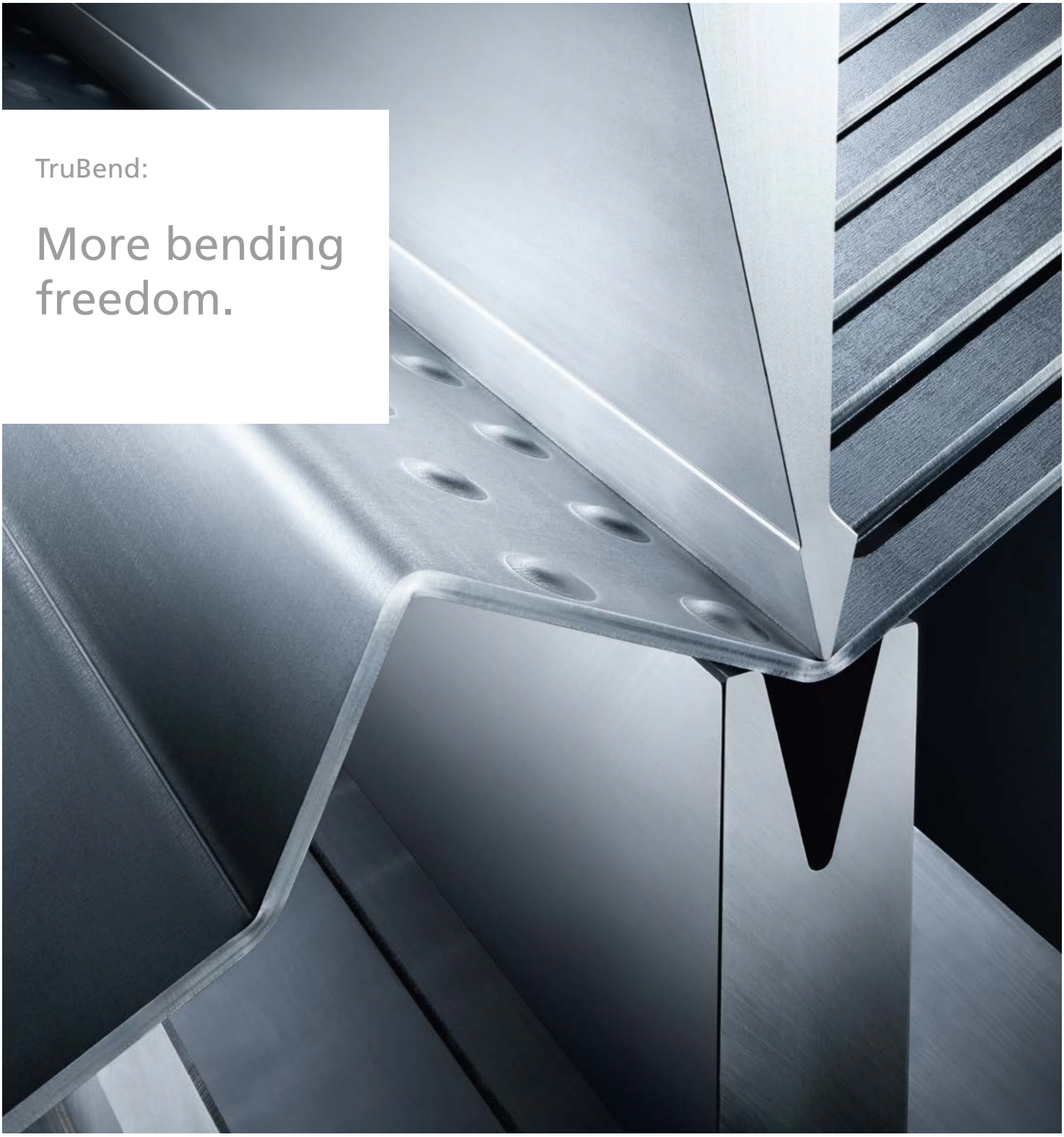

TruBend:

More bending freedom.

TRUMPF

Machine Tools/Power Tools
Laser Technology/Electronics

The best bending solutions.

