used, for instance, to adjust the focus position. The profile is also used for the inspection of the optical system by a TRUMPF technician.

### Your benefits at a glance

- Increased process reliability thanks to permanent control of the focus position
- Reduced downtimes, since the focus position can be checked and set at the push of a button and without a sheet
- Increased machine availability thanks to improved (remote) diagnostic capabilities of the optical system

### Machine type

TruLaser	5030 fiber (L68)
	5040 fiber (L69)



Experience the **Smart Beam Control** in action  
[www.trumpf.info/ik80tm](http://www.trumpf.info/ik80tm)





## Dot Matrix Code



### Marking parts for identification and process control

**Description and application**

The Dot Matrix Code function enables you to mark parts with a standardized industrial code quickly and reliably. This makes it possible to keep track of parts effortlessly and greatly simplifies the sheet metal process chain. Within just a few seconds, the robust industrial code (data matrix) of dots is marked on the part being processed and is easy to read even if the sheets are scratched.

**Your benefits at a glance**

- Process reliability in sheet processing owing to the clear identification of parts
- High productivity across the entire process chain due to the traceability of parts
- Minimum production interruption as the industrial code is marked within seconds

**Machine type**

TruLaser	3030 fiber (L49), 3030 Lean Edition, 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L66, L81)
	5030 fiber (L68, L76), 5030 (L52)
	5040 fiber (L69), 5040 (L53)
	5060 (L54)
	7040 (L62)
	8000 (L63)



Experience the **Dot Matrix Code** in action  
[www.trumpf.com/s/a308ys](http://www.trumpf.com/s/a308ys)





## Changing the nozzle automatically without any interruptions

### Description and application

The nozzle changer enables the nozzle to be changed automatically at the cutting head. When the material or sheet thickness changes, the automatic nozzle changer screws on the new nozzle automatically while the pallet is being changed. The nozzle can be changed within a very short space of time. This greatly reduces machine idle times.

### Your benefits at a glance

- Reduction in non-productive times as nozzles are exchanged parallel to pallet changes
- Unattended production as nozzles are changed fully automatically when the material or sheet thickness changes
- Lower part costs because of higher productivity

### Machine type

TruLaser	1030 fiber (L88)
	2030 fiber (L72, L82)
	3030 fiber (L49), 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L66, L81)
	5030 fiber (L41, L56, L68), 5030 (L52)
	5040 fiber (L47, L57, L69), 5040 (L53)
	5060 (L54)

## Configuration stages

Name	Machine type	Description	Advantages
Technology package – Automatic lens and nozzle system	TruLaser 3030 (L20) 3040 (L32)	In addition to nozzle changing, the beam is automatically centered and the condition of the lens is monitored. If it needs cleaning or changing, a message is displayed on the control.	<ul style="list-style-type: none"> <li>• Consistently high cutting quality thanks to optimal alignment of the laser beam</li> <li>• No need for manual checking of the lens</li> </ul>
Smart Nozzle Automation	TruLaser 5030 (L52) 5040 (L53) 5060 (L54) 5030 fiber (L68) 5040 fiber (L69)	<p>The function additionally checks the nozzle for wear and changes it as necessary. Smart Skip skips the current part after a critical situation (such as a collision), so ensuring that production is continued.</p> <p>On 5000 fiber series machines the protective glass is monitored, and the beam centering is not automated.</p>	<ul style="list-style-type: none"> <li>• Improved process reliability in fully automatic mode</li> <li>• No need for manual checking of the nozzle</li> </ul>



Experience the **Nozzle changer** in action  
[www.trumpf.info/tf4nz7](http://www.trumpf.info/tf4nz7)





## Cutting tubes on a 2D laser cutting machine

### Description and application

The tube cutting unit enables you to cut tubes and profiles on a 2D laser cutting machine. A flexible loading system accurately guides the tubes and profiles during the cutting process. Thanks to different workpiece carriers, tubes up to an outer circle diameter of 370 mm can be processed. Different clamping jaws offer maximum flexibility in profile geometry. It is easy to switch between 2D processing and tube processing.

### Your benefits at a glance

- Expansion of processing possibilities with the processing of tubes and profiles on a 2D laser cutting machine
- High level of flexibility thanks to the quick and easy changeover from flat material to tube processing

### Machine type

TruLaser	3030 fiber (L49), 3030 (L20)
	3040 fiber (L50), 3040 (L32)

## Accessories

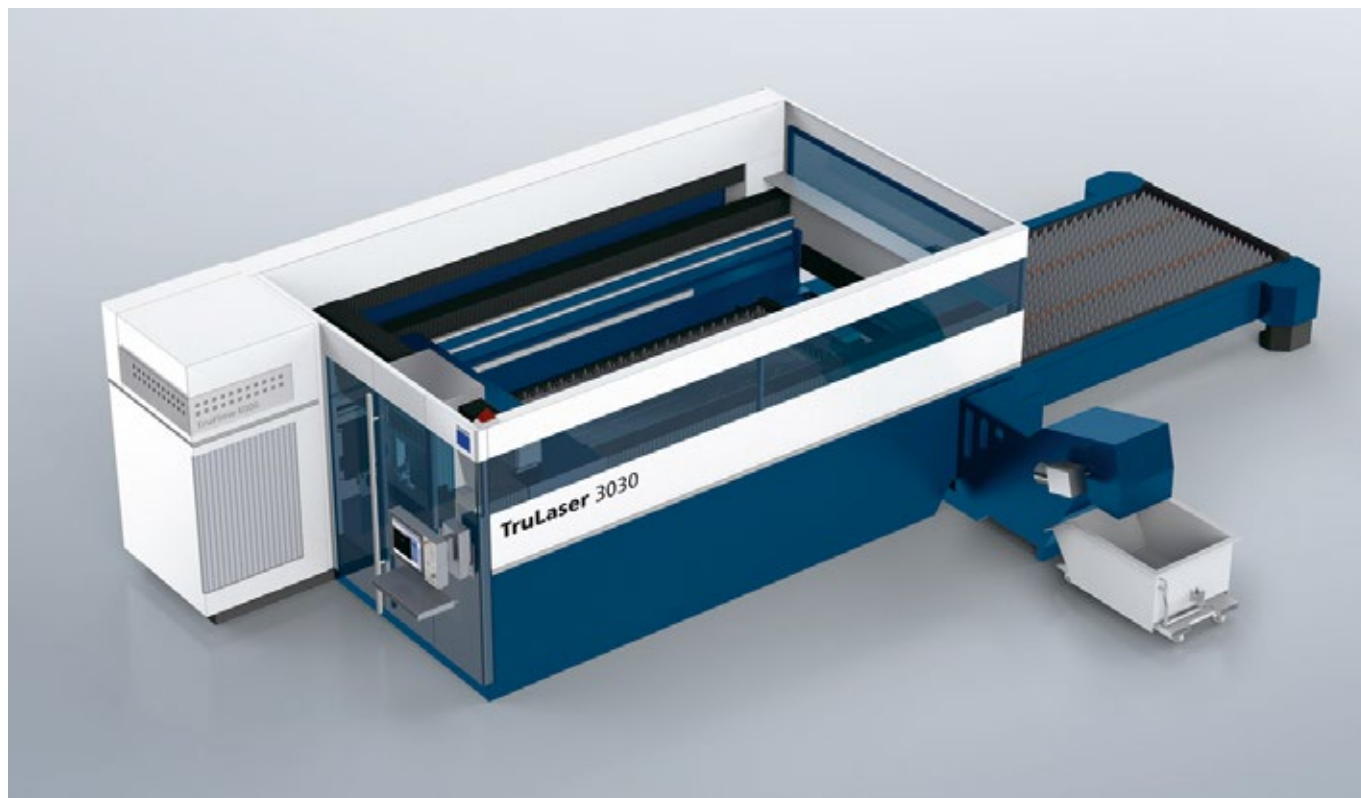
Name	Description
Bolt clamping set	With the bolt clamping set, bolts are used to clamp rectangular tubes at the opposite internal corners. The bolts are available in three different sizes, as the radius of the bolt should always be larger than the corner radius of the workpiece.
Prism clamping set	Square and rectangular tubes are tightened diagonally from the outside using two top jaws with prism inserts. The prism clamping set is used for rectangular tubes whose aspect ratio is smaller than 2:1.
Clamping with minimum dead zone	Square and rectangular tubes are clamped from the inside by two add-on jaws with screw-in bolts. This clamping method reduces the dead zone during processing.
Workpiece carriers	For longer tubes and profiles that protrude into the working area, a main holder and at least one workpiece holder are needed. The workpiece holders support the tube or profile, and are available for diameters of 15 - 310 mm and 220 - 370 mm.



Experience the **RotoLas**  
in action  
[www.trumpf.info/guo03n](http://www.trumpf.info/guo03n)



## Transverse conveyor belt with tipping container



## Conveying cutting waste from the machine

**Description and application**

This conveyor belt replaces the rear slag container and moves cutting waste from the longitudinal conveyor belt from the machine into a tipping container. This container has wheels and can be tilted. This ensures that contents of the container can be emptied easily. Depending on the machine location, the conveyor belt can be positioned on the right-hand side or left-hand side of the machine.

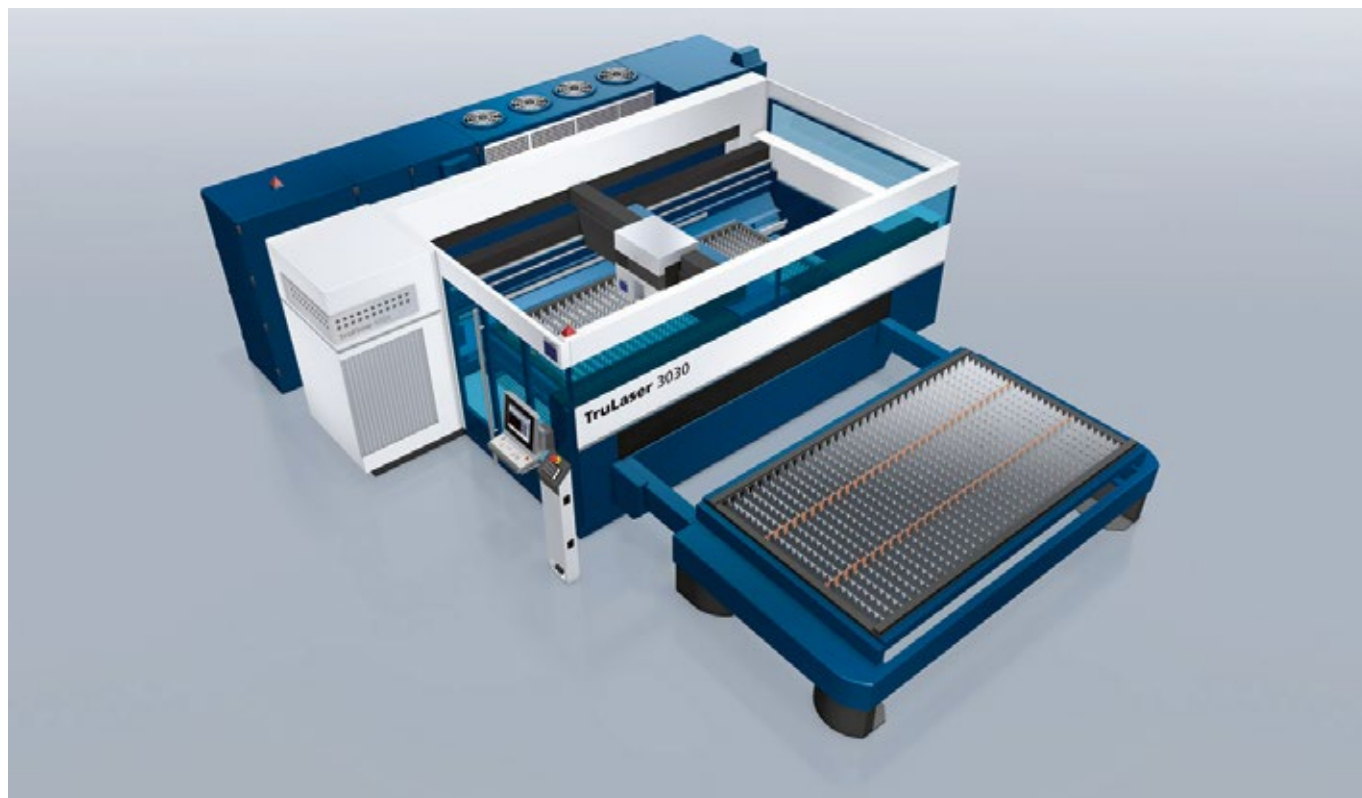
**Your benefits at a glance**

- Increased machine runtime owing to minimum interruption when containers are emptied
- Greater user-friendliness owing to easy and ergonomic emptying of the tipping container

**Machine type**

TruLaser	3030 fiber (L49), 3030 Lean Edition, 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L66, L81)
	5030 fiber (L41, L56, L68, L76), 5030 (L52)
	5040 fiber (L47, L57, L69), 5040 (L53)
	5060 (L54)
	7040 (L62)
	8000 (L63)

## Pallet changer



## Change sheets automatically

### Description and application

An automatic pallet changer works with two pallets. These pallets convey the raw sheets into the machine and to the loading and unloading positions after processing. The pallets are processed one after the other. The pallets can be accessed easily from outside the machine. This means they can be loaded and unloaded parallel to production. The pallets are moved fully automatically, and are safeguarded by a light barrier.

### Your benefits at a glance

- Simple and ergonomic loading and unloading thanks to the automatic pallet changer
- Low non-productive times thanks to the quick sheet change

### Machine type

TruLaser	1030 fiber (L88)
	2030 fiber (L82)
	3030 Lean Edition

## Variants

Name	Description
Semi-automatic pallet changer	With the semi-automatic pallet changer, the two pallets are traversed and lifted in dead-man operation. For this reason, no light barrier is needed for protection purposes.
Manual pallet removal	For simple loading and unloading of the machine, the machine pallet can be pulled out with the help of a pallet guide attached to the side of the machine. The pallet is moved by the operator. The pallet can be easily accessed from all sides.

## Possible functional enhancements

	TruLaser 1030 fiber (L88)	TruLaser 2030 fiber (L82)	TruLaser 3030 Lean Edition
Automatic pallet changer	•	•	•
Semiautomatic pallet changer	S	•	•
Manual pallet removal	-	S	S
Fixed pallet	-	-	-

S = standard; • = retrofittable; - = not available





## Automatic loading

### Description and application

The LoadMaster automatically loads the machine with raw sheets, thus freeing up the operator. The sheets are taken from the loading station and placed on the pallet changer using a pivoting suction frame. Peeler suction cup that separates the sheets and the fanning magnets provide additional help to ensure the process runs smoothly.

### Your benefits at a glance

- Swift order processing due to the automatic loading of raw material
- The process-reliable and fully automatic loading operation frees up the operator

### Machine type

Machine type	Models
TruLaser	3030 fiber (L49), 3030 Lean Edition, 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L66, L81)
	5030 fiber (L41, L56, L68), 5030 (L52)
	5040 fiber (L47, L57, L69, L76), 5040 (L53)
	5060 (L54)
	7040 (L62)
	8000 (L63)

## Technische Daten

		Large format	Maxi format	Oversize format		
TruLaser		3030 (L20) / Lean Edition	3040 (L32)	7040 (L62)	5060 (L19, L54)	3060 fiber (L66, L81)
		3030 fiber (L49)	3040 fiber (L50)	8000 (L63)		8000 (L63)
		5030 (L16, L52)	5040 (L18, L53)			
		5030 fiber (L41, L56, L68)	5040 fiber (L47, L57, L69)			
Max. sheet format	mm	3000 x 1500	4000 x 2000	4000 x 2500	6000 x 2000	6000 x 2500
Min. sheet format	mm	500 x 1000	500 x 1000	500 x 1000	500 x 1000	500 x 1000
Max. sheet thickness	mm	25	25	20	25	20
Max. sheet weight	kg	900	1600	1600	2400	2400

## Functional enhancements for the LoadMaster

	Medium format	Large format	Maxi format	Oversize format
--	---------------	--------------	-------------	-----------------

Peeling unit

- = retrofittable; – = not available



Experience the  
**LoadMaster** in action  
[www.trumpf.info/wlpojs](http://www.trumpf.info/wlpojs)



# LiftMaster Compact



## Material handling in the smallest spaces

### Description and application

The LiftMaster Compact loads and unloads the machine. Just like the LiftMaster, it has a suction frame and rake frame for receiving raw sheets and finished cut sheets. However, the suction frame and rake frame are two separate components which means loading and unloading can take place simultaneously. Because it is so compact, the LiftMaster Compact has a very small footprint.

### Your benefits at a glance

- Faster order processing owing to the synchronous loading of raw material and unloading of cut sheets
- Very compact setup
- Loading and unloading thanks to a reliable loading and unloading process requiring little manpower and no auxiliary equipment
- Longer machine runtime and higher productivity owing to shorter cycle times

### Machine type

TruLaser	1030 fiber (L88)
	3030 fiber (L49), 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L81)
	5030 fiber (L68, L76), 5030 (L52)
	5040 fiber (L69), 5040 (L53)

## Specifications

		Large format	Maxi format
TruLaser		3030 (L20), 3030 fiber (L49) 5030 (LL52), 5030 fiber (L68)	3040 (L32), 3040 fiber (L50) 5040 (L53), 5040 fiber (L69)
Max. sheet format, loading/unloading	mm	3000 x 1500	4000 x 2000
Min. sheet format, loading/unloading	mm	1000 x 1000/ 150 x 150	1000 x 1000/ 150 x 150
Max. sheet thickness, loading/unloading	mm	25/25	25/20
Max. sheet weight, loading/unloading	kg	900/900	1600/ 1260

## Functional enhancements for the LiftMaster Compact

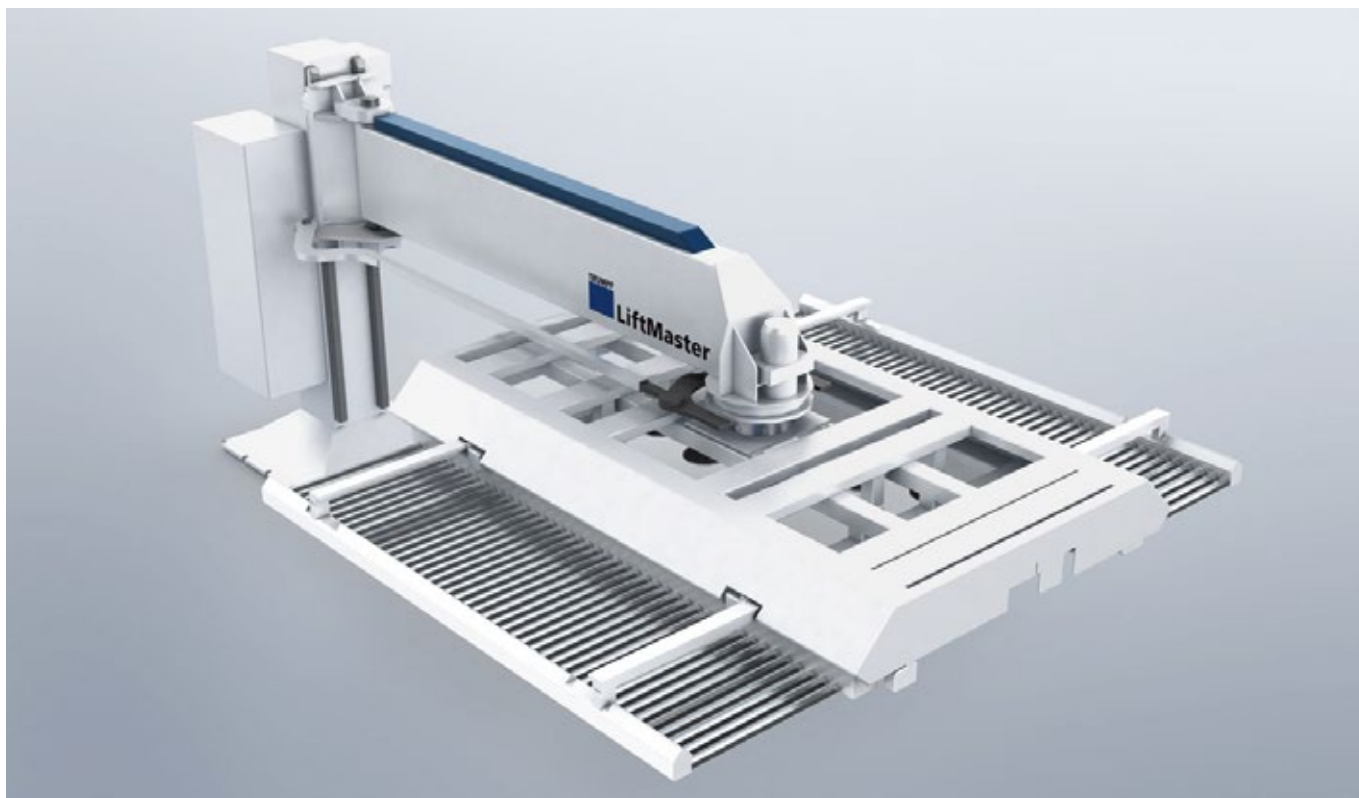
	Large format	Maxi format
Thin sheet separation	•	•
Belt prongs	•	•
PartMaster	•	•

• = retrofittable; – = not available



Experience the **LiftMaster Compact** in action  
[www.trumpf.info/u63ipj](http://www.trumpf.info/u63ipj)





## Maximum material handling flexibility

### Description and application

The LiftMaster offers a high degree of flexibility thanks to its various installation options and its wide range of automation functions – from loading and unloading to auxiliary pallet operation and on to part removal. The suction frame is equipped with carrier suction cups for the transport of raw sheets and rakes for the conveyance of the cut sheets. With LiftMaster Sort, the suction cup frame enables finished parts with minimum dimensions of 600 x 600 mm to be separated from the scrap skeleton and to be removed separately.

