TruLaser:

Cost-effective cutting through thick and thin.

TRUMPF

Machine Tools/Power Tools
Laser technology/Electronics

In the best hands.

Quality thrives in the right environment.

TRUMPF machines are renowned for their reliability and superb quality. That's because our high quality standards are deeply embedded in our corporate culture and are rigorously applied on a worldwide basis. Thanks to our SYNCHRO production system, we are continuously optimizing our processes, products and services. TRUMPF produces all of its machines on synchronized, standardized flow lines – because optimum quality can only be achieved through reliable processes.

Setting standards.

TRUMPF consistently invests in research and development at a level well above the industry average. Our innovative products and functions constantly set new standards in the field of laser processing. One example of this is BrightLine fiber – the quality breakthrough in solid-state laser cutting.

Sustainable thinking.

We aim to run a cost-efficient and responsible business which makes efficient use of resources. For example, the tiny nozzle diameters of our lasers keep gas consumption to a minimum. With the TruFlow, we offer you the world's most efficient CO_2 laser. The universal cooling interface provides efficient machine cooling.

Making technology simple.

We are driven by our desire to make high-tech laser cutting available to everyone. That's why we focus on developing machines that are user-friendly and easy to operate. Installation, maintenance and programming can be performed without much effort. Many innovations make your everyday work easier: as an alternative to the control panel, the MobileControl app gives you the possibility of monitoring and controlling your machine.

Best choice based on experience.

Our expertise in lasers is based on four decades of experience and the installation of more than 60,000 lasers worldwide. For each laser cutting machine, we carefully select the most suitable option among our eight different types of lasers. As the technology leader, we provide you with neutral, results-oriented advice to help you find the optimum and most cost-effective solution for your particular field of application.

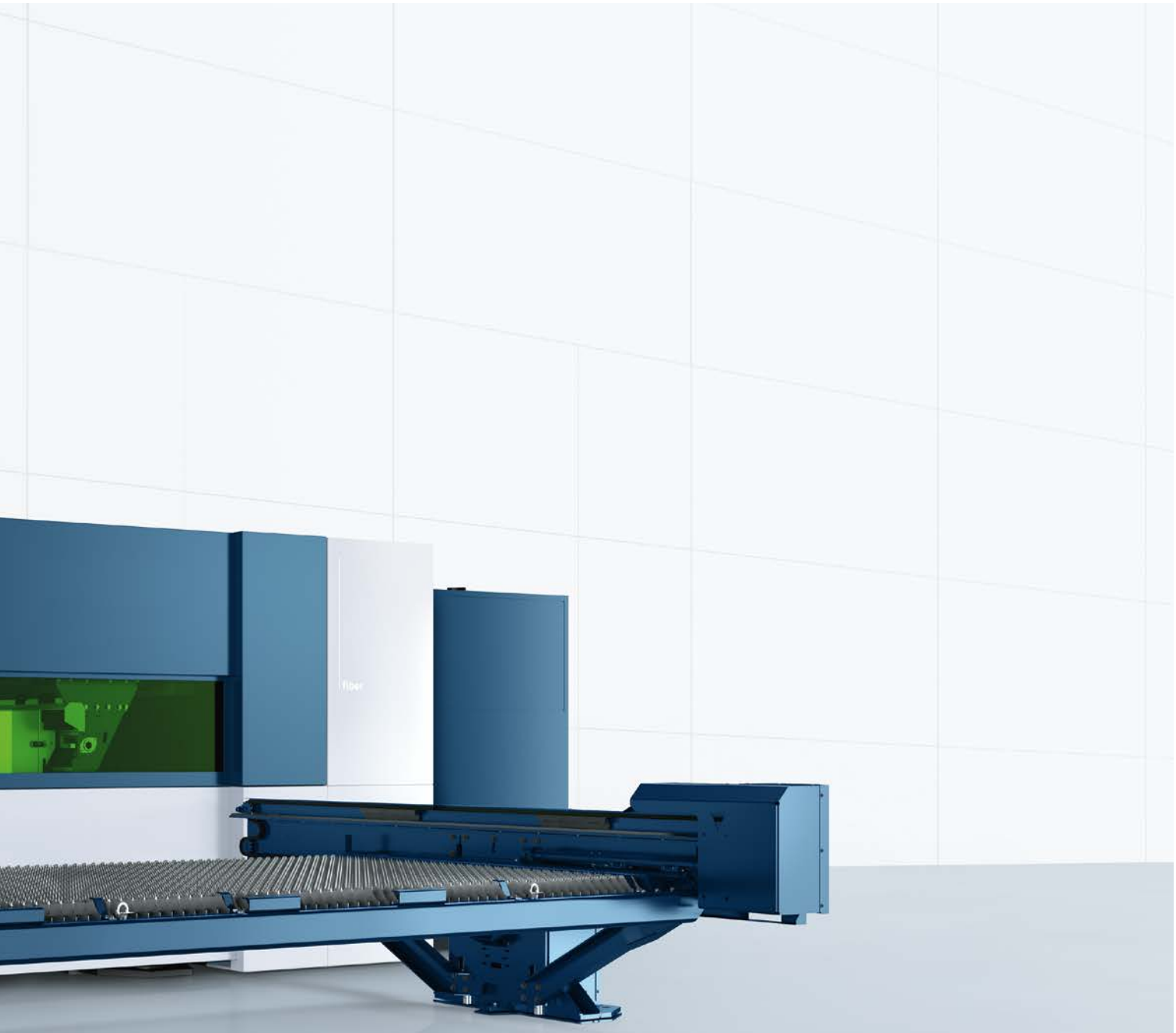
Abundant choice.