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Visit us on YouTube.
www.youtube.com/trumpftube

TruBend machines incorporate a wealth of experience in press brake technology coupled with pioneering innovations. They enable you to fabricate parts in any format, from the simplest to the most complex, precisely and cost-effective.

TRUMPF has been designing and manufacturing press brakes since 1989. Among the most important developments are the ACB angle measuring system, patented 4-cylinder drive technology, machine control unit and operator ergonomics with innovative details such as the MagicShoe. TRUMPF leads the field in programming convenience and ease of operation. TruBend machines are renowned above all for their flexibility, finished part quality, and high cost-benefit ratio. Moreover, TRUMPF can meet all of your additional requirements – for tools, automation and software – from a single source. Designed for years of continuous operation at full capacity, TRUMPF press brakes are favored by industrial customers the world over.

TruBend: Benefits at a glance.

1. The right machine for every part geometry.
2. Cost-effective bending thanks to high productivity.
3. Parts of the highest quality.
4. Single source for all requirements, including top-quality tools.
5. Ease of operation and ergonomic design.

TruBend Series 3000

Economical standard machine.
The right choice for users who value TRUMPF quality, simple operating procedures, and a favorable cost-performance ratio.

TruBend Series 5000

Productive jack of all trades.
High productivity throughout, from programming and tool setup to the bending process. The TruBend Series 5000 is capable of performing bending work on a wide range of parts, always with the greatest precision.

TruBend Series 7000

Ergonomic high-speed machine.
Incorporating innovative features for high-speed bending of small and larger parts under optimized working conditions.

TruBend Series 8000

Flexible large-format machine.
The TruBend Series 8000 is an impressively powerful and versatile machine that offers high-precision results for thick and large-format parts.

Why TruBend is better.

Precise results whatever the format.

The right machine for every part geometry.

TruBend bending machines enable you to process parts of any geometry economically and with high-quality results. The advantages for your business include:

- Wide choice of machine configurations.
- Numerous press forces and working lengths.
- Choice of air bending, bottom bending, and precision-angle bending.
- Exact positioning thanks to 2-, 3-, 4-, 5- or 6-axis backgauge systems.

The BendGuard can easily be pushed to the rear making it possible to load from the side.

Cost-effective bending thanks to high productivity.

TruBend machines enable you to minimize your cost per part. Several factors contribute to this cost-saving effect:

- High axis and working speeds.
- Minimum tool setup time.
- Automatic tool clamping systems.
- Energy-efficient drives.
- BendGuard: Maximum speed and optimum safety.

The MobileControl reduces the need to walk around.

The OCB accelerates angle measurement.

Top-quality parts.

With TruBend machines, you achieve precise results every time.

- The stable machine frame guarantees precision.
- Precise angles every time thanks to integrated CNC crowning.
- Precise results thanks to ingenious angle measuring systems.

Single source for all requirements.

TRUMPF does not only develop and produce press brakes. We also provide:

- TRUMPF LASERdur quality tools.
- Highly advanced machine controls.
- Customized automation solutions.
- TRUMPF software and services.

Ease of operation and ergonomic design.

The interaction between operator and machine is a decisive factor in bending. That is why TruBend machines are designed with the operator in mind, to lighten the workload:

- Individually selectable control settings.
- User-friendly man-machine interface.
- Ergonomic bending supports and consoles.
- Less walking due to the MobileControl.
- Simple, vertical tool loading.
- Revolutionary easy stroke triggering thanks to the MagicShoe.

The footrest increases operator ergonomics.

LED lighting ensures optimal visibility.

2D code scanner facilitates program selection.

Efficient consultation thanks to provision of teleservices.

TruBend Series 3000

TruBend Series 3000: Benefits at a glance.

1. Cost-efficiency, even when operated at low capacity.
2. High part accuracy.
3. High productivity.
4. Simple operation, well thought-through control.
5. Access to complete TRUMPF know-how.

Clearly structured and self-explanatory multi-touch control system.

Economical standard machine.

The TruBend Series 3000 combines outstanding TRUMPF quality with user-friendly operation in a superb value-for-money package, enabling cost-efficient production even for small batches. You can be confident of getting high precision results and enjoying maximum safety standards at an affordable price.

Designed to impress.