### Your benefits at a glance

- More effective use is made of machine capacity thanks to the quick loading and unloading
- Ensures automatic, unattended production cycles
- Reduces working time and enables longer machine runtimes because the sorting of large parts requires little labor

### Machine type

TruLaser	3030 fiber (L49), 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L81)
	5030 fiber (L68), 5030 (L52)
	5040 fiber (L69, L76), 5040 (L53)

## Specifications

		Large format	Maxi format
TruLaser		3030 (L20)	3040 (L32)
		3030 fiber (L49)	3040 fiber (L50)
		5030 (L52)	5040 (L53)
		5030 fiber (L68)	5040 fiber (L69)
Max. sheet format, loading/unloading	mm	3000 x 1500	4000 x 2000
Min. sheet format, loading/unloading	mm	1000 x 1000 / 150 x 150	1000 x 1000 / 150 x 150
Max. sheet thickness, loading/unloading / (with belt prongs)	mm	25 / 25 / (15)	25 / 20 / (15)
Max. sheet weight, loading/unloading	kg	900 / 900	1600 / 1260

## Functional enhancements for the LoadMaster

	Medium format	Large format	Maxi format	Oversize format
Thin sheet separation	•	•	•	–
Belt prongs	–	•	•	–

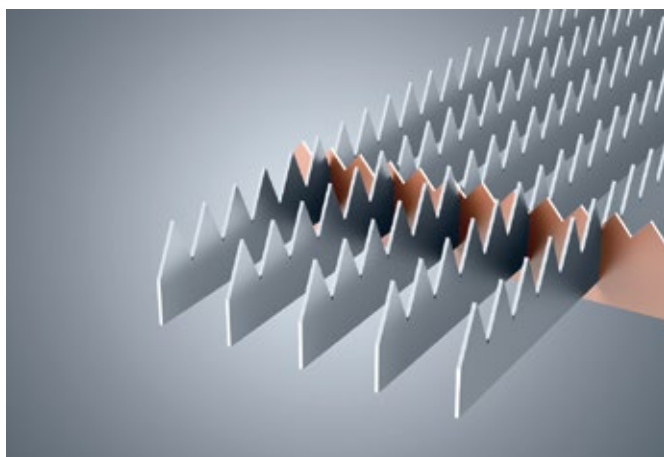
• = retrofittable; – = not available



Experience the LiftMaster / LiftMaster Sort in action  
[www.trumpf.info/qj7db0](http://www.trumpf.info/qj7db0)



## Slats



### Description and application

The standard slats are supplied in mild steel. If the machine is used to cut stainless steel or copper, we recommend that you start using slats made of the same material.

### Your benefits at a glance

- Greater flexibility as slats can be quickly adjusted
- Enhanced quality as material adhesion between the parts and the slats is eliminated

## Slat cleaner



### Description and application

The TruTool TSC 100 is used for slat cleaning. Even tough stainless steel slag can be removed. The cleaning increases the service life of the slats.

### Your benefits at a glance

- Cost savings as slats have to be replaced later
- Can be used on all flatbed laser machines with up to 8 kW laser power
- Operated by just one person



Experience the **Slat cleaner** in action  
[www.trumpf.info/qr14fz](http://www.trumpf.info/qr14fz)



## Easy Filter



### Description and application

The Easy Filter is used to clean the cooling water. The filter is connected to the cooling water circuit. The contaminated cooling water flows through the filter and is turned into clean, deionized water again. The connection only needs to be fitted the for the first use; it can then be reused any number of times. Use of the Easy kit is still required.

### Your benefits at a glance

- Maintenance work is significantly reduced, since new water does not have to be provided
- Cost savings over conventional water changing
- Can be used with almost all machines and lasers



Experience the **Easy Filter** in action  
[www.trumpf.info/70bkp2](http://www.trumpf.info/70bkp2)



## Partitioned slag container



### Description and application

Partitioned slag containers consist of three smaller containers, replacing the single piece slag containers. This means less space is needed to pull out the container. In addition, this slag container is easier to handle.

### Your benefits at a glance

- Smaller containers require less space
- Enhanced operator convenience thanks to easier handling

## Tipping container



### Description and application

The waste falls into the tipping container from the transverse conveyor belt. The tipping function makes it easy for the operator to empty the container. It is advised that an additional tipping container be used to ensure the machine can continue to operate while the container is being emptied.

### Your benefits at a glance

- Minimized idle times for scrap removal by using an additional container
- The tipping function facilitates ergonomic scrap removal

## Slag cart



### Description and application

Cut parts occasionally fall onto the ground while the pallet is being changed. The slag cart underneath the pallet changer catches these parts. It is pulled out easily for ergonomic emptying.

### Your benefits at a glance

- Increased operator convenience as there is no need to clean underneath the pallet changer

## Clamps



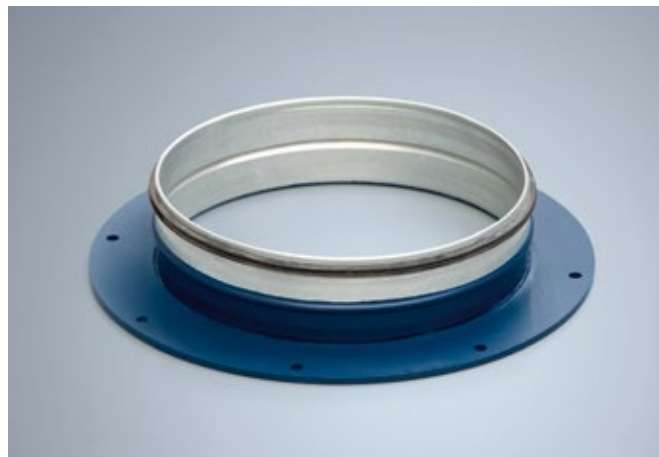
### Description and application

Very thin and light sheets are kept firmly in place with the help of clamps, for instance, during high-pressure cutting. They also prevent the slipping of pre-punched and slightly bulging sheets that cannot be evenly stacked.

### Your benefits at a glance

- High process reliability thanks to the firm positioning of the workpiece
- Higher productivity because a higher traverse speed is possible

## Air fitting for the dust extractor



### Description and application

With this transitional piece, a customer's ventilation duct can be connected to the dust extraction unit in order to guide the air to the outside.

### Your benefits at a glance

- Targeted guidance of filtered air owing to the connection to the customer's ventilation system



# TruLaser Tube



		TruLaser Tube					
		5000 fiber	5000	5000	7000 fiber	7000	7000
		(T06)	(T05)	(T08)	(T07)	(T02KT02)	(T03)
Page							
	<b>Standard product enhancements</b>	<b>38</b>					
	Conveyor table	38	■	■			■
	Finished part length +1.5 m	39	■	■	■		■
	SeamLine Tube	40	■	■	■	■	■
	Smart Profile Detection	41	■	■	■		■
	PierceLine	42		■	■		■
	Adaptive clamping technology	43	■	■	■	■	■
	Compressed air cutting	44	■	■	■		■
	Spatter protection device	45					■
	Cutting insert for centering the beam	46				■	■
	<b>Accessories</b>	<b>47</b>					

## Conveyor table



## Ergonomic unloading that is easy on material

### Description and application

The conveyor table is placed at the part removal station. Tubes and profiles are conveyed to the scrap disposal units via the conveyor table where they are piled up. This is where the finished workpieces are unloaded ergonomically. If the monitoring of a part-removal station issues an alert that the conveyor table is full, the next tube is only cut until the separating cut.

### Your benefits at a glance

- Enhanced operator convenience owing to the ergonomic removal of parts
- Increased quality thanks to transport that is easy on material

### Machine type

TruLaser Tube	5000 (T05, T08)
	7000 (T03)





## Unloading longer finished parts

### Description and application

With this function, the potential length of unloaded parts is extended by 1.5 m. To this end, a deflection plate can be mounted on the scrap conveyor or on the ground directly using a special mounting bracket. The rigidity of the tubes and the weight of the finished parts should be taken into account.

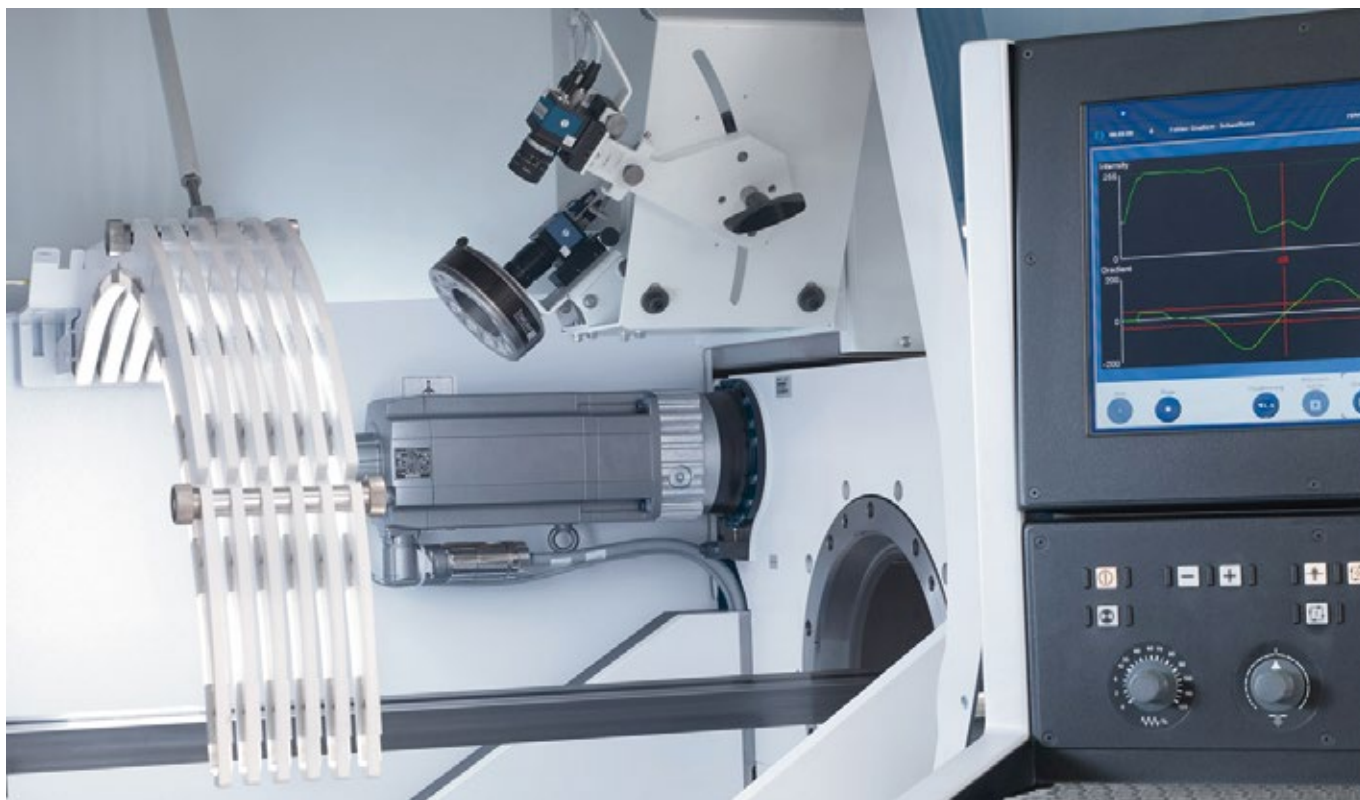
### Your benefits at a glance

- Greater flexibility as the length of parts being unloaded can be increased

### Machine type

TruLaser Tube	5000 fiber (T06), 5000 (T05)
	7000 fiber (T07), 7000 (T03)

## SeamLine Tube



## Detecting welding seams

### Description and application

The SeamLine Tube sensor system detects visible welding seams on the inside of the tube. With this function, a high-resolution camera examines the surface and detects welding seams on the tube. In addition, a further camera can be used on the majority of machines to check the inside of the tubes. Using this feature, tubes with clearly detectable welding seams or markings on the outside or inside can be ideally positioned for the cutting process.

### Your benefits at a glance

- High level of process reliability owing to optimum lighting and camera setting
- High productivity thanks to quick detection of welding seams

### Machine type

TruLaser Tube	5000 fiber (T06), 5000 (T05, T08)
	7000 fiber (T07), 7000 (T02KT02, T03)



Experience the **SeamLine Tube** in action  
[www.trumpf.info/t1z7wo](http://www.trumpf.info/t1z7wo)







## Loading special profiles fully automatically

### Description and application

Smart Profile Detection is an image processing system that supports fully automated loading operations. It measures the angular position and orientation of profiles during the loading process. A camera detects the cross-section of the profile on the gripper arm, checks it with the control and automatically adjusts the clamping device according to its orientation. This enables the automated loading of profile geometries that could not have been possible before.

### Your benefits at a glance

- Higher productivity thanks to the fully automated loading of special profiles
- High level of process reliability by matching the actual contour with the target contour
- Maximum part quality owing to the use of optimum, even asymmetrical clamping technology

### Machine type

TruLaser Tube	5000 fiber (T06), 5000 (T05, T08)
	7000 fiber (T07), 7000 (T03)



Experience the  
**Smart Profile Detection**  
in action  
[www.trumpf.info/x1dnju](http://www.trumpf.info/x1dnju)



## PierceLine



### Speeding up the piercing process and enhancing quality

**Description and application**

The PierceLine function monitors and controls the piercing process. It not only checks the piercing process but also controls the laser power based on requirements. Depending on the type of material and sheet thickness used, this reduces the time required for the piercing process by up to 90%. The result is more precisely pierced holes with less spatter.

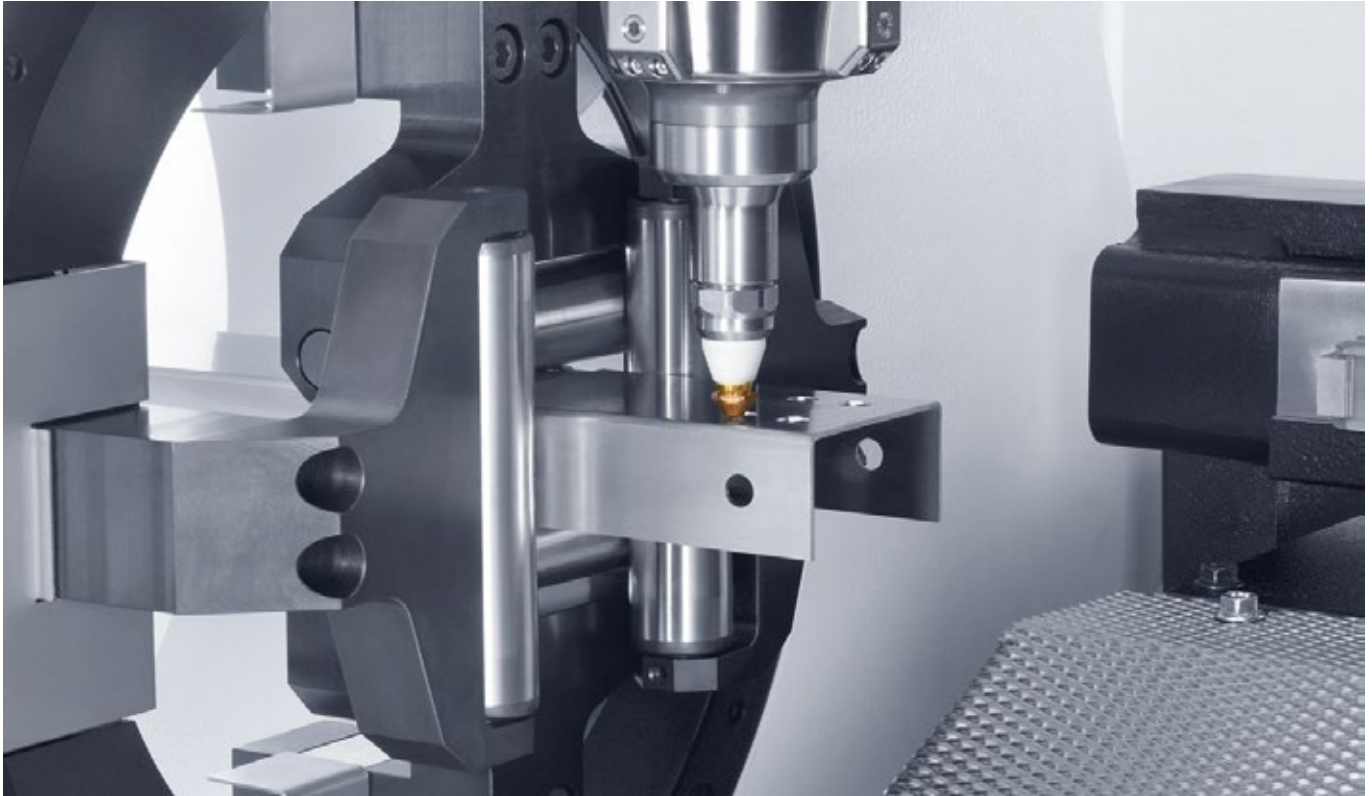
**Your benefits at a glance**

- Increased productivity owing to the faster piercing process
- Significant quality improvements thanks to lower slag buildup, less discoloration and reduced scorching on the opposite wall

**Machine type**

TruLaser Tube	5000 (T05, T08)
	7000 fiber (T07), 7000 (T03)

Your machine can do more  
TruLaser  
TruLaser Tube  
TruPunch / TruMatic  
TruBend  
Cross-technology



## Clamping open profiles

### Description and application

Adaptive clamping technology enables the clamping of U- and L-shaped profiles and flat material. Adaptive clamping technology is needed for certain profile geometries or for processing particularly narrow profiles. This means maximum clamping flexibility can be achieved.

### Your benefits at a glance

- Low non-productive times as clamping jaws can be changed swiftly
- Greater flexibility as open profiles and flat material can be processed

### Machine type

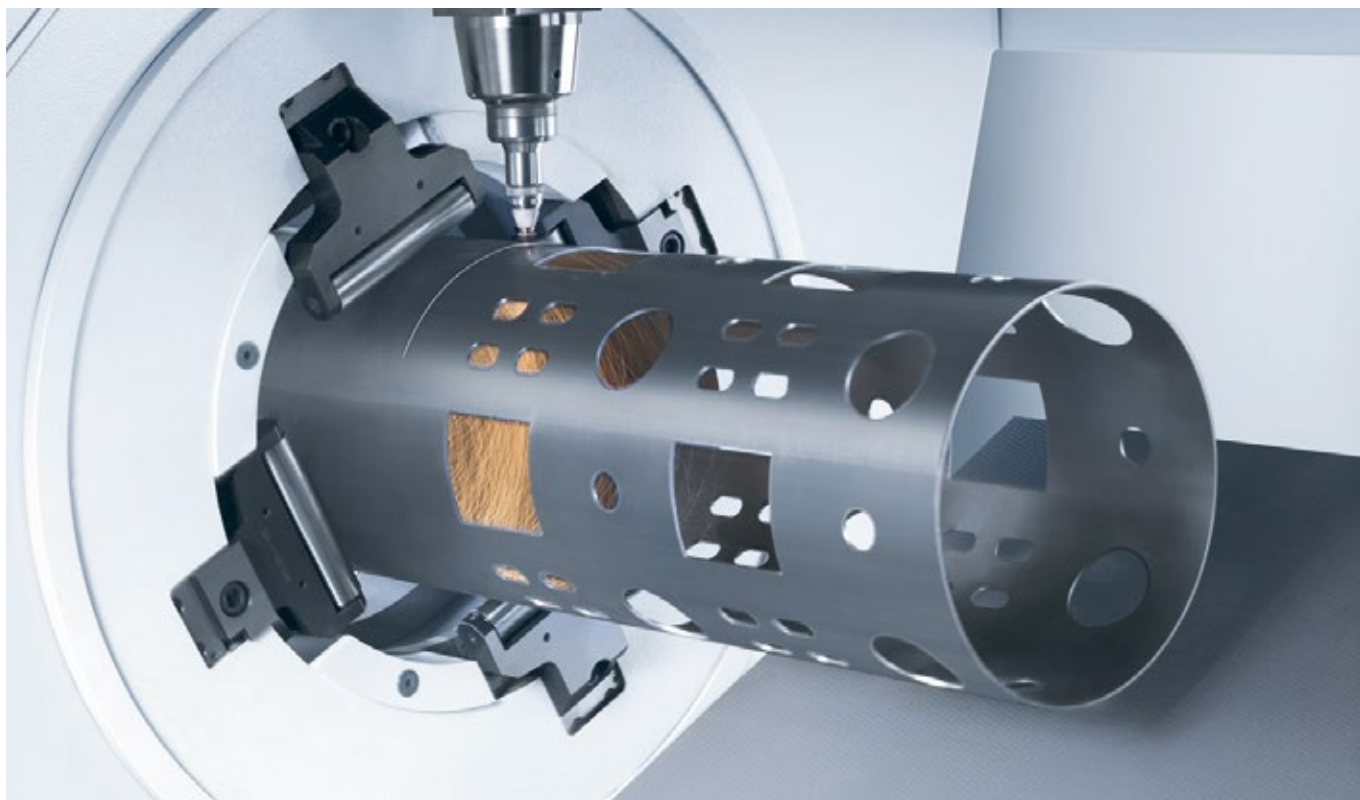
TruLaser Tube	5000 fiber (T06), 5000 (T05, T08)
	7000 fiber (T07), 7000 (T02KT02, T03)



Experience the **Adaptive clamping technology** in action  
[www.trumpf.info/wdytn4](http://www.trumpf.info/wdytn4)