TruLaser 3030
TruLaser 1030

TruLaser Series 2000

Advanced compact machines.

Our TruLaser Series 2000 machines offer maximum performance in a compact format. They can be automated to the degree you choose, giving you plenty of potential for growth in the future.



Benefits at a glance.

1. High productivity.
2. Flexible automation concept.
3. Easy to use.
4. Low space requirements.
5. TruDisk can be used in a laser network.

TruLaser Series 2000

Compact powerhouse.

The TruLaser Series 2000 combines the benefits of a compact machine with the level of performance you would expect from a higher end machine. As with the TruLaser Series 1000, you benefit from simple operation, low space requirements, and fast and easy installation. In addition, the motion unit with gantry drives makes your TruLaser Series 2000 considerably more dynamic.

Together with higher laser performance and optional automation, it opens up new opportunities for growth. The single-cutting-head strategy with collision protection keeps downtimes to a minimum.

Thanks to BrightLine fiber you will achieve top-quality results for every material and sheet thickness.

The automatic nozzle changer means that you no longer have to switch cutting nozzles by hand. The machine does it for you in just a fraction of the time.

The robust TruDisk laser maximizes the productivity of your cutting processes, even for highly reflective non-ferrous metals.

Your TruDisk can also be used in a laser network to power multiple machines, offering an economical way to get started in the world of laser welding.

Machine data	
	TruLaser 2030 fiber
Working range	
X axis	3000 mm
Y axis	1500 mm
Z axis	75 mm
Workpiece	
Max. weight	720 kg
Max. speed	
Simultaneous	120 m/min
Accuracy[1]	
Position deviation P_a	0.1 mm
Average position scatter $P_{s\,max}$	0.03 mm
Dimensions and weight[2]	
Length	7800 mm
Width	5900 mm
Height	2900 mm
Weight	11410 mm
Available lasers	TruDisk 3001/4001

[1] Position scatter information is given in reference to the entire working length. Positional accuracy is measured and approved according to VDI/DGQ 3441.
[2] Approximate values (TruDisk not included): The exact figures can be obtained from the applicable installation plan.
Subject to alteration. Only specifications in our offer and order confirmation are binding.