The compact architecture and integrated hydraulic drive are designed to deliver symmetrical force distribution. Thanks to the enclosed machine casing you can safely work with the entire bending length. And automatic CNC crowning guarantees a precise and identical angle whatever the length of the bend. Simple to operate, robust and reliable, the TruBend Series 3000 offers the perfect combination of components to make it the fastest machine in its class.

Easy loading of tools from below thanks to Safety Click.

Use all available tools.

Manually with an Allen key, manually with QuickClamp or automatically with hydraulics: The TruBend Series 3000 allows you to choose from a range of different tool clamping systems. Each tool is automatically centered and quickly secured in place by the Safety Click locking mechanism. Third-party tools can also be used without the need for an adapter, so you can continue to use your existing stock of tools even after making the switch to TRUMPF machines.


TRUMPF
TruBend 3100

Technical data			
	TruBend 3066	**TruBend 3100**	**TruBend 3170**
Press force	660 kN	1000 kN	1700 kN
Bending length	2040 mm	3060 mm	4080 mm
Width between columns	2364 mm	3384 mm	4404 mm
Maximum table/beam distance	470 mm	470/620[1] mm	620 mm
Usable open height with manual and hydraulic tool clamping	350 mm	350/500[1] mm	500 mm
Usable open height with TRUMPF QuickClamp	430 mm	430/580[1] mm	580 mm
Operating height[2]	1049–1069 mm	1049–1069 mm	1049–1069 mm
Inclination of beam	± 3 mm	± 6.5 mm	± 7.5 mm
Speeds[3]			
Y rapid	200 mm/s	200 mm/s	170 mm/s
Y working	max. 15 mm/s	max. 15 mm/s	max. 10 mm/s
Y return traverse speed	200 mm/s	200 mm/s	170 mm/s
X axis	500 mm/s	500 mm/s	500 mm/s
R axis	200 mm/s	200 mm/s	200 mm/s
Z axis	1000 mm/s	1000 mm/s	1000 mm/s
Precision			
Y axis position accuracy	0.01 mm	0.01 mm	0.01 mm
X axis position accuracy	0.05 mm	0.05 mm	0.05 mm
R axis position accuracy	0.1 mm	0.1 mm	0.1 mm
Working range			
Y axis stroke	200 mm	200/350[1] mm	350 mm
Travel path X axis	600 mm	600 mm	600 mm
Max. gauge area in X	860 mm	860 mm	860 mm
Travel path R axis	150 mm	150 mm	150 mm
Control	T3500T	T3500T	T3500T
Connection values			
Connected load	15 kVA	20 kVA	30 kVA
Oil capacity (approx.)	120 l	120/165[1] l	220 l
Dimensions and weight			
Length x Width	2587 x 1644 mm	3607 x 1644 mm	4647 x 1644 mm
Height	2370 mm	2370/2720[1] mm	2925 mm
Weight	5650 kg	7700/8300[1] kg	15000 kg

[1] With enlarged open height (optional).

[2] With lower tool height 100 mm. Working height varies with the height of the installation material.

[3] Speeds freely programmable.

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

TruBend Series 5000

TruBend Series 5000: Benefits at a glance.

1. Unrivaled productivity.
2. Full application freedom.
3. All-round user-friendliness.
4. Exact results.
5. Cutting-edge control.

Flexible production thanks to the 6-axis backgauge.

Productive jack of all trades.

The TruBend Series 5000 is TRUMPF's most successful bending machine worldwide. High productivity throughout, from programming and tool setup to the bending process. Innovative features such as the lower tool displacement rail and the 6-axis backgauge give you complete freedom of application.

Optimal part precision due to 4-cylinder drive technology.

Operator in focus.

The third generation of the TruBend Series 5000 has a great many innovative features to make an operator's everyday work easier. These include a revolutionary control concept that can be used easily and intuitively, as well as all kinds of novel ergonomic solutions, such as the MagicShoe.

Precision is its strong point.