## Compressed air cutting



## Cut thin-walled pipes cost-effectively

### Description and application

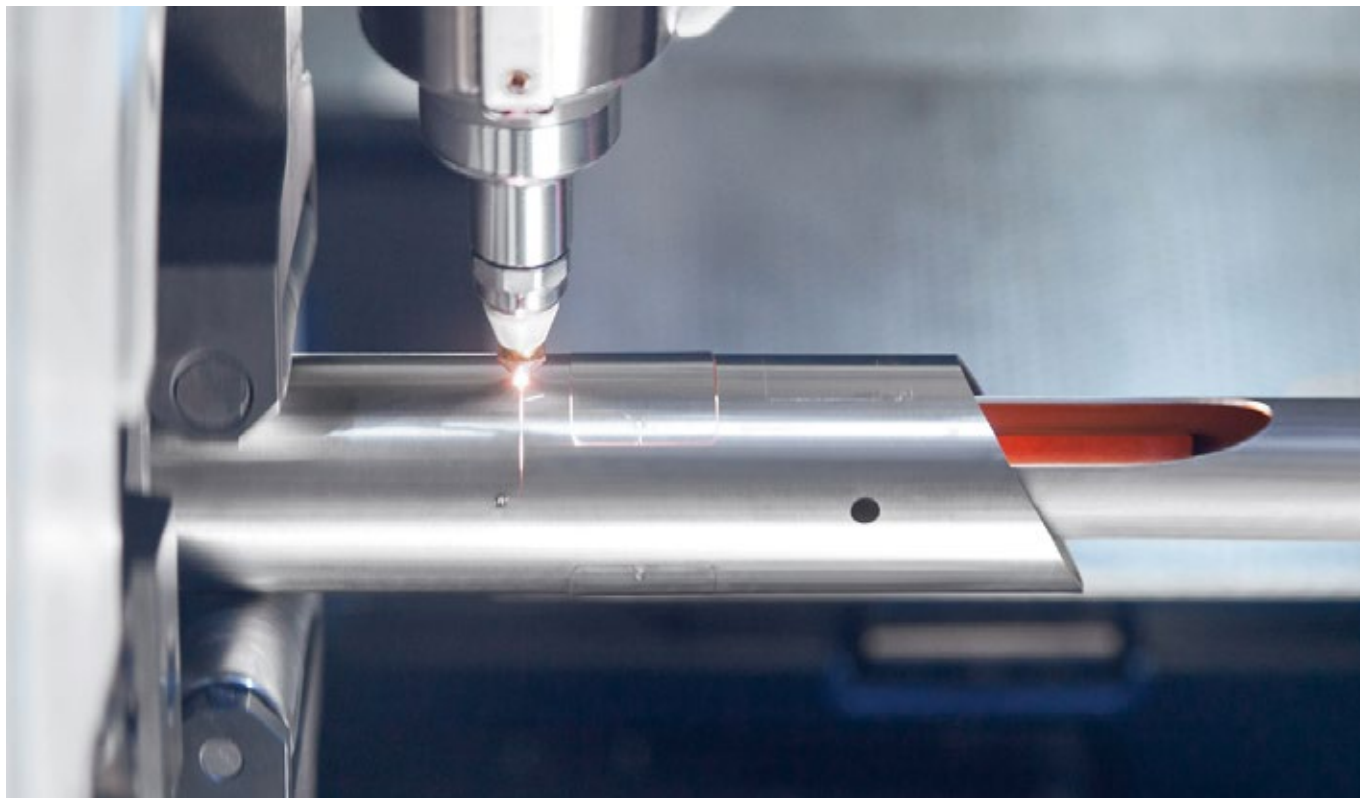
In addition to cutting with oxygen and nitrogen, this function also allows pressurized air to be used as a cutting gas. This increases the pipe's surface roughness and decreases the cut quality. With straight cuts, this application is possible up to a wall thickness of 3 mm, depending on the laser output and material type.

### Your benefits at a glance

- Reduced cutting gas costs being a more cost-effective alternative
- More flexible laser cutting processes with an additional cutting gas

### Machine type

TruLaser Tube	5000 fiber (T06), 5000 (T05, T08)
	7000 fiber (T07), 7000 (T03)



## Protecting the tube interior and avoiding reworking

### Description and application

The spatter protection device makes it possible to produce tubes with little spatter on the inside. A lance that is mounted on the flexible part removal station catches any cutting spatter that is generated during the cutting process. A stripper removes the finished cut tubes from the lance.

### Your benefits at a glance

- Enhanced quality of parts as there is less spatter on the inside of the tubes
- Less need for touch-up work because parts have less spatter
- Integration in the removal processes thanks to the stripper

### Machine type

TruLaser Tube	7000 (T03)
---------------	------------



Experience the **Spatter protection device** in action  
[www.trumpf.info/x2yep6](http://www.trumpf.info/x2yep6)





## Cutting insert for centering the beam



## Centering the laser beam with ease

### Description and application

The cutting insert can be used to adjust the laser beam simply and conveniently in the X and Y axes. Centering screws are used to do so. The previously required beam centering device is no longer needed. Positioning the laser beam towards the center of the nozzle ensures a good cutting result independent of direction.

### Your benefits at a glance

- Considerable time savings thanks to the convenient adjustment of the laser beam using centering screws
- No special device needed to center the laser beam

### Machine type

TruLaser Tube	7000 (T02KT02, T03)
---------------	---------------------

## Easy Filter



### Description and application

The Easy Filter is used to clean the cooling water. The filter is connected to the cooling water circuit. The contaminated cooling water flows through the filter and is turned into clean, deionized water again. The connection only needs to be fitted for the first use; it can then be reused any number of times. Use of the Easy kit is still required.

### Your benefits at a glance

- Maintenance work is significantly reduced, since new water does not have to be provided
- Cost savings over conventional water changing
- Can be used with almost all machines and lasers



Experience the **Easy Filter**  
in action  
[www.trumpf.info/70bkp2](http://www.trumpf.info/70bkp2)



## Low-scratch conveyor path



### Description and application

With the TruLaser tube 7000 (T03), a conveyor line is folded in via the bundle magazine to enable small batch sizes to be fitted manually or special profiles to be processed. In the non-scratch design, the individual chain links are coated with plastic to protect pipes and profiles from scratches.

### Your benefits at a glance

- Higher quality thanks to low-impact transport of materials over the conveying distance

## Low-scratch bundle space



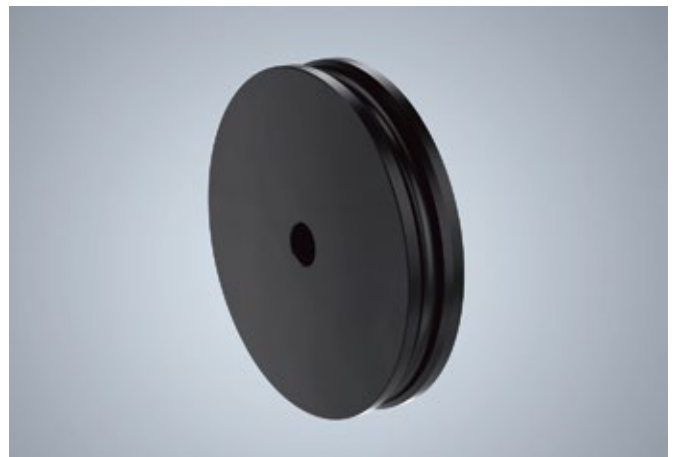
### Description and application

The bundle space in LoadMaster Tube can be equipped with plastic strips. This reduces damage to tubes and profiles.

### Your benefits at a glance

- Enhanced quality as damage to workpieces is prevented

## Tube supports



### Description and application

The additional tube supports prevent premature wear and tear of guide rollers and other tube supports. If tubes and profiles with the same diameter are frequently processed, suitable tube supports can be installed. They are pivoted and adjusted to the respective outside tube diameter in accordance with customer specifications.

### Your benefits at a glance

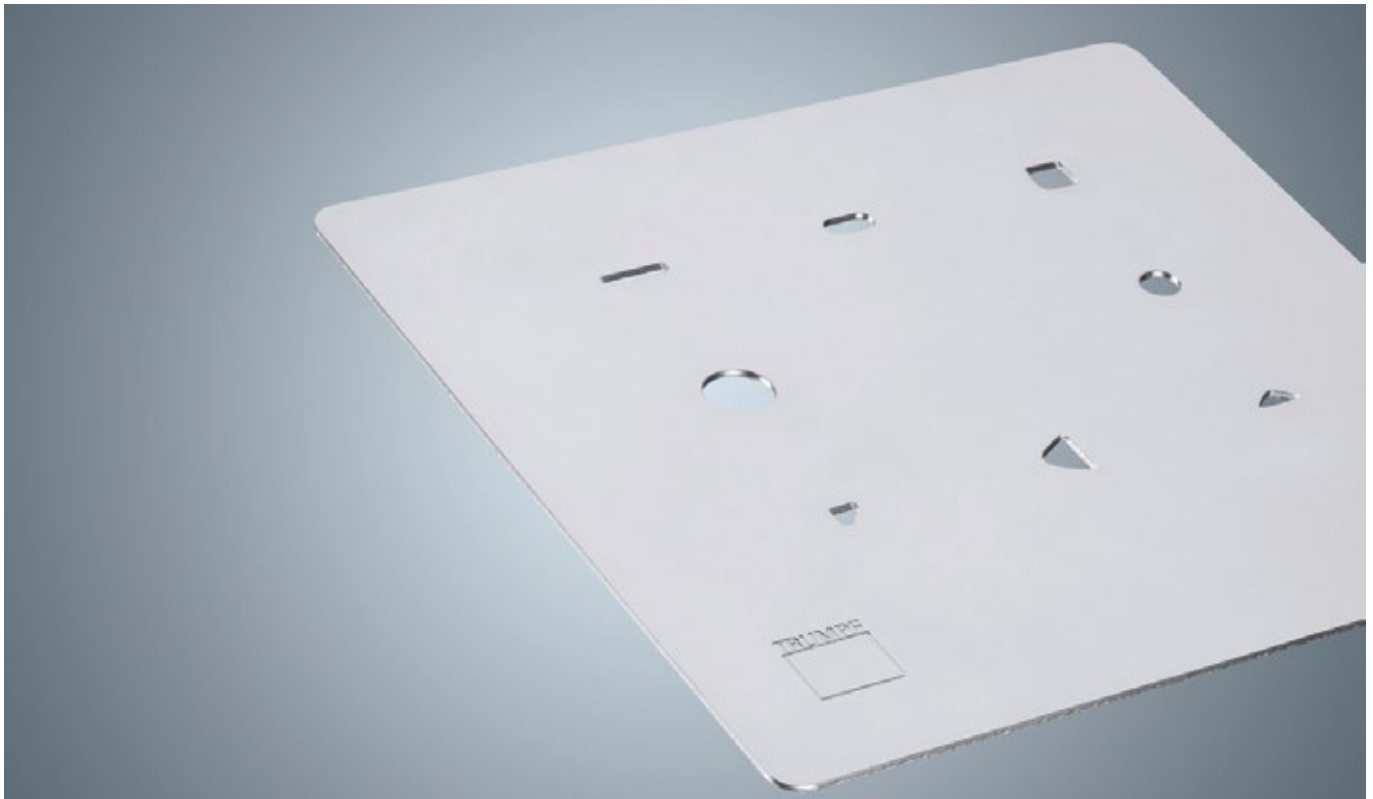
- Less wear and tear as the movement of the profile causes the roller to turn

# TruPunch / TruMatic

		TruPunch				
	Page	1000 (S05)	1000 (S19)	3000 (S11)	5000 (S01)	5000 (S10)
<b>Standard product enhancements</b>		<b>50</b>				
MultiTool	50	■	■	■	■	■
MultiShear	51	■	■	■	■	■
MultiBend	52	■	■	■	■	■
Tapping	53	■	■	■	■	■
Marking / quick beading	54	■	■	■	■	■
Engraving	55	■	■	■	■	■
Deburring and roller technology	56	■	■	■	■	■
Integrated flattening	57					■
Adaptive stroke calibration	58	■	■	■	■	■
Ejection of small parts	59		■			
Smart Punch Monitoring	60		■	■		
Spray lubrication of the die	61	■	■	■	■	■
Compressed air cutting	62					
Clamps	63	■	■	■	■	■
Repositioning cylinders	64		■	■	■	■
Sensor for part chute	65	■	■	■	■	■
Vibration-damping installation	66	■		■	■	■
Foot switch start	67	■	■	■	■	■
Brush table	68			■	■	■
Sheet arching detection	69	■	■	■	■	
Parts conveyor belt	70	■	■	■	■	■
Chip conveyor with tipping container	71	■	■	■	■	■
<b>Automation components</b>		<b>72</b>				
SheetMaster Compact	72		■	■		
SheetMaster	73			■	■	■
GripMaster	74				■	■
SortMaster Box	75			■	■	■
SortMaster Pallet	76				■	■
SortMaster Compact	77		■			
ToolMaster	78					
<b>Accessories</b>		<b>79</b>				



## MultiTool



### One tool, ten geometries

#### Description and application

This function enables the use of MultiTools. Up to 10 different punch and die inserts can be integrated in one MultiTool. The different geometries are changed by tool rotation. This greatly increases the number of tools available on the machine. Another added benefit is that shorter tool change times within the MultiTool increase productivity.

#### Your benefits at a glance

- Increased productivity thanks to the quick change of punching geometries
- Greater flexibility as there are more punching geometries available on the machine

#### Machine type

TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K05)
	7000 (K02, K08)





## Punching with maximum edge quality

### Description and application

With this function, MultiShear tools can be used to produce high-quality parts. When punching, the MultiShear produces consistent cutting edges, free of imprints and nibble marks. Interior cutouts and outside contours can be processed at any angle. The edge quality is comparable to that of a laser-cut edge.

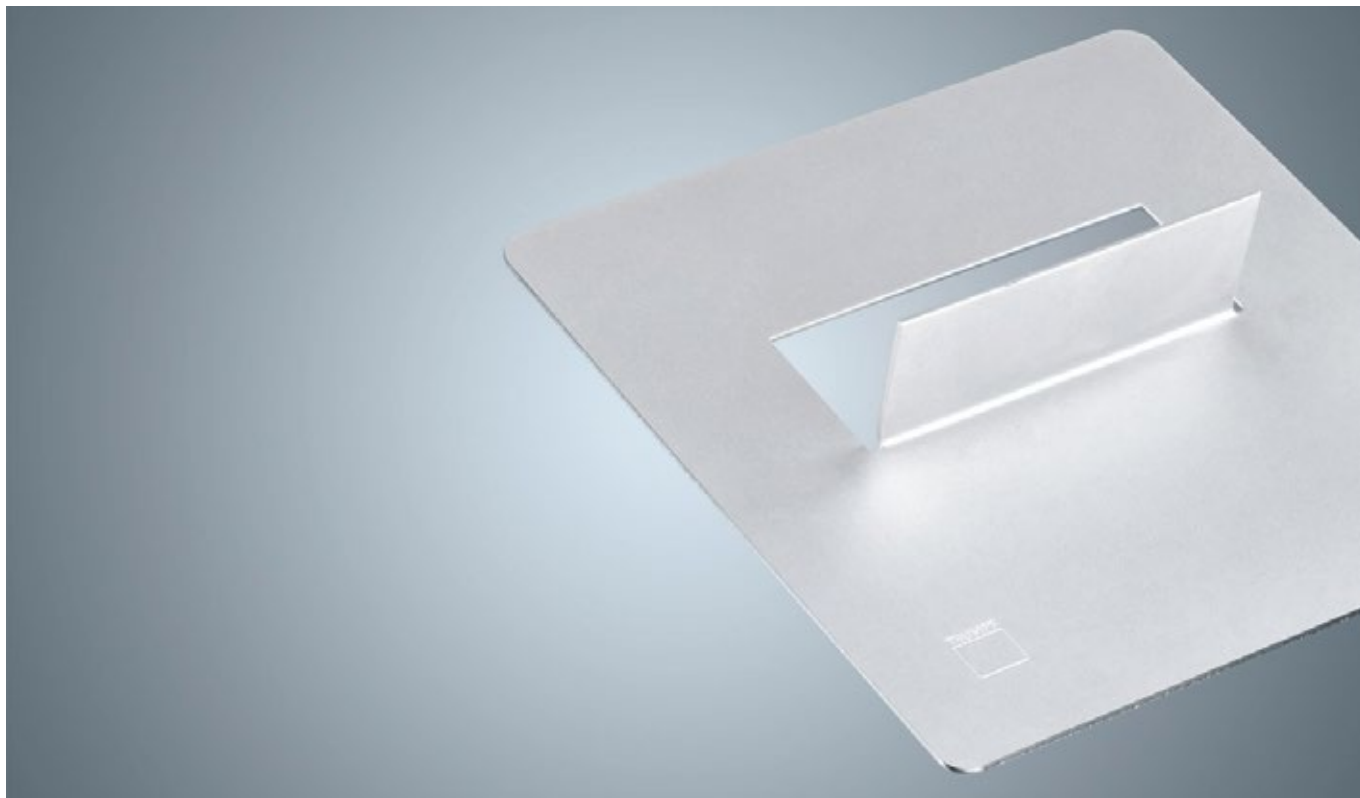
### Your benefits at a glance

- Outstanding laser-like edge quality on outer and inner contours
- Lower costs per part thanks to punching at higher cutting speed

### Machine type

TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K01, K05)
	7000 (K02, K08)

## MultiBend



## Using the punch head to create bends

**Description and application**

With this function, the potential length of unloaded parts is extended by 1.5 m. To this end, a deflection plate can be mounted on the scrap conveyor or on the ground directly using a special mounting bracket. The rigidity of the tubes and the weight of the finished parts should be taken into account.

**Your benefits at a glance**

- High productivity owing to fast bending operations
- High level of accuracy due to the exact positioning of the workpiece
- Reduction of secondary operations because of the start-to-finish on one machine

**Machine type**

TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K01, K05)
	7000 (K02, K08)



Experience the **MultiBend**  
in action  
[www.trumpf.info/ovrb52](http://www.trumpf.info/ovrb52)





## Thread forming instead of cutting

### Description and application

This function enables the use of a thread forming tool. Threads can be formed in a prepunched hole or in an extrusion. The threads are formed without producing any chips. Furthermore, a higher strength is achieved as the material is displaced and is not cut during the thread forming process.

### Your benefits at a glance

- High productivity thanks to swift processing
- High quality of threads owing to thread forming
- Reduction of secondary operations because of the start-to-finish on one machine

### Machine type

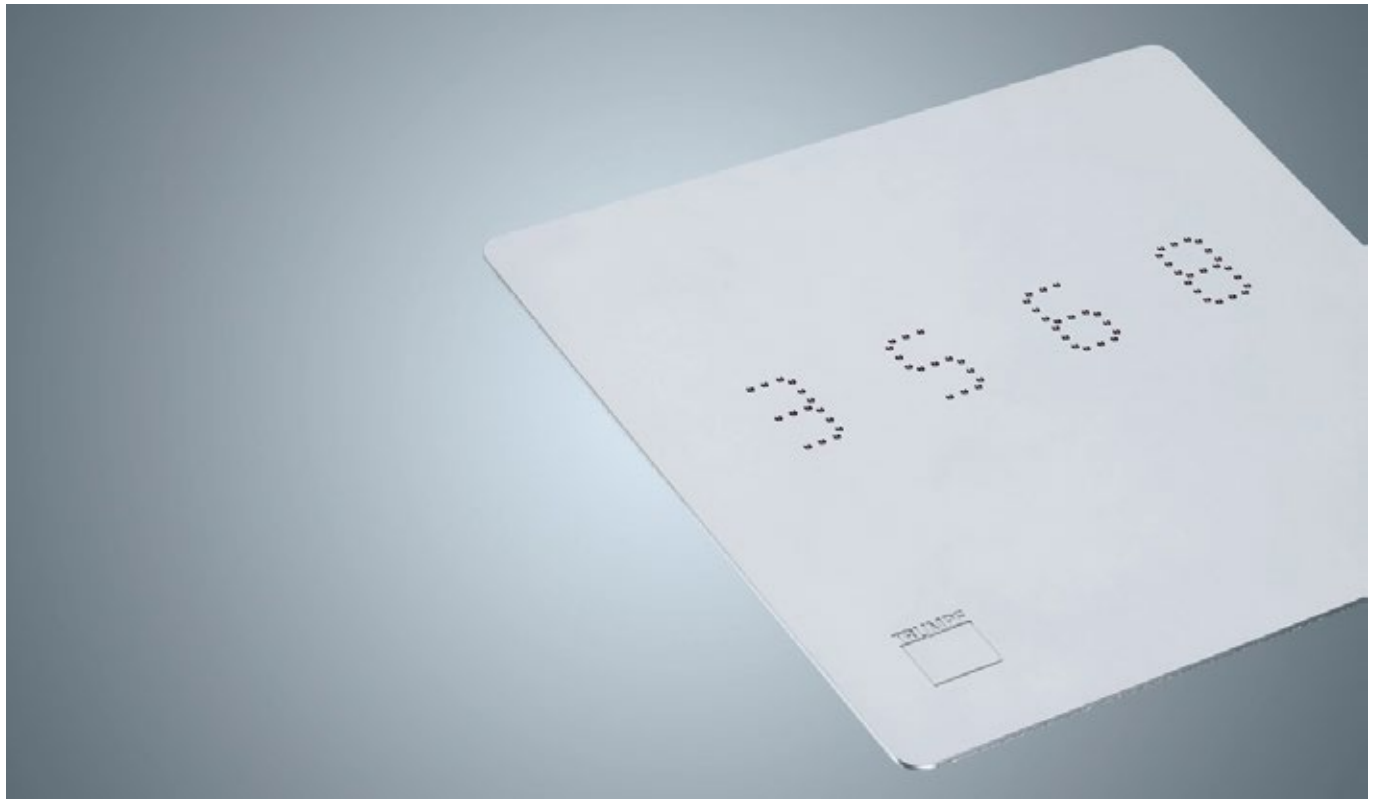
TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K01, K05)
	7000 (K02, K08)



Experience the **Tapping**  
in action  
[www.trumpf.info/hvggft](http://www.trumpf.info/hvggft)



## Marking / quick beading



## Processing sheets with a high stroke rate

### Description and application

This function facilitates the use of a marking and beading tool. Sheets are processed using an oscillating tool with a high stroke rate. This greatly reduces the part processing times.