Laser data		
	TruDisk 3001	**TruDisk 4001**
Max. power	3000 W	4000 W
Wavelength	1.03 µm	1.03 µm
Max. sheet thickness		
Mild steel	20 mm	20/25[3] mm
Stainless steel	16 mm	20 mm
Aluminum	12 mm	16/20[3] mm
Copper	6 mm	8 mm
Brass	6 mm	8 mm
Power consumption		
Average power consumption during production	13 kW	15 kW

[3] With BrightLine fiber.
Subject to alteration. Only specifications in our offer and order confirmation are binding.

Focused knowledge.

With TRUMPF machines you know you have the right equipment to tackle whatever challenges you might face – and you can be confident of achieving the best possible results in sheet metal processing. TRUMPF machines incorporate highly intelligent processes that enable you to reduce the non-productive time typically spent on setting up and configuring the machine, keeping the results of the cutting process firmly under your control.

Even under the most difficult conditions, TRUMPF's innovative Lines and Smart Functions ensure reliable and consistent manufacturing, maximum cutting speeds, and outstanding cut quality.

Productivity, reliability and high quality – these clever features can help you improve your workflow.

Productivity Process reliability Quality

▶ AdjustLine

Adapting to material quality made easy.
AdjustLine makes it easier to process lower-quality material. The function adjusts cutting parameters to ensure process reliability when cutting parts.

▶ CoolLine

Cut even thick mild steel intricately.
The selective cooling of the workpiece during the cutting process allows for new geometries, more efficient sheet utilization and significantly increases process reliability in the processing of thick mild steel. This process is part of the single cutting head strategy.

▶ BrightLine

Excellent through thick and thin.
This special cutting system produces the highest quality cuts in thick stainless, mild steel and aluminum. The smoothness and squareness of the cut edge are far superior to a standard cut. No finishing work is required.

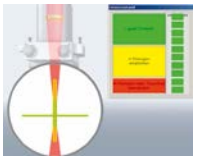
▶ DetectLine

Precise position recognition.
A camera system determines the position of inserted sheets with a high degree of precision, enabling the accurate reworking of parts that have already been cut. In addition, DetectLine automatically cuts a focus comb and with it adjusts the focal position.

▶ Dot Matrix Code

Marking parts fast and reliably.
In just a few seconds, the laser in your flatbed machine applies a 2-dimensional code (data matrix) of dots to the part being processed. The code content is defined during the programming stage and contains information for the sheet metal processing chain. This considerably simplifies production processes.

▶ LensLine

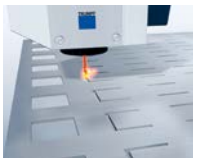


Protection for lens and machine.
LensLine switches off the beam as soon as there are critical impurities within the focusing lens. In doing so the lens is prevented from thermal decomposition, and the beam guidance stays clean. LensLine additionally offers a condition checking function which, thanks to the RFID lens, guarantees perfectly timed cleaning cycles.

▶ Drop&Cut

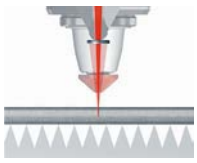
Make your post-production processes simpler.
Drop&Cut will make your post-production and remainder sheet utilization easier, more intuitive, and more efficient than ever before. A camera projects the live image of the machine interior directly onto the user interface. Now you can use the mouse or touch control to flexibly place geometries on the remainder sheet.

▶ FlyLine



Pierce on the fly and process faster.
The cutting head travels at high speed over the entire sheet line by line. The control system cuts all the contour sections in the respective beam path. This reduces the time spent on traversing and positioning, especially when cutting perforated grids.

▶ PierceLine



Everything under control when piercing.
PierceLine monitors and controls the piercing process. This reduces stress on the material and machine and shortens pierce time by up to 80%.