The TruBend Series 5000 achieves the optimal part precision and angle accuracy starting from the very first part thanks to, among other things:

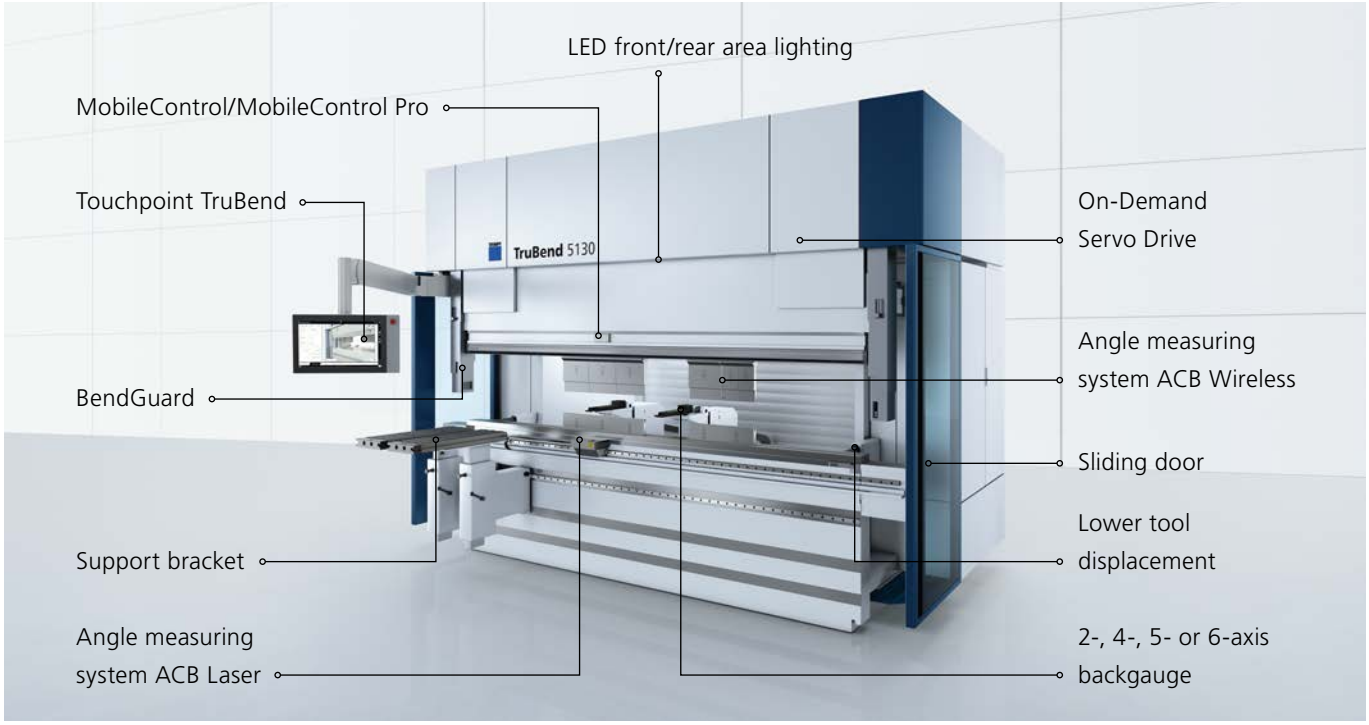
- 4-cylinder drive technology.
- CNC-controlled crowning.
- Ingenious angle measuring systems.

Surprisingly quiet, convincingly fast.

Not only is the On-Demand Servo Drive extremely energy-efficient, but at 220 mm/s it is also particularly fast. What is more, the eco-friendly drive has another impressive feature: It is unusually quiet. It makes things easier for the operator by mastering all set tasks without generating distracting noise.

Flexibly positioned.

The lower tool clamping can be moved into a variety of positions in X direction. This allows you to use special lower tools whenever necessary, for instance to make folds or Z edges at one station – quickly and without the need for a new setup. Repositioning is also useful when removing parts.

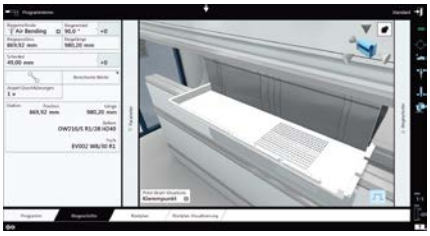


TruBend Series 5000

A dialog between man and machine.