### Your benefits at a glance

- Short part processing times due to increased stroke rate
- Greater flexibility owing to the use of additional tools
- Reduction of secondary operations because of the start-to-finish on one machine

### Machine type

TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K01, K05)
	7000 (K02, K08)

## Suitable tools

Name	Description	Benefits
Marking tool	Tool used for the flexible marking of sheet metal parts	<ul style="list-style-type: none"> <li>• Parts can be marked with letters, numbers and symbols of any size</li> <li>• Suitable for all sheet thicknesses</li> </ul>
Beading tool	Tool for producing continuous beads in nibbling mode	<ul style="list-style-type: none"> <li>• Reduces material costs as thinner sheets are used</li> <li>• High level of geometric flexibility due to continuous operation mode</li> </ul>



## Engraving sheets, deburring and slitting film

### Description and application

This function enables the use of the engraving, roller deburring, film slitting and ink marking tools. With all these tools, only one punching stroke is carried out for each working step. The processing is performed by the movement of the sheet. This creates a wide range of options of the areas of marking and deburring.

### Your benefits at a glance

- The use of new tools expands the range of applications
- Little noise emission due to special processing process
- Reduction of secondary operations because of the start-to-finish on one machine

### Machine type

TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K01, K05)
	7000 (K02, K08)

## Suitable tools

Name	Description	Benefits
Engraving tool	Tool used for flexible marking of sheet metal parts	<ul style="list-style-type: none"> <li>• Outstanding inscription quality thanks to marking without generating any chips</li> <li>• Long tool life guaranteed by a wear-resistant engraving needle</li> <li>• Maximum contour versatility due to a narrow line width</li> </ul>
Roller engraving tool	Deburring tool for all contours	<ul style="list-style-type: none"> <li>• A single tool for all possible contours</li> <li>• Smooth deburring result thanks to rigid ball in the stamp</li> <li>• Deburring also possible near formed sections</li> </ul>
Film slitting tool	Tool for slitting protective films	<ul style="list-style-type: none"> <li>• Perfect slitting of film without leaving any marks thanks to the spring-loaded punch</li> <li>• Extremely long service life thanks to the ball point</li> <li>• Flexibility in different film thickness owing to the large spring range of the tool</li> <li>• Tool structure enables the finest slitting contours</li> </ul>
Ink marking tool	Tool for quickly and flexibly marking	<ul style="list-style-type: none"> <li>• The marking of all metal, non-metal and film-coated sheets</li> <li>• Suitable for all sheet thicknesses</li> <li>• As there are no mechanical influences in the process, the surface remains undamaged</li> <li>• The ink can be removed from the sheet using a solvent</li> </ul>



Experience the Engraving  
in action  
[www.trumpf.info/wtozem](http://www.trumpf.info/wtozem)





## Deburring and roller technology



### Rolling instead of punching

**Description and application**

This function enables the use of a range of different roller tools. With the deburring and roller technology, sheets are not processed by repeated strokes, but the movement of the sheet. The sheets are moved between two rollers which are located in the punch and the die.

**Your benefits at a glance**

- Shorter production times as the process is possible at maximum axis speeds
- The use of new tools expands the range of applications
- Little noise emission due to special processing process
- Reduction of secondary operations because of the start-to-finish on one machine

**Machine type**

TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K01, K05)
	7000 (K02, K08)

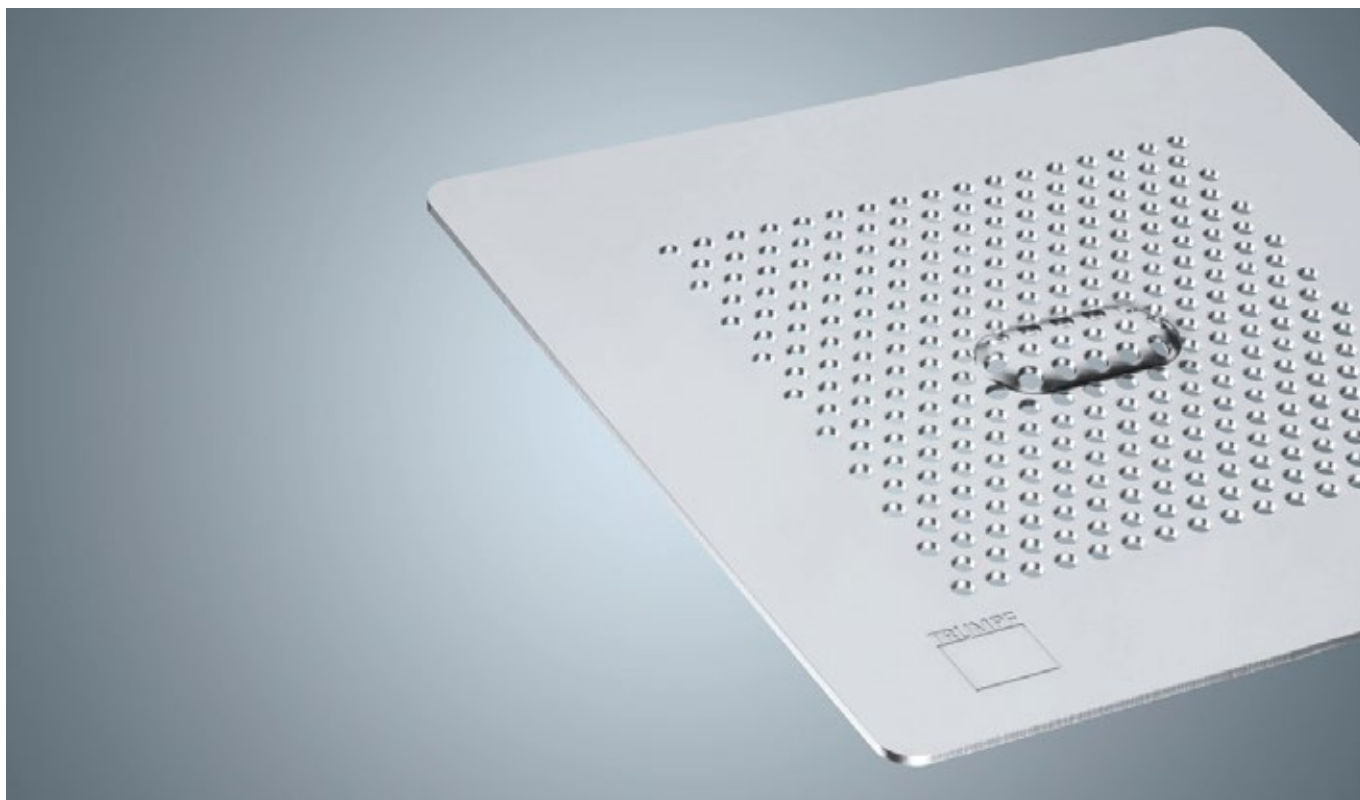
### Matching tools

Bezeichnung	Beschreibung	Vorteile
Roller offsetting tool	Tool for producing continuous folds using roller forming	<ul style="list-style-type: none"> <li>• Flexible application for straight or curved offsets</li> <li>• Outstanding part quality with no visible marks from forming</li> </ul>
Roller deburring tool	Tool for deburring punched contours	<ul style="list-style-type: none"> <li>• Optimal quality through the pressing flat of the burr</li> <li>• High flexibility as rollers can be exchanged to meet any requirement</li> </ul>
Roller pinching tool	Tool for chamfering of laser cut edges	<ul style="list-style-type: none"> <li>• Deburring of laser cut contours without requiring an additional work cycle</li> <li>• Indentations can also be created as a predetermined breaking point or for subsequent manual bending</li> <li>• Wide range of rollers increases flexibility</li> </ul>
Roller beading tool	Tool for producing continuous beading by roller forming	<ul style="list-style-type: none"> <li>• High part quality without any nibble marks owing to roller technology</li> <li>• Reduces material costs as thinner sheets can be used</li> </ul>



Experience the **Deburring and roller technology** in action  
[www.trumpf.info/roze38](http://www.trumpf.info/roze38)





## Flat sheets directly from the machine

### Description and application

This function enables the use of tools with integrated flattening. During the punching of sheets, the workpiece is left with internal compressive and tensile stresses which result in deformation. With the integrated flattening function, the sheet is flattened during the stroke used to punch the hole. This enables the production of flat parts in one work cycle on the machine.

### Your benefits at a glance

- Enhanced flexibility thanks to the option of forming directly in flattened sheets
- Maximum part quality owing to workpieces free from distortion
- Greater process reliability thanks to flat sheets
- Reduction of secondary operations because of the start-to-finish on one machine

### Machine type

TruPunch	5000 (S10, S12)
TruMatic	6000 fiber (K06), 6000 (K05)
	7000 (K02, K08)



Experience the **Integrated flattening** in action  
[www.trumpf.info/eh804v](http://www.trumpf.info/eh804v)



## Adaptive stroke calibration



## Measuring and compensating sheet thickness tolerances

### Description and application

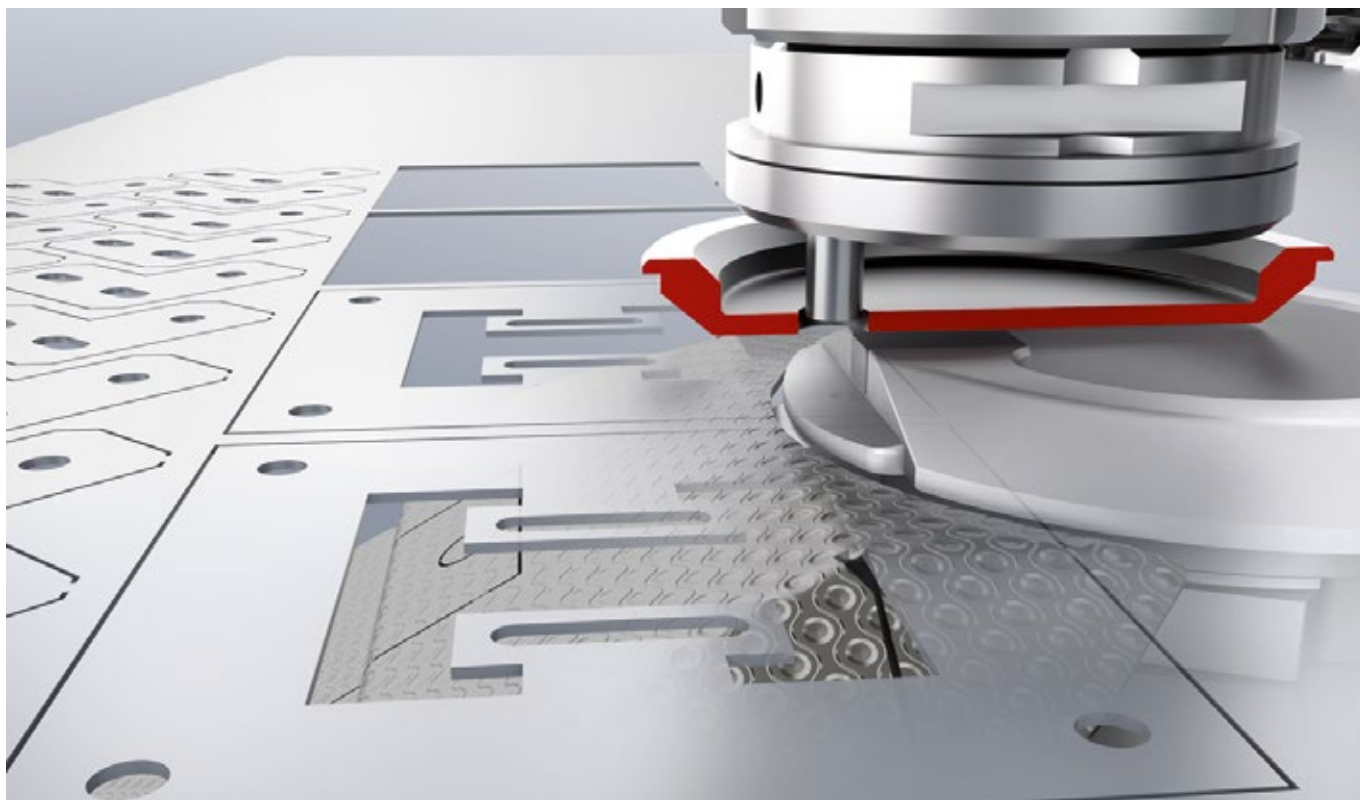
A special measuring tool can be used with this function. The adaptive stroke calibration uses this tool to measure the sheet thickness and calibrates the ram stroke to within 0.03 mm. The automatic compensation of sheet thickness tolerances enables a consistently high level of embossing and deformation quality to be maintained.

### Your benefits at a glance

- Consistent embossing and forming quality thanks to the calibrated ram stroke
- Cost savings through to avoidance of rejects

### Machine type

TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K01, K05)
	7000 (K02, K08)



## Automatic sorting of finished parts and waste parts

### Description and application

A special tool that has an inner and outer cutting edge can be used to sort finished parts and waste parts. The inner cutting edge can be used to dispose of waste parts through the die. The outer cutting edge ensures that the finished parts are ejected via the parts chute. Even laser-cut parts can be ejected reliably in this way.

### Your benefits at a glance

- Additional expenses are eliminated thanks to reliable separation of finished parts and waste parts directly on the machine
- Laser-cut parts can also be sorted for ejection

### Machine type

TruPunch	1000 (S19)
TruMatic	1000 fiber (K07)



Experience the Ejection of small parts in action  
[www.trumpf.info/b6uo7f](http://www.trumpf.info/b6uo7f)



## Smart Punch Monitoring



## Detecting punch breakage, preventing waste

### Description and application

The Smart Punch Monitoring function checks for punch breakage. Before a tool change, this function checks whether a hole has actually been punched into the sheet with the last stroke. In doing so, the machine detects a punch break early and forwards this information to the control.

### Your benefits at a glance

- Early detection of punch breakage prevents the production of rejects
- Prevention of waste during unattended shifts

### Machine type

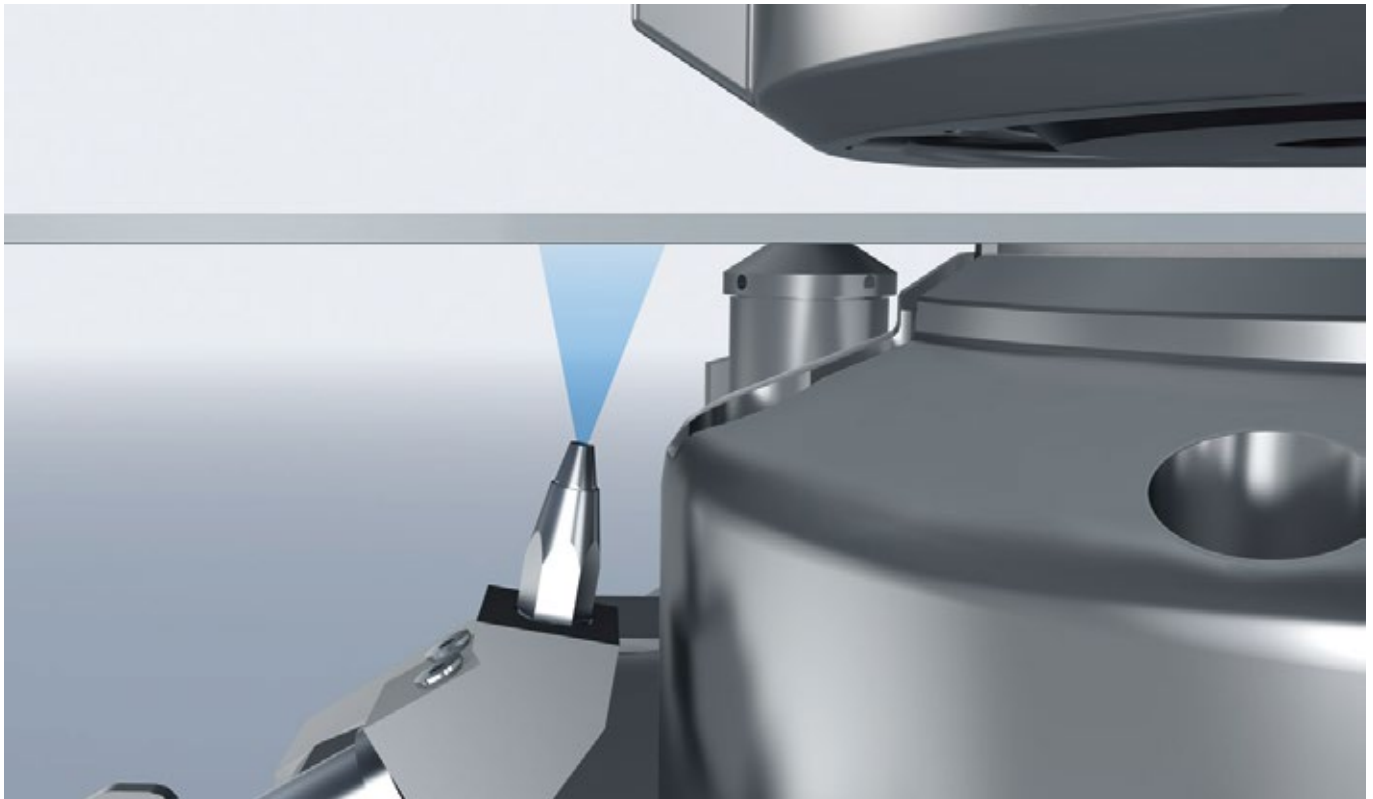
TruPunch	1000 (S19)
	3000 (S11)
	5000 (S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K05)
	7000 (K02, K08)



Experience the **Smart Punch Monitoring** in action  
[www.trumpf.info/dw78b5](http://www.trumpf.info/dw78b5)







## Oiling then forming, achieving longer tool life

### Description and application

With spray lubrication of the die, it is possible to lubricate the underside of the sheet before the forming process. An oil-air mixture is sprayed through a nozzle onto the underside of the sheet. This results in lower friction and less wear and tear on tools. This also reduces processing marks, and therefore enhances the quality of parts.

### Your benefits at a glance

- Cost savings owing to longer tool service life
- Increased part quality thanks to fewer processing marks

### Machine type

TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K05)
	7000 (K02, K08)

## Compressed air cutting



### Cut thin sheets cost-effectively

**Description and application**

In addition to cutting with oxygen and nitrogen, this function also allows pressurized air to be used as a cutting gas. This increases the sheet's surface roughness and decreases the cut quality. This application is possible up to a sheet thickness of 3 mm, depending on the laser output and material type.

**Your benefits at a glance**

- Reduced cutting gas costs being a more cost-effective alternative
- More flexible laser cutting processes with an additional cutting gas

**Machine type**

TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K05)
	7000 (K02, K08)



## Secure grip to meet all requirements

### Description and application

Clamps ensure the sheets are held securely in place during the entire punching process. There are a number of clamps available to meet a wide range of processing requirements.

### Your benefits at a glance

- The machine is adjusted to changed customer requirements
- Greater flexibility through the ability to combine different types of clamps

### Machine type

TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K01, K05)
	7000 (K02, K08)

## Clamps at a glance

Name	Description	Benefits	Machine type
Additional clamps	Additional clamps are used to stabilize thin sheets. It is recommended that additional clamps be used for sheet thicknesses of	<ul style="list-style-type: none"> <li>• Higher process reliability owing to additional stabilization of sheets</li> </ul>	TruPunch 1000 (S05), 3000 (S11), 5000 (S01, S10, S12) TruMatic 6000 (K01, K05), 6000 fiber (K06), 7000 (K02, K08)
Individually opening clamps	The clamps can be opened individually. This enables workpieces to be removed from the clamps without having to open all the clamps on the sheets.	<ul style="list-style-type: none"> <li>• Removal of workpieces in clamp area</li> </ul>	TruPunch 5000 (S12) TruMatic 6000 (K05), 6000 fiber (K06), 7000 (K02, K08)
Vertically adjustable clamps	These clamps can move up to 12 mm upwards. This means forming can be produced even close to the clamp dead area. It is recommended that these clamps be used with the MultiBend tool.	<ul style="list-style-type: none"> <li>• Forming close to the clamp dead area possible</li> </ul>	TruPunch 3000 (S11), 5000 (S01, S10, S12) TruMatic 6000 fiber (K06), 7000 (K02, K08)

## Repositioning cylinders



## Holding sheets firmly in place during repositioning

### Description and application

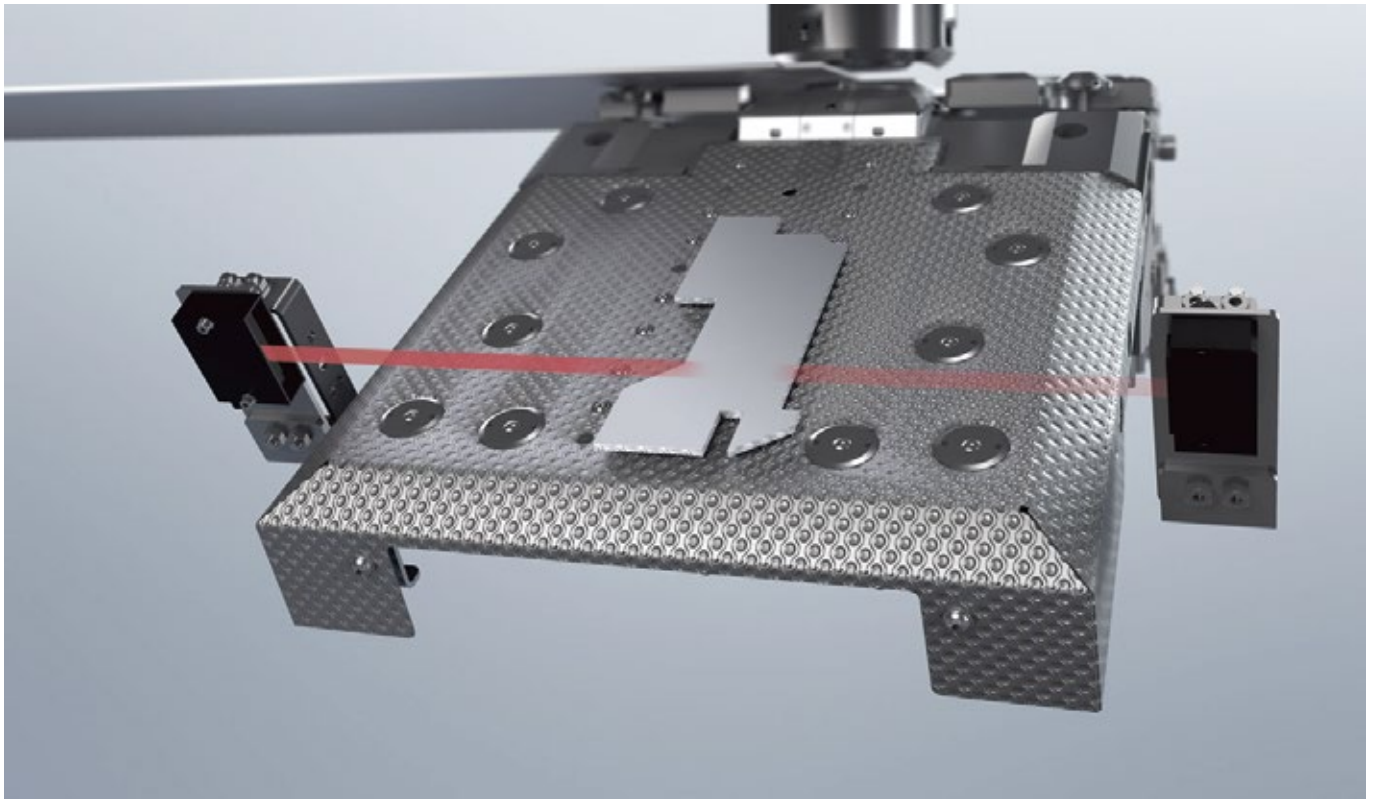
Repositioning cylinders press the sheet against the machine table while the clamps are being repositioned. The clamps open up, the transverse rail moves to a defined position and the clamps close once again. This enables repositioning regardless of the type of tools used. The cylinders have plastic caps to prevent marks made in sheets during repositioning.