▶ Smart Collision Prevention

Safe without microjoints.
Smart collision prevention creates a processing strategy that applies across components. Parts at risk of tipping over are cut free only when there is no longer any risk of collision. This allows you to work reliably and safely, even without microjoints.

Focused knowledge.

▶ Single cutting head strategy

Save time by using a single cutting head that does not require changing. This reduces non-productive time, especially when you are automatically processing a number of different materials.

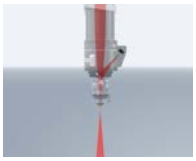
▶ Condition Guide

A sensor system shows, among other things, the state of the cutting components, recommends appropriate actions and thus enables optimal planning.

▶ Performance package fusion cut

Achieve a further qualitative leap in cutting quality with thin sheets, significant improvements in sheet throughput and thus even more cost-effective production with innovative nozzles and optimized cutting data.

▶ Smart Beam Control



The intelligent beam monitoring automatically controls the focal position during the cutting process and keeps process reliability consistently high. It also enables remote diagnostics of the cutting system.

	TruLaser Series 1000	TruLaser Series 2000	TruLaser Series 3000	TruLaser Series 5000	TruLaser Series 7000	TruLaser Series 8000
AdjustLine			■ □	■ □	■	■
BrightLine			■	■	■	■
BrightLine fiber		□	□	□		
Condition Guide				■ □		
CoolLine			■ □	■ □	■	■
DetectLine			■ □	■ □		
Dot Matrix Code			■ □	■ □	■	■
Drop&Cut			■ □	■ □	■	■
Single cutting head strategy	■ □	□	■ □	■ □	■ □	■
FlyLine			■ □	■ □	■ □	■
LensLine			■	■	■	■
Performance package fusion cut			□	□		
PierceLine	□	□	■ □	■ □	■	■
Smart Beam Control				□		
Smart Collision Prevention			■ □	■ □		
Smart Nozzle Automation				■ □		

■ CO_2 □ SSL
Subject to variability. Please contact your TRUMPF sales person for further details.

BrightLine fiber

Outstanding results – without compromises.
The patented* BrightLine fiber option turns solid-state lasers into all-purpose tools: it enables you to achieve top-quality results for every sheet metal thickness. What's more, the solid-state laser's benefits for thin-sheet metal processing remain unchanged.

* Patent numbers US8781269B2, KR101456768B1.

1. Higher quality
Process sheet metal with outstanding edge quality.

2. Enhanced flexibility
Expand the range of sheet thickness you can handle with the same laser power.

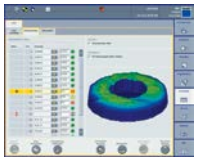
3. Maximum piercing quality
Thanks to BrightLine fiber and multi-stage piercing, there is no spatter even with the smallest of piercing holes.

4. Tiny contours
BrightLine fiber enables you to process even smaller contours than before. Small holes that formerly could only be drilled can now be cut by laser.

5. Higher process stability
BrightLine fiber provides all-round process stability, even with the most exacting cutting quality requirements.

6. Simple part removal
BrightLine fiber makes it easier to remove parts from the scrap skeleton. This saves valuable time when sorting parts. An even cutting surface and a wider kerf are responsible for this easier part removal.