### Your benefits at a glance

- Higher flexibility owing to the option of processing extra-long sheets
- Repositioning enables processing in the clamp dead area
- Higher process reliability as sheets cannot slip

### Machine type

TruPunch	1000 (S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K01, K05)
	7000 (K02, K08)



## Monitoring the ejection of parts

### Description and application

The optical sensor on the parts chute detects whether the part has passed through the parts chute. As soon as the finished part has interrupted the light barrier, the sensor alerts the control. This closes the parts chute which means further processing can begin.

### Your benefits at a glance

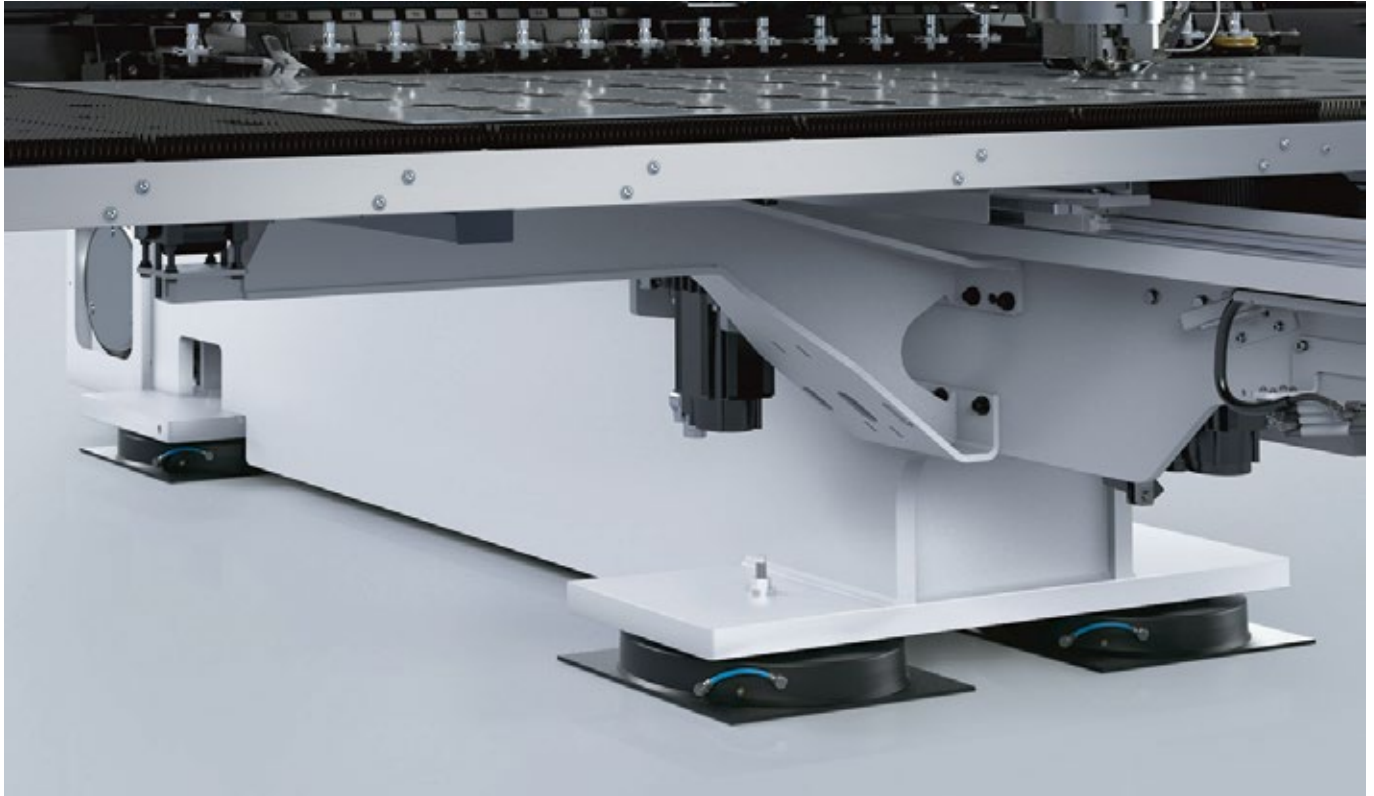
- Greater process reliability as the ejection of parts is monitored
- Prevention of collisions in unattended shifts

### Machine type

TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)



## Vibration-damping installation



## Reducing machine vibration

### Description and application

With vibration-damping installation, instead of wedge mounts there are air-cushioning elements under the machine legs. These components reduce the transmission of vibration and noise in the vicinity of the machine.

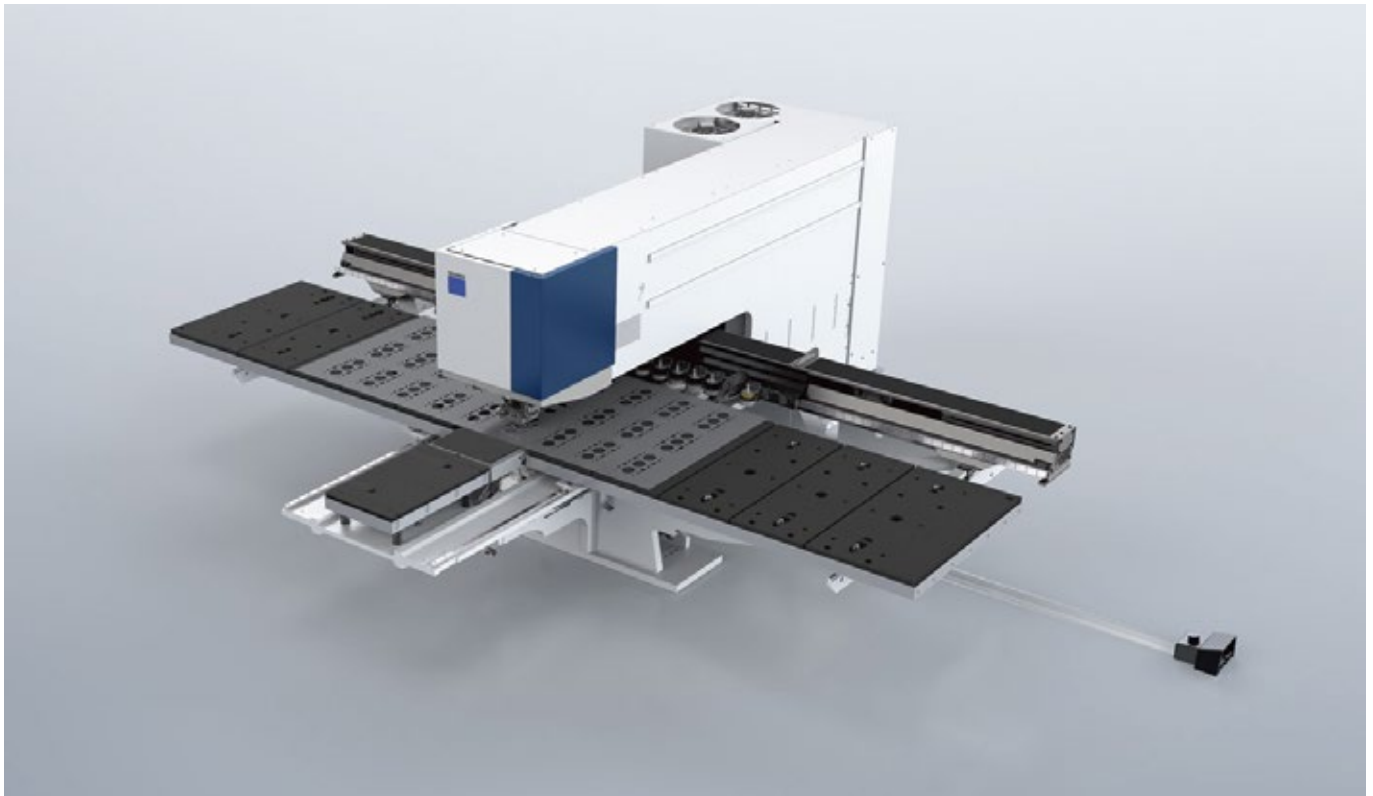
### Your benefits at a glance

- Less interference affecting sensitive machines nearby thanks to reduced vibration
- Noise reduction enhances user-friendliness

### Machine type

TruPunch	1000 (S05)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K01, K05)
	7000 (K02, K08)





## Activating the machine from an additional position

### Description and application

The machine can be activated from an additional position using a foot switch. The foot switch has the functions „Acknowledge light barrier“, „Emergency shutdown“, „Start“ and „Feed hold“.

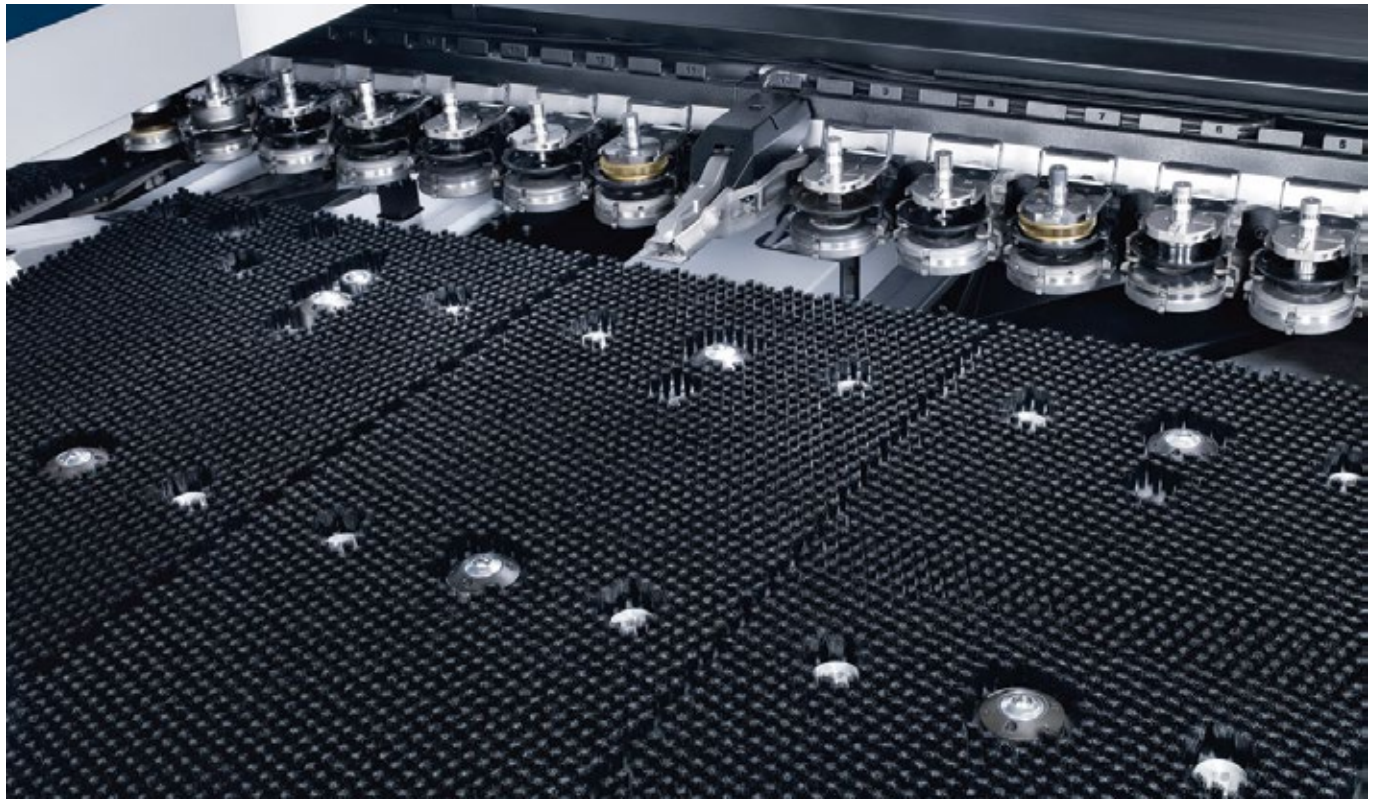
### Your benefits at a glance

- Increased productivity because of faster machine operation
- Greater operator convenience owing to less walking around in the production process

### Machine type

TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K01, K05)
	7000 (K02, K08)

## Brush table



## Avoiding scratches, reducing noise

### Description and application

Brush tables are particularly suitable for processing sensitive materials. A brush table ensures the bottom of the sheet does not come into contact with machine parts, the die in particular, which cause scratching. Any dirt particles generated fall between the fiber bundles, preventing them from sticking to the slide surface.

### Your benefits at a glance

- Enhanced quality thanks to less scratching on the bottom of the sheet
- Operator convenience because of noise reduction
- Easy to clean with quickly exchangeable brush fields

### Machine type

TruPunch	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	6000 fiber (K06), 6000 (K01, K05)
	7000 (K02, K08)



## Detecting sheet arching, preventing damage

### Description and application

The sheet arching detection function enables early detection of sheet arching, thereby preventing collision. An infrared light barrier detects sheet arching and interrupts the production process. This early interruption of production prevents damage to the machine.

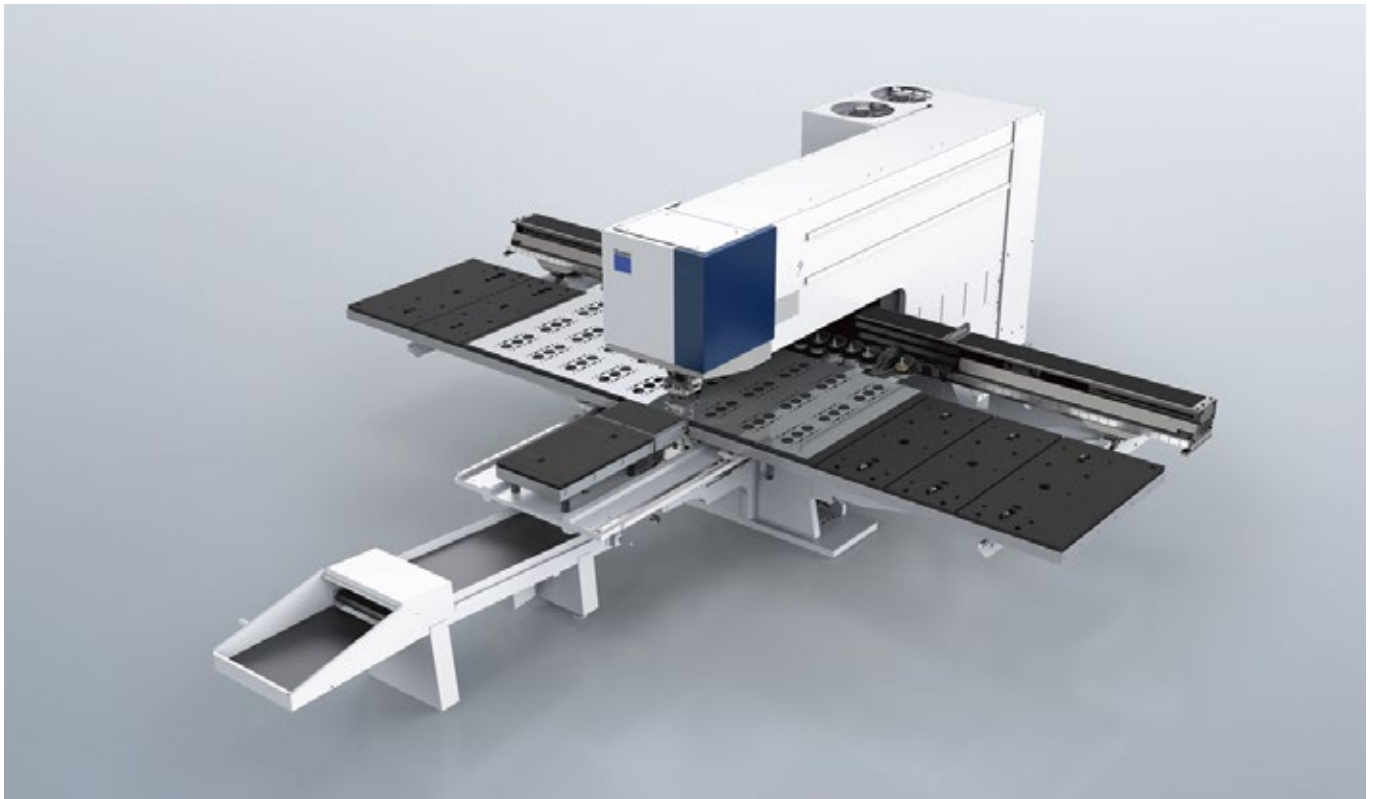
### Your benefits at a glance

- Higher process reliability owing to early detection of sheet arching
- Prevention of subsequent damage to the machine

### Machine type

TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K01, K05)

## Parts conveyor belt



## Conveying finished parts with little wear and tear on the material

**Description and application**

The parts conveyor belt transports finished parts away from the safety area of the machine. Parts are ejected onto the conveyor belt through a flap or chute. The parts can be removed separately which is easy on the material or can be collected in a finished parts container.

**Your benefits at a glance**

- Enhanced productivity with less time lost to interruptions
- Reliable ejection of finished parts which is easy on materials as parts can be removed individually

**Machine type**

TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K01, K05)
	7000 (K02, K08)

## Chip conveyor with tipping container



## Taking away punching slugs

### Description and application

The chip conveyor transports the punching slugs to the tipping container. This is much larger than the chip container. This increases machine runtime as the tipping container does not need to be emptied as often. Tipping containers have wheels and a tilt function that greatly ease the emptying process.

### Your benefits at a glance

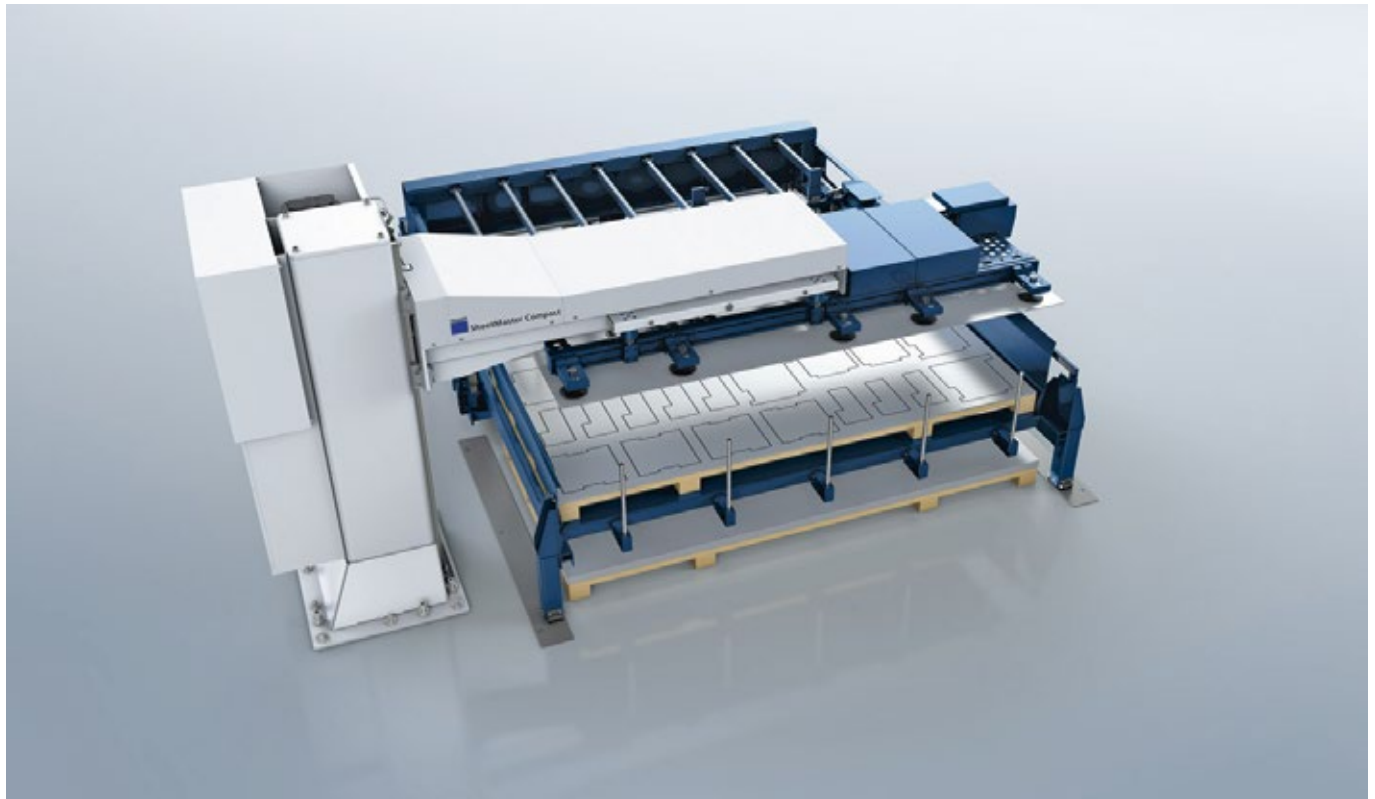
- Longer machine runtimes owing to the larger volume in the chip container
- Greater user-friendliness owing to easy and ergonomic emptying of the tipping container

### Machine type

TruPunch	1000 (S05, S19)
	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K01, K05)
	7000 (K02, K08)



## SheetMaster Compact



## Loading and unloading in the smallest spaces

**Description and application**

The SheetMaster Compact loads the machine with sheets or pre-cut sheets and unloads microjoint sheets and scrap skeletons. The SheetMaster Compact is particularly economical in terms of the space required. The installation area of the machine only needs to be slightly enlarged.

**Your benefits at a glance**

- Enhanced productivity owing to automatic loading of raw material and unloading of microjoint sheets and scrap skeletons
- High process reliability as double sheet detection separates sheets
- Loading and unloading with little operative intervention enables multi-machine operation and additional shifts
- Optimum use of space thanks to space-saving installation

**Machine type**

TruPunch	1000 (S19)
	3000 (S11)
TruMatic	1000 fiber (K07)

## Specifications

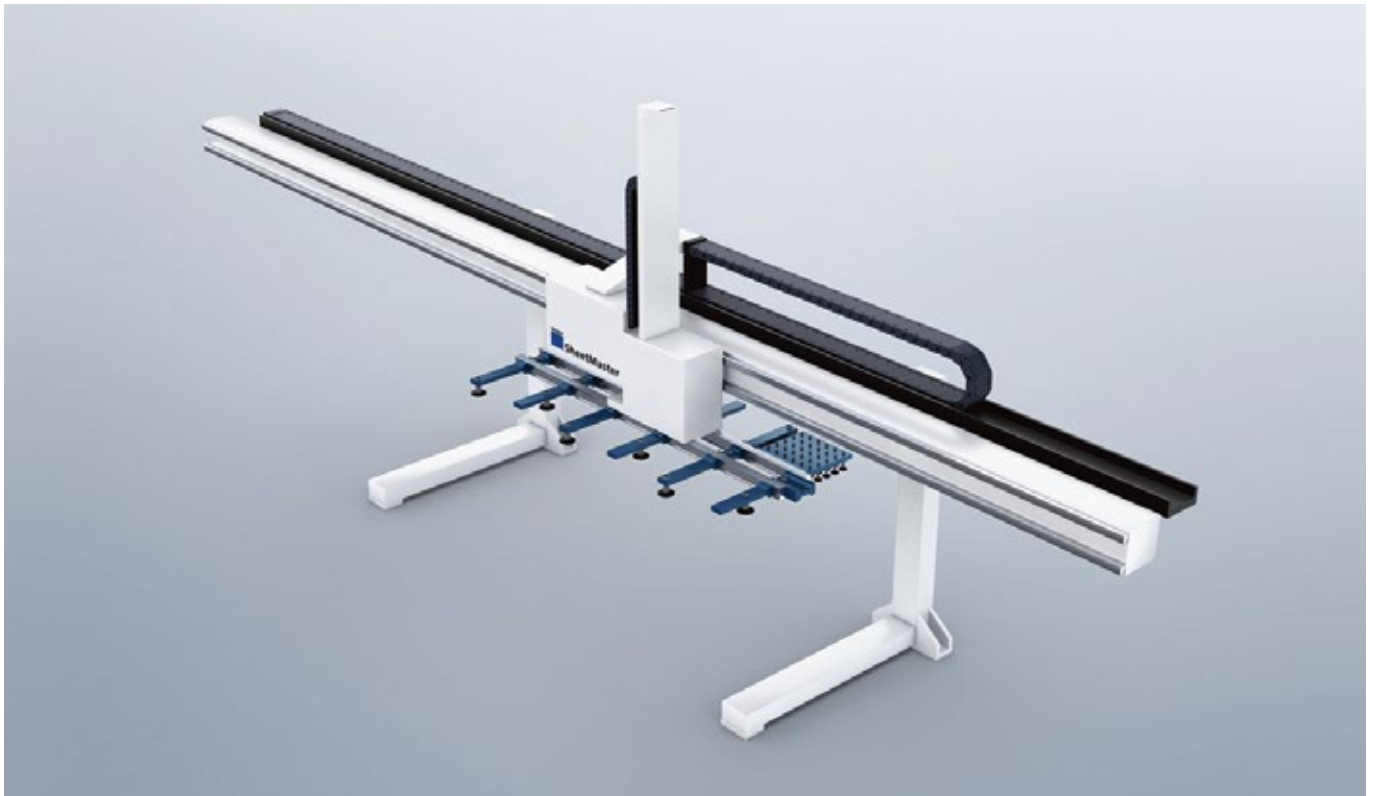
	Medium format	Large format
TruPunch	1000 (S19), 3000 (S11)	1000 (S19)
TruMatic	1000 fiber (K07)	1000 fiber (K07)
Max. sheet format	mm 2500 x 1250	3000 x 1500
Min. sheet format	mm 700 x 350	1000 x 1000
Sheet thickness, loading/ unloading	mm 1,0 - 6,4	1,0 - 6,4
Max. sheet weight, loading/unloading	kg 160	230



Experience the  
**SheetMaster Compact**  
in action  
[www.trumpf.info/nty6Gu](http://www.trumpf.info/nty6Gu)







## Maximum material handling flexibility

### Description and application

The SheetMaster is an automation component for loading and unloading. Sheets are automatically removed by the suction frame and are conveyed to the machine table. As soon as the machine has removed the finished parts from the table, the SheetMaster deposits them onto the unloading platform. Different types of suction cups can be positioned in the suction frame. This means different sheet variants can be processed.

### Your benefits at a glance

- Increased productivity owing to better utilization of machine capacity
- Maximum process reliability owing to optimized loading and unloading cycles, double sheet detection and peeling suction cups for sheet separation
- Loading and unloading with little operative intervention enables multi-machine operation and additional shifts
- Flexibility in removing individual parts thanks to a range of suction cup variants
- Sorting function results in greater operator convenience

### Machine type

TruPunch	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	6000 (K05)
	7000 (K02, K08)

## Technical data

		Medium format	Large format	Oversize format
TruPunch		3000 (S11), 5000 (S01, S10, S12)	3000 (S11), 5000 (S01, S10, S12)	5000 (S01, S10, S12)
TruMatic		6000 (K01, K05), 7000 (K02)	6000 (K01, K05), 7000 (K02)	6000 (K05), 7000 (K02)
Max. sheet format for loading	mm	2500 x 1250	3000 x 1500	4000 x 1500
Sheet thicknesses	mm	0.8 - 8.0*	0.8 - 8.0*	0.8 - 8.0*
Max. sheet weight	kg	160 - 230*	230 - 285*	285

\* Depending on machine type.

## Product enhancements for the SheetMaster

	Medium format	Large format	Oversize format
Peeling system including positioning aids	•	•	•
Loading and unloading in productive time	•	•	•
Suction cups for additional applications	•	•	•
Laser parts unloading monitoring	Δ	Δ	Δ

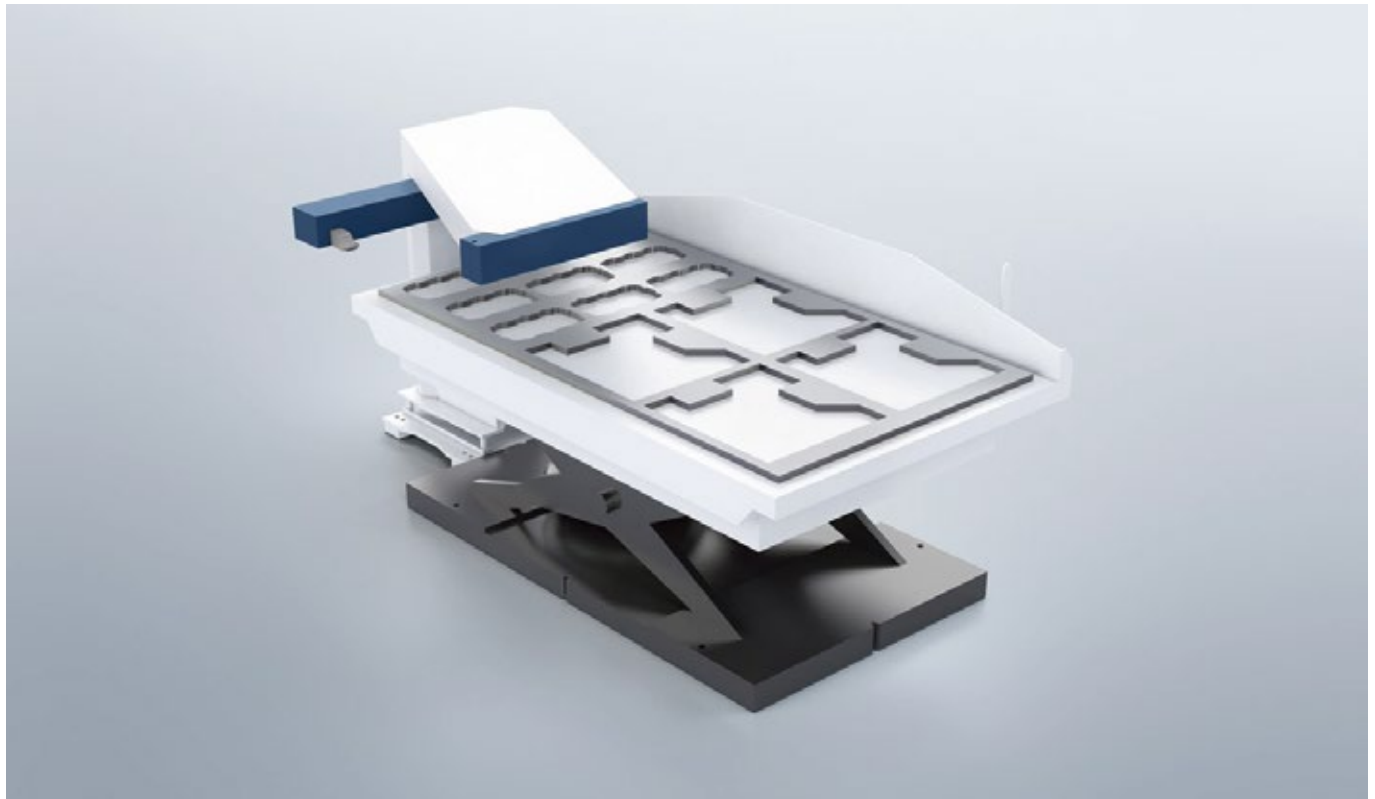
• = Can be retrofitted on TruPunch and TruMatic machines / Δ = Can be retrofitted on TruMatic machines



Experience the  
SheetMaster in action  
[www.trumpf.info/xo7gn9](http://www.trumpf.info/xo7gn9)



## GripMaster



## Unloading scrap skeletons automatically

### Description and application

With the GripMaster, scrap skeletons are automatically removed by two grippers and are stacked automatically on a scrap skeleton pallet. The pallet can be removed from the scissor table via forklift truck for disposal of the scrap skeleton. Scrap skeletons are easily removed with the help of the tipping function. It is recommended that a third gripper be used when unloading heavy scrap skeletons weighing more than 110 kg.

### Your benefits at a glance

- Enhanced productivity owing to longer machine runtimes coupled with faster order processing
- Accurate placement and stacking of scrap skeletons enhances process reliability

### Machine type

TruPunch	5000 (S01, S10, S12)
TruMatic	6000 (K05)
	7000 (K02, K08)



## Automatic sorting of small parts

### Description and application

With the SortMaster Box, small parts are sorted into four bins. The finished parts are sorted and placed in a defined bin. The respective bin is positioned automatically. Depending on the configuration, the bins are positioned by means of rotational or linear movement. The size of the parts depends on the maximum size of workpieces that can be removed through the part chute.

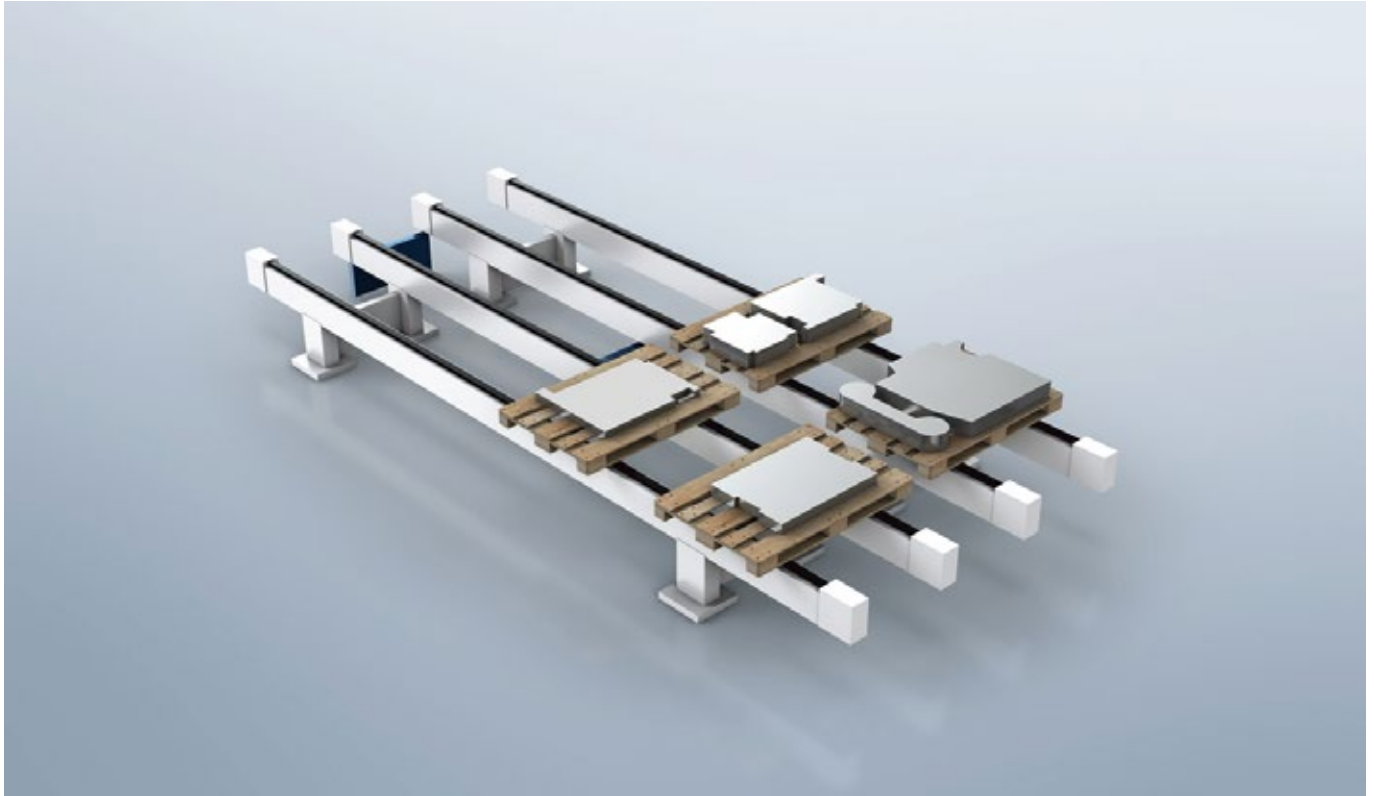
### Your benefits at a glance

- Increased productivity as there is no need to re-sort and separate finished parts
- Greater flexibility as small parts are sorted into four bins
- The containers can be removed with a forklift truck or a pallet jack

### Machine type

TruPunch	3000 (S11)
	5000 (S01, S10, S12)
TruMatic	6000 (K05)
	7000 (K02, K08)

## SortMaster Pallet



## Sorting large parts automatically

**Description and application**

The SortMaster Pallet is a chain conveyor used for sorting workpieces onto pallets. It replaces the unloading platform at the SheetMaster. The SheetMaster transports the finished parts to the SortMaster Pallet. Depending on the configuration, the SortMaster Pallet can take up to six pallets. The pallets can be positioned by the program or manually.

**Your benefits at a glance**

- Enhanced productivity due to effective handling of finished parts and longer machine runtimes
- Flexible positioning of parts in the deposition area by moving the pallets

**Machine type**

TruPunch	5000 (S01, S10, S12)
TruMatic	6000 (K05)
	7000 (K02, K08)



## Automate without additional space requirement

### Description and application

SortMaster Compact is integrated into the installation space of the machine. Around the pallet cart, the safety space is enlarged slightly. Protection is provided by a light curtain without interfering contours. The operating panel is shifted accordingly.

### Your benefits at a glance

- Entry to single-part automation
- Automating without increasing the footprint
- Outstanding flexibility and safety during removal

### Machine type

TruPunch	1000 (S19)
TruMatic	1000 fiber (K07)

## ToolMaster



## Increasing tool capacity

### Description and application

The ToolMaster changes tools automatically. The external tool magazine greatly expands the capacity of the linear magazine. Depending on the configuration, the tools are loaded with a swivel arm or linear gripper.

### Your benefits at a glance

- Higher productivity by reducing tool change times for complex and tool-intensive parts
- Greater processing flexibility thanks to greater tool capacity
- Simple and convenient setup of tools in the ToolMaster

### Machine type

TruPunch	5000 (S12)
TruMatic	6000 fiber (K06), 6000 (K05)
	7000 (K02, K08)

## Tool capacity

Name	Machine type	Machine type
ToolMaster	TruMatic	6000 (K05) 6000 fiber (K06) 7000 (K02) 40, 70
ToolMaster Linear	TruPunch	5000 (S12) 18, 54, 90



## SortMaster Box container



### Description and application

The container is used in the SortMaster box as a collecting container for the parts that are ejected via the parts chute. The container can be removed with a forklift truck or pallet jack for emptying. To ensure that the machine can continue producing while being emptied, it is advisable to use additional containers.

### Your benefits at a glance

- Minimized idle times for unloading of parts through the use of an additional container

## Easy Filter



### Description and application

The Easy Filter is used to clean the cooling water. The filter is connected to the cooling water circuit. The contaminated cooling water flows through the filter and is turned into clean, deionized water again. The connection only needs to be fitted the for the first use; it can then be reused any number of times. Use of the Easy kit is still required.

### Your benefits at a glance

- Maintenance work is significantly reduced, since new water does not have to be provided
- Cost savings over conventional water changing
- Can be used with almost all machines and lasers



Experience the **Easy Filter**  
in action  
[www.trumpf.info/70bkg2](http://www.trumpf.info/70bkg2)



## Container for workpieces



### Description and application

The workpiece container catches all parts that are removed through the parts chute or parts conveyor belt. The container can be removed with a forklift truck or pallet jack. The use of an additional tipping container is recommended in order to ensure the machine can continue producing while the container is being emptied.

### Your benefits at a glance

- Minimized idle times for part removal through the use of an additional container

## Tiltable scrap skeleton pallet



### Description and application

The GripMaster removes scrap skeletons from the machine table and places them on the tiltable scrap skeleton pallet. The tipping function of the pallet makes it easier to unload the residual sheets. Use of an additional scrap skeleton pallet means the machine can continue producing during the emptying process.

### Your benefits at a glance

- Minimized idle times for scrap removal through the use of an additional pallet
- The tipping function makes unloading easier and more convenient

Accessories

Tipping container



**Description and application**

The waste falls into the tipping container from the transverse conveyor belt. The tipping function makes it easy for the operator to empty the container. It is advised that an additional tipping container be used to ensure the machine can continue to operate while the container is being emptied.

**Your benefits at a glance**

- Minimized idle times for scrap removal by using an additional container
- The tipping function facilitates ergonomic scrap removal

Lubricant container



**Description and application**

Lubricant containers are filled with punching and nibbling oil. Depending on the type of material processed, different cutting oils may be needed. Thanks to the quick coupling, these containers are fast and easy to change if and when the need arises.

**Your benefits at a glance**

- Minimized idle times owing to swift cutting oil change for different types of material

Chip container



**Description and application**

The chip container catches any chips that fall through the chip flap. The use of an additional chip container is recommended in order to ensure the machine can continue working while the container is being emptied.

**Your benefits at a glance**

- Minimized idle times for scrap removal by using an additional container

Punching tool cabinet



**Description and application**

The punching tool cabinet enables the clearly arranged, space-saving and neat storage of tools. This facilitates tidiness and efficient production processes. Moreover, careful storage also increases the service life of the tools.