Smart Nozzle Automation

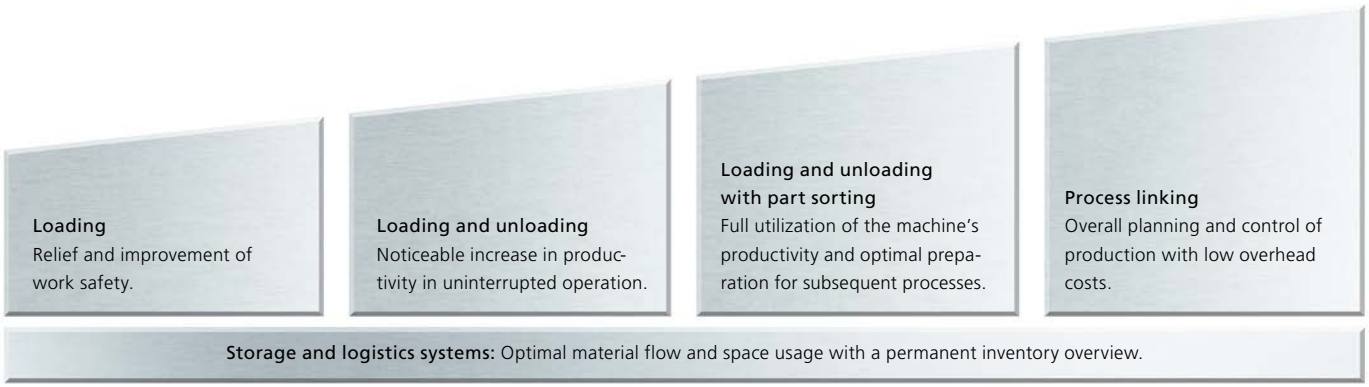


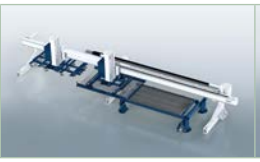
Process reliability in fully automated operation.
Smart nozzle automation bundles clever features that provide process reliability in fully automated operation. In doing this, this smart function ensures, among other things, the autonomous changing of nozzles when necessary. The nozzle inspection reliably determines whenever a change is necessary. Be it for CO_2 or solid-state laser technologies, smart nozzle automation always includes the relevant functionalities.

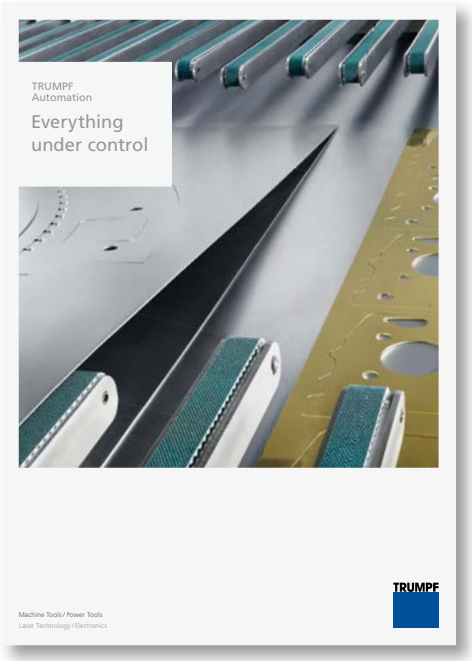
Everything under control.

Automated laser cutting.

Automated machines support your material flow and increase process reliability, ultimately boosting your productivity. Modular automation components from TRUMPF offer the best way to get your automation, storage and software solutions working in harmony. From automatic loading right through to fully automated production, we can provide you with the best solution to meet your specific needs.



Automation function	Loading	Loading and unloading		
	LoadMaster	LiftMaster Shuttle	LiftMaster Compact	LiftMaster Linear Basic
				
Possible machines:				
TruLaser Series 1000				
TruLaser Series 2000		■		
TruLaser Series 3000	■		■	■
TruLaser Series 5000	■		■	■
TruLaser Series 7000	■			
TruLaser Series 8000	■			



Whatever degree of automation you're looking for, we're confident you'll find the right solution for your production process on our website and in our automation catalog.
www.trumpf.info/8hy9bq

Automated production. Watch this video to learn more about how automation could benefit you.
www.trumpf.info/cdwkzn

Loading and unloading / part sorting				Auxiliary pallet mode	Storage systems
LiftMaster / LiftMaster Sort	**LiftMaster Linear**	**LiftMaster Store / LiftMaster Store Linear**	**SortMaster**	**PalletMaster Tower**	**TruStore**
					
■	■	■	■	■	■
■	■	■	■	■	■
■			■		■

Software:

Programmed for success.