**Your benefits at a glance**

- Maximum tidiness, minimum space requirements
- The quick access to the tools reduces set up times and costs
- Ergonomic tool handling through practical vertical drawers
- Storage that is easy on tools thanks to specially designed racks

Your machine can do more  
TruLaser  
TruLaser Tube  
TruPunch / TruMatic  
TruBend  
Cross-technology



Cross-technology

TruBend

TruPunch / TruMatic

TruLaser Tube

TruLaser

Your machine can do more

# TruBend

	Page	TruBend Cell		TruBend							
		5000	7000	3066 (B17)	3066 (B26)	3100 (B26)	3120 (B17)	3170 (B26)	3180 (B17)	5050 (B03)	5085 (S) (B03)
<b>Standard product enhancements</b>	<b>84</b>										
Support bracket	84			■	■	■	■	■	■	■	■
Production Data Acquisition	85									■	■
Bending aid	86										■
Mobile Control	87									■	■
Mobile hand wheel	88									■	■
Operator Controlled Bending (OCB)	89			■	■	■	■	■	■	■	■
Setup optimization of production plans	90									■	■
Bar code reader / 2D code scanner	91			■	■	■	■	■	■	■	■
Keyboard and mouse	92										
TecZone Bend	93										
Tool Indicator / Optical setup and positioning aid	94									■	■
ToolMaster	95										
Additional backgauge finger	96			■	■	■	■	■	■	■	■
Additional screen	97										
Additional foot switch	98			■	■	■	■	■	■	■	■
<b>Automation components</b>	<b>99</b>										
BendMaster	99										■
Sheet removal station	100	■									
Gripper changing console	101	■									
Thickness Controlled Bending (TCB)	102		■								
Tool gripper for faster tool change	103		■								
Pivoted-jaw gripper	104	■									
<b>Accessories</b>	<b>105</b>										



## Support bracket



## Easier material handling

### Description and application

The bending parts can be placed on the support bracket, which greatly facilitates the handling of bulky workpieces. The support bracket is carried by the guide rail beneath the lower tool clamp, and can be moved along the bending line. It can be secured at any position. The support brackets are also height-adjustable.

### Your benefits at a glance

- Enhanced operator ergonomics owing to simplified material handling
- Greater operator convenience thanks to the flexible positioning of the support brackets

### Machine type

TruBend	3066 (B17, B26)
	3100 (B26)
	3120 (B17)
	3170 (B26)
	3180 (B17)
	5050 (B03)
	5085 (S) (B03, B23), 5085 (S)X (B03, B23), 5085 X (B03)
	5130 (B03, B23), 5130 X (B03, B23)
	5170 (S) (B03, B23)
	5230 (S) (B03, B23)
	5320 (B03, B23)

## Maximum workpiece weight per support bracket

Bezeichnung		TruBend 3000 (B17)	TruBend 3000 (B26)	TruBend 5000 (B03)	TruBend 5000 (B23)
Basic support bracket	kg	70	70	-	-
Support bracket	kg	100	-	100	200
Heavy-duty support bracket	kg	-	-	250	-

- = not available

## Accessories

Name	Description
Tilt stop with micrometer adjustment	The tilt stop enables parts to be tilted forward. It can be adjusted in a range from 0 - 7 mm.
Auxiliary slat 500 / 1000 mm (B03 only)	The support area is extended by 500 / 1000 mm with an auxiliary rail.
Table extension (B03 only)	The table extension is mounted between two support brackets in order to extend the support area.
Length extension (B23 only)	A table length extension extends the contact surface by 600 mm.
Width extension (B23 only)	A table width extension widens the contact surface by 350 mm.





## Recording production data

### Description and application

Production Data Acquisition records what happens at the machine. The data can be retrieved as a report or as a status file via the machine control. Alternatively, it can be scanned via an interface. Customers can use this data for production control, maintenance planning or for post-calculation purposes.

### Your benefits at a glance

- Transparency of machine data as data is recorded
- Post-calculation using actual machine data

### Machine type

TruBend	5050 (B03)
	5085 (S) (B03, B23), 5085 (S)X (B03, B23), 5085 X (B03)
	5130 (B03, B23), 5130 X (B03, B23)
	5170 (S) (B03, B23)
	5230 (S) (B03, B23)
	5320 (B03, B23)
	7018 (B19)
	7036 (B19)

## Bending aid



## Bending aid for large, heavy parts

**Description and application**

The bending aid assists with the bending of large, thin or heavy workpieces across the entire swivel movement. The bending aid is carried by the guide rail beneath the lower tool clamp, and can be attached at any position. The adjustable height axis also relieves the operator. Up to two bending aids can be installed on a machine.

**Your benefits at a glance**

- Higher productivity by relieving the operator from having to carry heavy and bulky workpieces
- Enhanced operator ergonomics thanks to support during the bending process
- Enhanced quality by preventing the reverse-bend effect of large, thin parts

**Machine type**

TruBend	5085 (S) (B03, B23), 5085 (S)X (B03, B23), 5085 X (B03)
	5130 (B03, B23), 5130 X (B03, B23)
	5170 (S) (B03, B23)
	5230 (S) (B03, B23)
	5320 (B03, B23)

## Technical data

Name		TruBend 5000 (B03)	TruBend 5000 (B23)
Max. swivel angle	°	47	78
Max. working speed	°/s	45	90
Parking position		Right	Right/Left

## Accessories

Name	Description
Length extension	A table length extension extends the contact surface by 600 mm.
Width extension	A table width extension widens the contact surface by 350 mm.
Parkposition	When the bending aid is not needed, it can be moved to the parking position so as not to get in the way.



## Spending less time walking back and forth

### Description and application

The Mobile Control unit displays the most important machine functions directly to the operator. This cuts down the walking between the control unit and the workstation and increases productivity at the same time. The Mobile Control Pro is additionally equipped with a display that enables input of corrections directly at the machine. Operators can position both units anywhere along the press beam.

### Your benefits at a glance

- Greater operator convenience as the most important functions are always within easy reach
- Reduced cycle times as there is no need for operators to walk to the control panel

### Machine type

TruBend	5050 (B03)
	5085 (S) (B03, B23), 5085 (S)X (B03, B23), 5085 X (B03)
	5130 (B03, B23), 5130 X (B03, B23)
	5170 (S) (B03, B23)
	5230 (S) (B03, B23)
	5320 (B03, B23)

## Availability

Name	TruBend 5000 (B03)	TruBend 5000 (B23)
Mobile Control	•	•
Mobile Control Pro	-	•

• = retrofit possible / - = not available

## Mobile hand wheel



## Determining axis positions easily and quickly

### Description and application

The mobile hand wheel enables machine operators to move the most important axes manually. The manually determined axis positions can be transmitted to the control unit at the touch of a button. The hand wheel can be positioned as required on the press beam.

### Your benefits at a glance

- Optimum and fast run in, especially in small series and prototype construction
- Greater operator convenience as the hand wheel can be used to move axes

### Machine type

TruBend	5050 (B03)
	5085 (S) (B03), 5085 (S)X (B03), 5085 X (B03)
	5130 (B03), 5130 X (B23)
	5170 (S) (B03)
	5230 (S) (B03)
	5320 (B03)
	7018 (B19)
	7036 (B19)

## Operator Controlled Bending (OCB)



## Transmitting angle data via Bluetooth

### Description and application

Operator Controlled Bending (OCB) is a digital manual angle measuring device that measures angles and transfers the angle data to the machine control wirelessly. The data is transmitted via Bluetooth at the touch of a button. The control unit works out the required angle correction and incorporates it automatically into the bending program.

### Your benefits at a glance

- Faster run in, as the angle data is transmitted via Bluetooth
- Enhanced operator ergonomics thanks to support during the bending process

### Machine type

Machine type	
TruBend	3066 (B17, B26)
	3100 (B26)
	3120 (B17)
	3170 (B26)
	3180 (B17)
	5050 (B03)
	5085 (S) (B03), 5085 (S)X (B03), 5085 X (B03)
	5130 (B03), 5130 X (B03)
	5170 (S) (B03)
	5230 (S) (B03)
	5320 (B03)
	7018 (B19)
	7036 (B19)



## Setup optimization of production plans



## Reducing setup effort

### Description and application

Setup optimization of production plans enables optimum processing sequences of bending programs. To do this, at least four programs must be loaded into the production plan. The control checks which processing sequence requires the minimum setup effort and indicates the optimization achieved.

### Your benefits at a glance

- The reduction in idle times enhances productivity
- Cost savings owing to minimum setup effort

### Machine type

TruBend	5050 (B03)
	5085 (S) (B03), 5085 (S)X (B03), 5085 X (B03)
	5130 (B03), 5130 X (B03)
	5170 (S) (B03)
	5230 (S) (B03)
	5320 (B03)
	7018 (B19)
	7036 (B19)





## Ensuring the right program is always loaded

### Description and application

A hand scanner is used to retrieve programs at the machine using a bar code or Dot Matrix Code for accurate allocation. This ensures the correct program is always loaded.

### Your benefits at a glance

- Enhanced productivity since programs can be retrieved quickly and effortlessly
- Greater operator convenience as there is no need for data input or searches

### Machine type

TruBend	3066 (B17, B26)
	3100 (B26)
	3120 (B17)
	3170 (B26)
	3180 (B17)
	5050 (B03)
	5085 (S) (B03, B23), 5085 (S)X (B03, B23), 5085 X (B03)
	5130 (B03, B23), 5130 X (B03, B23)
	5170 (S) (B03, B23)
	5230 (S) (B03, B23)
	5320 (B03, B23)
	7018 (B19)
	7036 (B19)

## Readability

Name	TruBend 3000 (B17)	TruBend 3000 (B26)	TruBend 5000 (B03)	TruBend 5000 (B23)	TruBend 7000 (B19)
Bar code	•	•	•	•	•
Dot Matrix Code	-	•	•	•	•

• = readable / - = not readable



Experience the **Bar code reader / 2D code scanner** in action  
[www.trumpf.com/s/a308ys](http://www.trumpf.com/s/a308ys)



## Keyboard and mouse



## Operation with keyboard and mouse

### Description and application

With this option, a holder with keyboard and mouse is installed directly at the control panel. The keyboard and mouse can be pulled out for use. If they are not needed, they disappear back into the holder.

### Your benefits at a glance

- Control system operation using keyboard and mouse

### Machine type

TruBend	5085 (S) (B23), 5085 (S)X (B23)
	5130 (B23), 5130 X (B23)
	5170 (S) (B23)
	5230 (S) (B23)
	5320 (B23)



## Create and change programs at the machine

### Description and application

TecZone Bend is shop floor programming software. TecZone Bend allows a program suggestion to be created automatically based on 2D and 3D data. It also enables the manual changing of bending programs. The 3D simulation is created including collision protection. TecZone Bend can also easily be used offline.

### Your benefits at a glance

- Quick and easy programming directly at the machine control

### Machine type

TruBend	5085 (S) (B23), 5085 (S)X (B23)
	5130 (B23), 5130 X (B23)
	5170 (S) (B23)
	5230 (S) (B23)
	5320 (B23)



Experience the **TecZone Bend** in action  
[www.trumpf.info/mokz24](http://www.trumpf.info/mokz24)



## Tool Indicator / Optical setup and positioning aid



## Faster setup, faster bending

**Description and application**

The Tool Indicator is an optical setup and positioning aid. This is an LED light bar that is integrated in the upper tool clamp. The LEDs indicate the setup position, thereby assisting the operator with the setup process. With station bending, the optical positioning aid indicates the position where the next bend must be made.

**Your benefits at a glance**

- Reduces setup times as there is no need to look for a position on the scale
- Enhances operator convenience as this optical setup and positioning aid always lights up at the station where the next bending operation is done

**Machine type**

TruBend	5050 (B03)
	5085 (S) (B03, B23), 5085 (S)X (B03, B23), 5085 X (B03)
	5130 (B03, B23), 5130 X (B03, B23)
	5170 (S) (B03, B23)
	5230 (S) (B03, B23)
	5320 (B03, B23)



Experience the **Tool Indicator / Optical setup and positioning aid** in action  
[www.trumpf.info/ou25dc](http://www.trumpf.info/ou25dc)





## Automatic tool setup

### Description and application

Bending tools are set up automatically with the ToolMaster. The upper and lower tools are stored in the tool magazine. When tools are changed, they are moved to the setup position independently of one another with the help of the positioning aid. The setup process is fully automated and saves time and effort.

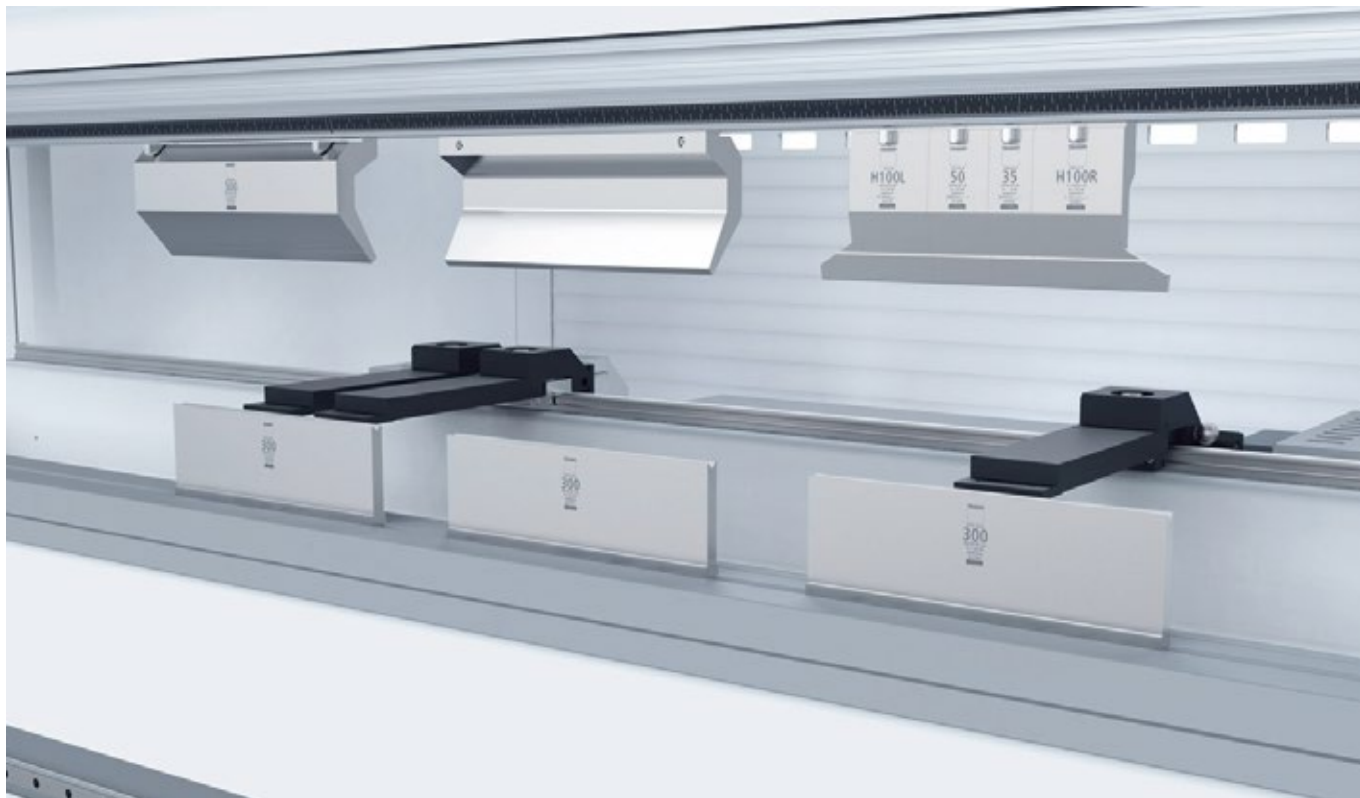
### Your benefits at a glance

- Enhanced productivity as idle times are reduced
- High degree of operator convenience as setup requires less manual effort
- Use of TRUMPF standard tools and customer's special tools

### Machine type

TruBend	5085 (S)X (B03, B23), 5085 X (B03)
	5130 X (B03, B23)
	5170 (S) (B03, B23)
	5230 (S) (B03, B23)
	5320 (B03, B23)

## Additional backgauge finger



## Station bending without waiting

### Description and application

Additional backgauge fingers are mainly used in station bending. An additional backgauge finger is attached directly to the backgauge system in the desired bending position meaning the backgauge does not need to be moved. When bending long, narrow parts, an additional gauge finger can be used as an additional stop point. This prevents the material from bowing.

### Your benefits at a glance

- Enhanced productivity as there is no need to wait for the backgauge
- Greater operator convenience as the next bending position can be optimally prepared
- Enhanced quality thanks to the additional gauge finger when bending long and narrow parts

### Machine type

TruBend	3066 (B17, B26)
	3100 (B26)
	3120 (B17)
	3170 (B26)
	3180 (B17)
	5050 (B03)
	5085 (S) (B03, B23), 5085 (S)X (B03, B23), 5085 X (B03)
	5130 (B03, B23), 5130 X (B03, B23)
	5170 (S) (B03, B23)
	5230 (S) (B03, B23)
	5320 (B03, B23)

## Variants

Name	Description
Standard	The backgauge finger is pressed onto or clipped onto the back gauge.
Micrometer adjustment	In addition to the standard back gauge finger, the back gauge finger can be adjusted +/- 15 mm in the X axis.
1000 mm	The additional back gauge finger increases the back gauge range to 1000 mm.





## Digital display of documents and drawings

### Description and application

An additional screen is mounted above the main screen. This screen is also swivel-mounted too, and can be used to visualize digital documents and drawings. The document display and the user interface can be switched between the upper screen and the lower screen. TecZone Bend always opens on the upper screen. The height of the monitors cannot be adjusted, so this can only be used for machines with a greater open height.

### Your benefits at a glance

- No paper on the press beam, since PDF drawings and documents are displayed on the screen
- Reduced non-productive time, since paper drawings do not have to be prepared
- Network access ensures that the most up-to-date drawing is displayed at all times

### Machine type

TruBend	5085 (S)X (B23)
	5130 X (B23)
	5170 (S) (B23)
	5230 (S) (B23)
	5320 (B23)

## Additional foot switch



## A foot switch always within reach

**Description and application**

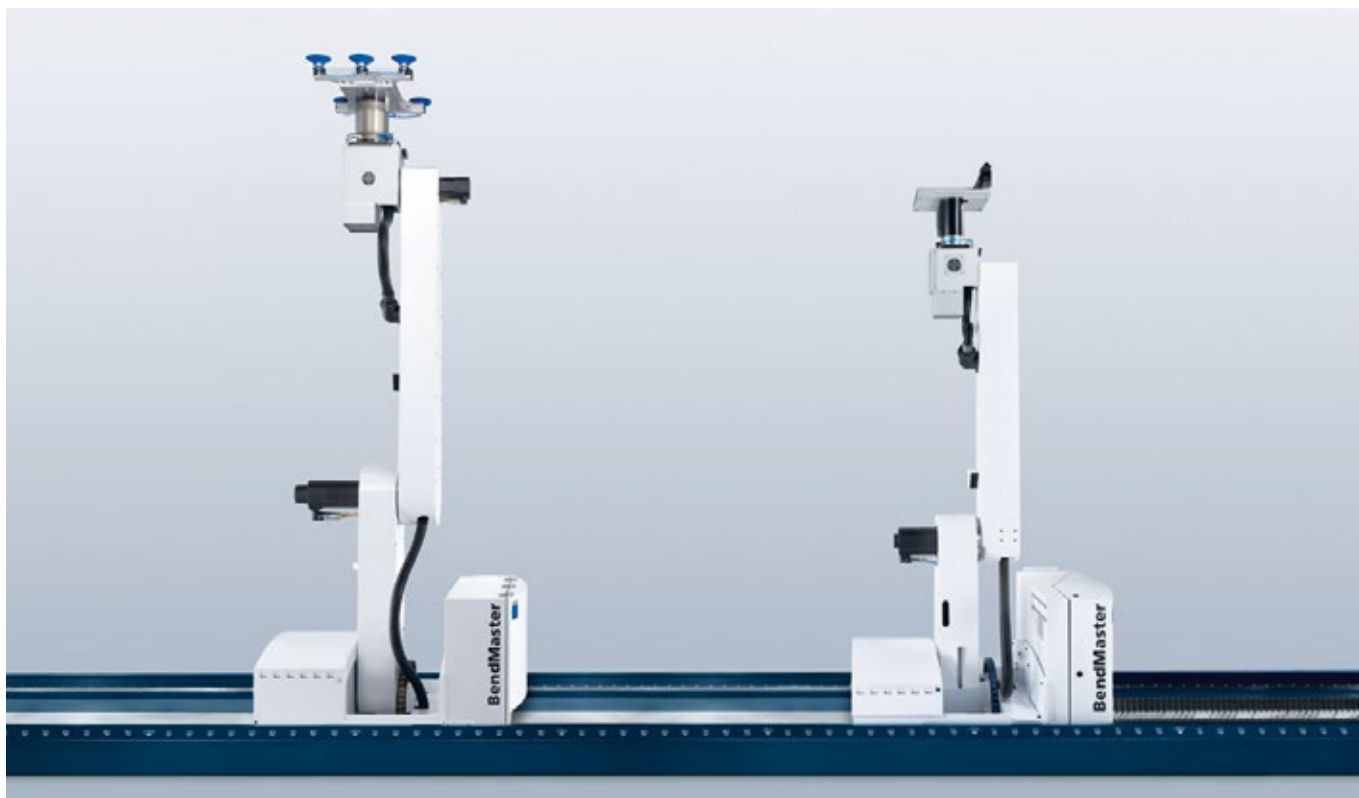
When bending at several stations, an additional foot switch ensures that operating elements for moving the press beam are always within easy reach. It also features an indicator lamp and an emergency off switch. If two operators are working at the machine, it is essential to have a second foot switch for safety reasons. The press beam can only be moved if both foot switches are activated.

**Your benefits at a glance**

- Greater operator convenience owing to the additional foot switch
- Observance of safety regulations when the machine is run by two operators

**Machine type**

TruBend	3066 (B17, B26)
	3100 (B26)
	3120 (B17)
	3170 (B26)
	3180 (B17)
	5050 (B03)
	5085 (S) (B03, B23), 5085 (S)X (B03, B23), 5085 X (B03)
	5130 (B03, B23), 5130 X (B03, B23)
	5170 (S) (B03, B23)
	5230 (S) (B03, B23)
	5320 (B03, B23)



## Automatic bending offering maximum flexibility

### Description and application

The bending machine can be automated with the BendMaster. The BendMaster moves along a guide rail within the bending cell and can approach any position for material handling. As such, it is not just used for loading and unloading but also for handling bending parts during the bending process. The option of using different types of grippers means the BendMaster can handle almost any material, regardless of size and composition. This means a wide range of parts can be taken through the bending process automatically.

### Your benefits at a glance

- Enhanced productivity thanks to fully automatic bending
- High flexibility in part production with the use of different grippers

### Machine type

TruBend	5085 (S) (B03), 5085 (S)X (B03)
	5130 (B03), 5130 X (B03)
	5170 (S) (B03)
	5230 (S) (B03)
	5320 (B03)

## Technische Daten

Technical data		BendMaster 60	BendMaster 150
Max. carrying capacity	kg	60	150
Max. workpiece weight	kg	40	110
Max. workpiece size	mm	2000 x 1000	3000 x 1500
Min. sheet thickness	mm	0.7	0.7
Max. sheet thickness		Dictated by max. workpiece weight	Dictated by max. workpiece weight



Experience the BendMaster in action  
[www.trumpf.info/c1lxks](http://www.trumpf.info/c1lxks)



## Sheet removal station



### Separating material and having them ready for the gripper

**Description and application**

The sheet removal station takes cut parts, separates them if necessary, and has them ready for handover to the gripper. Depending on how the machine is configured, the sheet removal station can load up to four sheet stacks onto each pallet. In order to reduce idle times, pallets can be set up outside the cell.

**Your benefits at a glance**

- High productivity as parts are readied parallel to production
- High process reliability owing to the automatic separation of parts
- Short setup times as pallets can be loaded outside the bending cell

**Machine type**

TruBend Cell	5000
--------------	------

### Variants

Name	Description
Sheet removal station	The sheet removal unit that is fixed to the ground removes the workpiece from a pallet. Sheet stacks can be loaded onto each pallet.
Sheet removal station with linear axis	The sheet removal unit has a linear axis and can move between two pallets. Sheet stacks can be loaded onto each pallet.
Sheet removal station with rotary table	The sheet removal unit is attached firmly to the ground, however the pallet can be rotated into position. Four sheet stacks can be loaded onto these pallets.



Experience the **Sheet removal station** in action  
[www.trumpf.info/c1lxks](http://www.trumpf.info/c1lxks)





## Automatic gripper change

### Description and application

The gripper changing console is used to change grippers within the bending cell. The BendMaster moves the empty station into the gripper changing console, deposits the gripper and picks the correct gripper in order to process the next program.

### Your benefits at a glance

- Long runtimes without interruptions for manual setup
- Different grippers in the bending cell provide flexibility for processing parts

### Machine type

TruBend Cell	5000
--------------	------



Experience the  
Gripper changing  
console in action  
[www.trumpf.info/c1lxks](http://www.trumpf.info/c1lxks)



## Thickness Controlled Bending (TCB)



### Detecting sheet thickness, adjusting the plunging depth

#### Description and application

With Thickness Controlled Bending (TCB), the actual sheet thickness is measured. The LoadMaster places the blank on the transfer station. The TCB measuring unit is then swiveled up and measures the sheet thickness. The plunging depth is automatically adjusted based on the value determined.

#### Your benefits at a glance

- Enhanced quality as angle errors are eliminated
- Cost-efficiency as no need for extra setup, independent of tools, and without any interference contours

#### Machine type

TruBend Cell	7000
--------------	------



## Tool gripper for faster tool change



### Fast tool change, accurate positioning

**Description and application**

The tool gripper is used exclusively for changing bending tools. A centering cone on the gripper ensures the tool is picked up correctly and is positioned more swiftly.

**Your benefits at a glance**

- Reduced setup time owing to rapid gripping of tools
- Greater setup accuracy in the positioning of tools

**Machine type**

TruBend Cell	7000
--------------	------

Your machine can do more

TruLaser

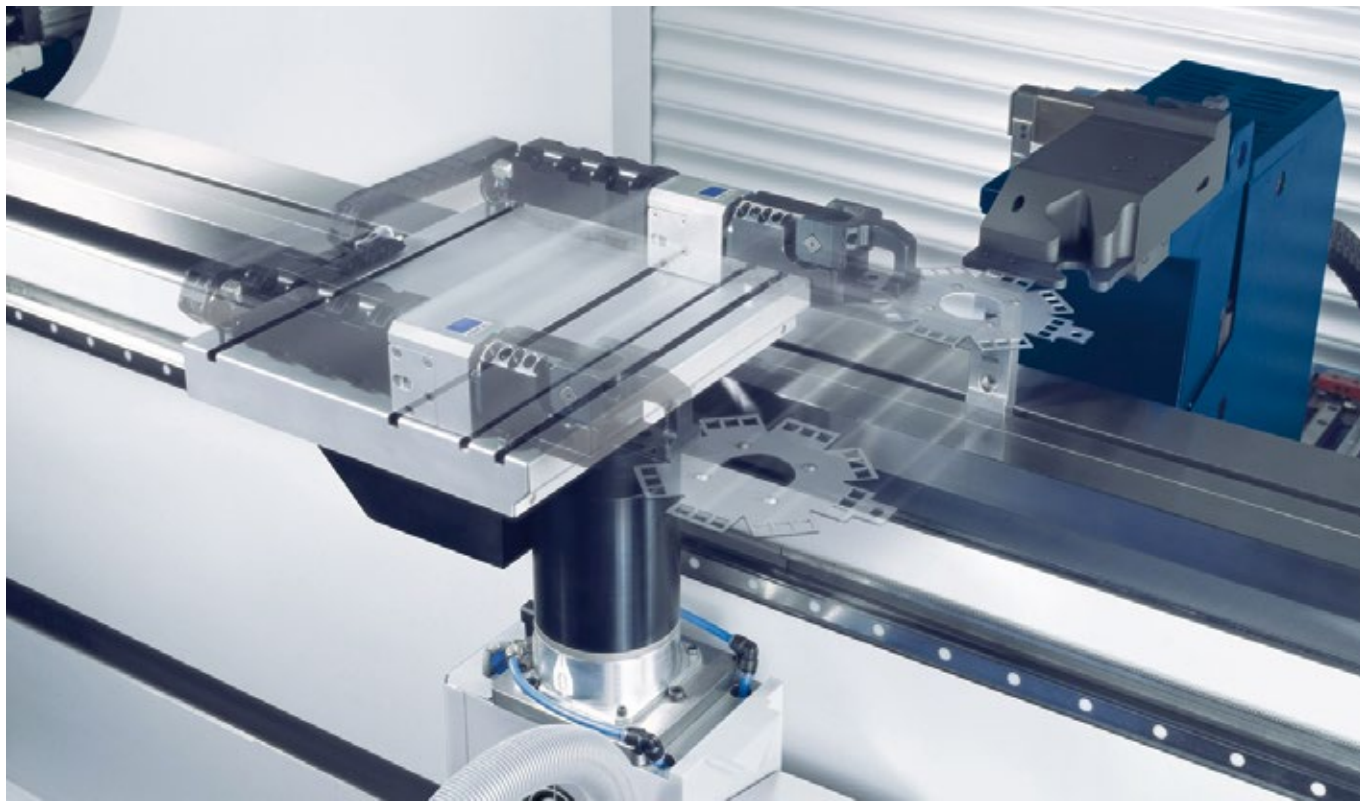
TruLaser Tube

TruPunch / TruMatic

TruBend

Cross-technology

## Pivoted-jaw gripper



## The gripper grasps small parts

**Description and application**

With the pivoted-jaw gripper, small parts can be automatically processed, regardless of the material and surface. It is recommended that a gripper with a rotary axis be used when bending parts that make frequent regripping necessary. The rotational movement of the gripper means there is no need to regrip the parts.

**Your benefits at a glance**

- Greater flexibility, as all materials can be handled
- Shorter production times thanks to greatly reduced need to reach around

**Machine type**

TruBend Cell	5000
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## Technical data and types of gripper

Name		BendMaster 60	BendMaster 150
Max. workpiece size	mm	500 x 400	500 x 400
Max. workpiece weight	kg	1,5	1,5
Max. sheet thickness	mm	6	6
Pivoted-jaw gripper		•	•
Pivoted-jaw gripper with rotary axis		•	-

• = retrofit possible / - = not available



Experience the  
**Pivoted-jaw gripper**  
in action  
[www.trumpf.info/c1lxks](http://www.trumpf.info/c1lxks)



## Bending tool cabinet



### Description and application

Tools can be stored in a clean, clearly arranged, space-saving manner in the bending tool cabinet. This ensures order and efficient processes in manufacturing. Protective storage also increases the tools' service life.

### Your benefits at a glance

- Maximum tidiness, minimum space requirements
- The quick access to the tools reduces set up times and costs
- Ergonomic tool handling through practical vertical drawers
- Storage that is easy on tools thanks to specially designed racks

## Integrated tool cabinet



### Description and application

The integrated tool cabinet is mounted directly onto the side of TruBend series 5000 (B03) machines. As the tools are stored directly at the machine, this means less walking around.

### Your benefits at a glance

- Less walking around as tools are stored directly at the machine
- Little space required as the tool cabinet is mounted directly onto the machine

## ToolShuttle



### Description and application

The ToolShuttle facilitates the easy handling of heavy tools. With the help of the transfer carriage, tools are moved to the tool clamps. The ToolShuttle can supply bending tools to up to two bending machines. At the same time, the tools are stored in the ToolShuttle and can be removed centrally and ergonomically using a control unit.

### Your benefits at a glance

- It frees up operators as it simplifies tool handling
- Minimum idle time as there is no need for searching or walking around
- High storage volume despite minimum space requirement



Experience the  
**ToolShuttle** in action  
[www.trumpf.info/mt8lac](http://www.trumpf.info/mt8lac)



# Cross- technology

## TruLaser

		1030 fiber (L88)	2030 fiber (L82)	3030 fiber (L49)	3030 Lean Edition	3030 (L20)	3040 fiber (L50)	3040 (L32)	3060 fiber (L66)	3060 fiber (L81)	5030 fiber (L41)	5030 fiber (L56)	5030 fiber (L68)	5030 (L52)	5040 fiber (L47)	5040 fiber (L57)
<b>Standard product enhancements</b>	<b>Page</b>															
MDA interface	108	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
MobileControl App	109			■	■	■	■	■	■	■	■	■	■	■	■	■
OPC UA Retrofit Cube	110			■		■	■	■	■		■	■		■	■	■
Remote Support via the Internet	111	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
TRUMPF Machine Apps	112	■	■	■		■	■	■	■	■		■	■	■		■
Visual Online Support	113			■	■	■	■	■	■	■		■	■	■		■



	TruLaser Tube						TruPunch						TruMatic					TruBend									
5040 fiber (L69)	5040 fiber (L76)	5040 (L53)	5060 (L54)	others	5000 fiber (T06)	5000 (T05)	5000 (T08)	7000 fiber (T07)	7000 (T02)	7000 (T03)	All machines	1000 (S05)	1000 (S19)	2000 (S18)	3000 (S11)	5000 (S01)	5000 (S10)	5000 (S12)	All machines	1000 fiber (K07)	6000 fiber (K06)	6000 (K05)	7000 (K02)	7000 (K08)	All machines	Serie 5000 (B23)	
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

## MDA interface



## Data output in real time

### Description and application

Machine statuses can be recorded and logged with the MDA interface. The following machine statuses are available as potential-free contacts: Program stopped, program end, production time, fault, automation fault, order complete, machine ready for operation, laser beam switched on. The signals are converted into data using the customer's own solution. A signal lamp, horn etc. can also be connected to the MDA interface.

### Your benefits at a glance

- Flexible connection options because the machine status is communicated using potential-free contacts
- Potential-free contacts are generated in realtime

### Machine type

TruLaser	All machines
TruLaser Tube	All machines
TruPunch	All machines
TruMatic	All machines





## Controlling the machine with a tablet

### Description and application

The MobileControl App transfers the user interface of the control panel straight to an iPad. This offers an additional option for monitoring and operating your machine. It also allows operators to monitor the production process during work steps that take place away from the control panel.

### Your benefits at a glance

- Monitoring and controlling the machine in the vicinity of the machine
- Greater operator convenience thanks to the second, mobile operating unit

### Machine type

TruLaser	3030 fiber (L49), 3030 Lean Edition, 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L66, L81)
	5030 fiber (L41, L56, L68), 5030 (L52)
	5040 fiber (L47, L57, L69), 5040 (L53)
	5060 (L54)
	7040 (L62)
	8000 (L63)
TruLaser Tube	5000 fiber (T06), 5000 (T05, T08)
	7000 fiber (T07)
TruPunch	1000 (S05, S19)
	2000 (S18)
	3000 (S11)
	5000 (S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K05)
	7000 (K02)



Experience the  
**MobileControl App**  
in action  
[www.trumpf.info/fmqag9](http://www.trumpf.info/fmqag9)



# OPC UA Retrofit Cube



## Connect your TRUMPF machine to your local monitoring system

### Description and application

Retrofit digital interfaces to your longstanding machines and systems – that is what the TRUMPF OPC UA Retrofit Cube does. What's behind it is an industrial PC with an OPC UA interface. Once it is connected and configured, it provides the necessary signals locally. The main task of OPC UA is the standardized transfer of information for new Industry 4.0 Services.

### Your benefits at a glance

- Facilitates the provision of OPC UA data for local systems on existing TRUMPF machines
- Easy to integrate with TRUMPF machines and systems
- Connects disparate systems that used to be disconnected
- Simply saves time, effort and costs

### Machine type

TruLaser	3030 fiber (L49), 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L66)
	5030 fiber (L41, L56), 5030 (L52)
	5040 fiber (L47, L57), 5040 (L53)
	5060 (L54)
TruLaser Tube	7040 (L62)
	5000 (T05)
TruPunch	7000 (T02, T03)
	1000 (S05)
	3000 (S11)
TruMatic	5000 (S01, S10)
	6000 fiber (K06), 6000 (K05)
	7000 (K02)

Your machine can do more  
TruLaser  
TruLaser Tube  
TruPunch / TruMatic  
TruBend  
Cross-technology



## Eliminating faults remotely

### Description and application

With Remote Support via the Internet, an in-house service engineer at TRUMPF can connect to the machine via the Internet. Once the operator has given confirmation, the service engineer can use remote diagnostics to access the control system, identify faults and often rectify them immediately.

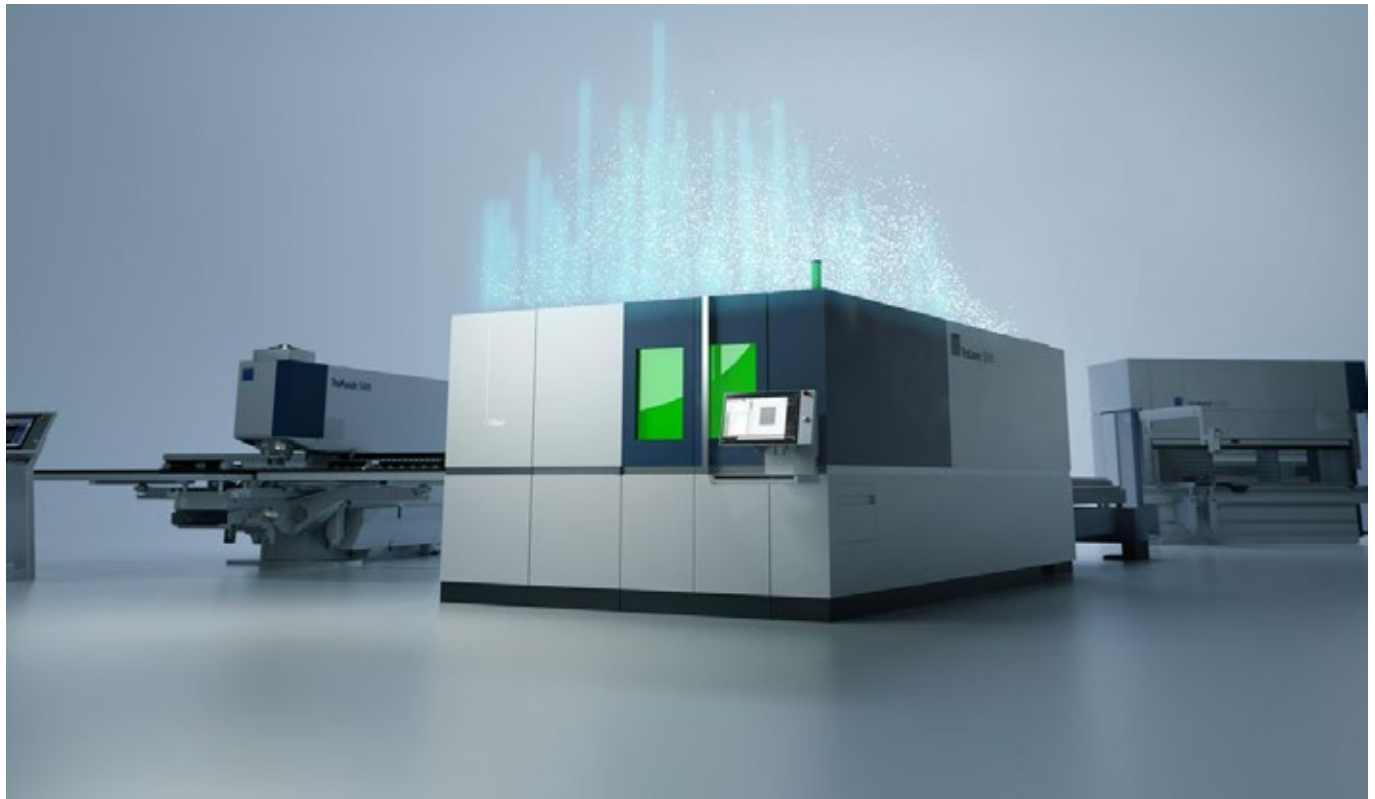
### Your benefits at a glance

- Much faster fault clearance thanks to the online connection
- Reliable transmission via the Telepresence Portal
- Optimum preparation of field service

### Machine type

TruLaser	All machines
TruLaser Tube	All machines
TruPunch	All machines
TruMatic	All machines

## TRUMPF Machine Apps



### Data becomes values

**Description and application**

TRUMPF machine apps offer an easy and free introduction to a smart factory. Identification of optimization potentials in the process allows you to monitor the success of optimization activities. Provision of 5 apps: Live Status Analytics, Machine Analytics, Program Analytics, Material Analytics, Punching Tool Analytics.

**Your benefits at a glance**

- Increase your productivity
- Data usage 24/7
- Role-specific information provision

**Machine type**

TruLaser	1030 fiber (L88)
	2030 fiber (L82)
	3030 fiber (L49), 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L66, L81)
	5030 fiber (L68), 5030 (L52)
TruLaser Tube	5040 fiber (L69, L76), 5040 (L53)
	5060 (L54)
	5000 fiber (T06), 5000 (T08)
TruPunch	7000 fiber (T07), 7000 (T03)
	1000 (S05, S19)
TruMatic	5000 (S12)
	1000 fiber (K07)
TruBend	7000 (K08)
	Serie 5000 (B23)

Your machine can do more

TruLaser

TruLaser Tube

TruPunch / TruMatic

TruBend

Cross-technology



## The virtual service engineer at the machine

### Description and application

Using the Visual Online Support (VOS) app, you can communicate quickly and easily with our Technical Service. For a quick solution to your technical problem, Visual Online Support offers the possibility of exchanging image, audio and video files with the TRUMPF Technical Service. What's more, image files can be processed live and enhanced with additional information.

### Your benefits at a glance

- Higher machine uptime thanks to efficient communication
- Reduction in on-site missions, enabling additional cost savings
- Reliable transmission via the Telepresence Portal
- Faster identification of spare parts as complex issues can be clarified using image and audio files

### Machine type

TruLaser	3030 fiber (L49), 3030 Lean Edition, 3030 (L20)
	3040 fiber (L50), 3040 (L32)
	3060 fiber (L66, L81)
	5030 fiber (L56, L68), 5030 (L52)
	5040 fiber (L57, L69), 5040 (L53)
	5060 (L54)
	7040 (L62)
TruLaser Tube	8000 (L63)
	5000 fiber (T06), 5000 (T05, T08) 7000 fiber (T07), 7000 (T03)
TruPunch	1000 (S05, S19)
	2000 (S18)
	3000 (S11)
	5000 (S12)
TruMatic	1000 fiber (K07)
	6000 fiber (K06), 6000 (K05)
	7000 (K02)



Experience the **Visual Online Support** in action  
[www.trumpf.info/mfh1cq](http://www.trumpf.info/mfh1cq)



## Notes

### Subject to change

We reserve the right to change data and do not assume any liability for mistakes or printing errors in the catalog. Liability is excluded. Technical changes in particular are subject to change without advance notice. Individual features may differ owing to country-specific conditions.

Illustrations are given as examples only and may vary from the original in terms of machine type and development stage.

All information is subject to change.

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TRUMPF is certified to ISO 9001

(For more information go to [www.trumpf.info/quality](http://www.trumpf.info/quality))



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