TruTops Boost takes you faster than ever from the geometry to the NC program.

TRUMPF's TruTops Boost is the software solution for designing and programming laser, punching and bending machines that lets you increase your performance at the touch of a button. The software combines all order processing steps, from the geometry through to the completed NC program, in a single all-in-one solution. Its new operating philosophy guides you through the software in a simple, process-oriented manner while allowing you to keep an overview of your orders. Thanks to its numerous automated functions, the innovative Boost technology also makes you unbeatably fast. With it, you become more profitable and boost your business!

With TruTops Boost you can expand into the world of production control easily with options from TruTops Fab yet without integration effort. This enables you to plan, monitor and control your complete production including your machines and automated equipment.

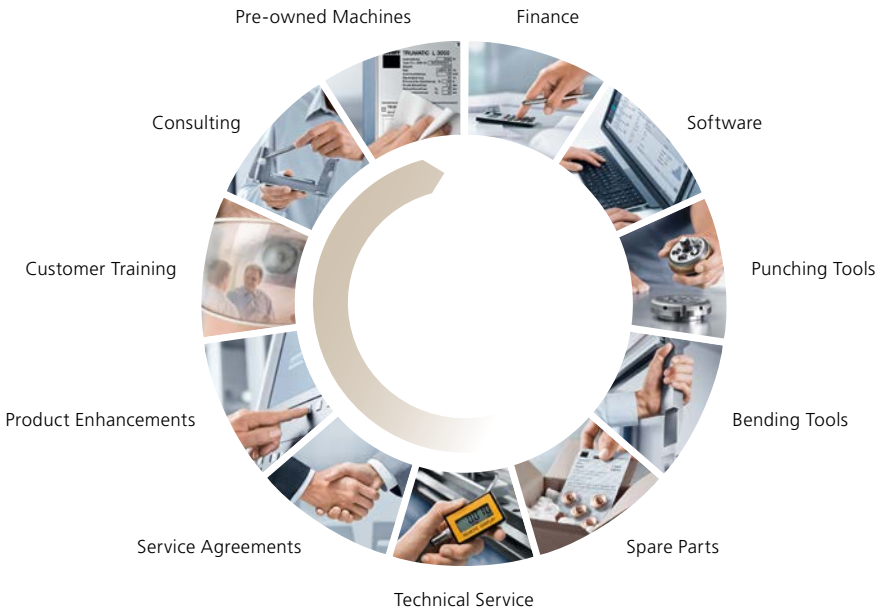
TruTops Boost: Benefits at a glance.

- From geometry to NC program faster than ever before.
- Everything monitored: Single software solution for all order processes.
- Everything under control: Intuitive user interface supports flexible working.
- Everything faster: Boost technology with productive automated functions.
- Innovative Boost technology + new operating philosophy = the easy way to enter the world of production control.

TruServices:

Service like no other.

Throughout the lifecycle of your machine.



Regardless of the TRUMPF technology you use, you will always get the best service. Thanks to the award-winning spare parts logistics at TRUMPF, we guarantee the highest availability of spare parts and provide you with all the products in the shortest time. TruServices Finance offers you individual financing solutions quickly and without a lot of paperwork. Our service technicians are highly trained and always available when you need them. A Service Agreement is the ideal way of ensuring the best usability of your machine. Should your requirements change, we have flexible upgrading options and technical innovations that will make your machine even better. Our broad range of training courses with experienced trainers and hands-on practice will also give you a head start in understanding and operating your machine.

The TRUMPF Group ranks among the world's leading manufacturers of production technology and industrial lasers. Technical and efficient solutions for our customers have been our focus since 1923. As a leading technology supplier, TRUMPF is a one-stop shop for all of your technology needs: machines, automation, storage technology and services.

TRUMPF is certified according to ISO 9001:2008
(for additional information see www.trumpf.info/quality)

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