TRUMPF has combined the advantages of state-of-the-art multi-touch technology with industrial control to make operating with Touchpoint TruBend remarkably simple.

- Intuitive operation just like that of a tablet or smartphone, even when wearing gloves.
- Displays concentrate on the essentials and make operation easier.
- Realistic 3D visualization complete with collision monitoring simplifies processing.
- The suitable solution for every application – no matter how simple or complex the component may be.
- The high-performance processor guarantees constant fast and reliable use in your everyday industrial operations.



Intuitive operation with the Touchpoint TruBend.

Walking less, doing more.

With MobileControl and MobileControl Pro you can control your machine from wherever you happen to be. This saves you from having to move from the control unit to the workstation, and as such it raises productivity. Each MobileControl unit features all the essential control functions. The MobileControl Pro modules also allow you to adjust the most important settings, such as correction values or the order of bending steps, directly at the machine. The MobileControl and MobileControl Pro modules enable you to work from anywhere along the work area.

Mobile operating units increase productivity.

Get off on the right foot.*

Operators are the key to productive bending. And now their work is becoming easier thanks to a groundbreaking development: the MagicShoe. TRUMPF is presenting this ergonomic innovation as an alternative to the mechanical foot switch. The MagicShoe is equipped with smart sensors that initiate the stroke with a simple foot movement – no matter where the operator in front of the machine is standing. This makes the moving or dragging along of foot switches a thing of the past and leaves the area in front of the machine free.

* Contact us to find out if the MagicShoe is available in your market.

The MagicShoe replaces the foot switch.

Bending assistance.

The bending aid provides valuable practical assistance for angles of up to 30° and includes an automatic height adjustment. It supports operators in bending especially heavy or large parts. There is a choice of either synthetic, brush or roller supports.

The bending aid provides support for the processing of heavy or large blanks.

On good form.

Support brackets with infinite height adjustment make it easier to handle your parts. They can take loads of up to 200 kg and, just like the bending aid, are available with a choice of different supports.

Twice as bright.

With the Tool Indicator operators can work more productively. During setup, white LEDs show with millimeter precision exactly where bending tools are needed. And while bending, the optical positioning aid always lights up at the station where the next bending operation is done. The operators no longer have to consult the control unit.

Robust consoles facilitate handling.

TruBend Series 5000

More room, more light, the best view.

Sideways sliding doors take up minimum space and create extra room around the machine for supplying sheet metal and for depositing bent parts. Since the doors are made of safety glass, they ensure both optimum protection and ideal lighting conditions in the work area.

This optimal illumination is further enhanced by LEDs found both in front of and inside the machine. These not only keep energy consumption low but also prevent the production of excess heat that would otherwise bother operators in their work.

Sliding doors minimize space requirements.

Keeping an eye on sheet thicknesses.

Thickness Controlled Bending (TCB) is a straightforward function that compensates for variations in sheet thickness. Sensors in the machine detect the thickness of the next sheet and adjust the upper tool's plunge depth accordingly. This allows you to achieve angle quality regardless of the sheet thickness – without having to recalibrate or reprogram, and with no drop in productivity.

LEDs provide optimal lighting conditions.

Straight ahead to precise angles.

Precise angles are essential for bending. Variations in material characteristics such as strength or springback can compromise precision. TRUMPF's solution is called ACB, which stands for Automatically Controlled Bending. Using the angle measuring systems from the ACB family means even the first part in a series turns out perfect. Sensors determine the actual angle together with the springback and guide the ram to achieve the desired angle.

TRUMPF offers two systems that complement each another perfectly. Depending on the application, the ideal system is deployed.

Optical angle measuring system ACB Laser.

Tactile angle measuring system ACB Wireless.

The right solution for every application.

ACB Laser.
The TRUMPF ACB Laser offers you a noncontact, optical system for measuring angles. A laser projects a line onto the sheet and a camera detects the angle. This involves putting two measuring units into position using CNC.

ACB Wireless.
The user-friendly ACB Wireless determines and adjusts angles with the help of sensor disks integrated into the upper tool. Their position is automatically detected by the system. The tool and the control unit communicate wirelessly with one another.

ACB Laser strengths	ACB Wireless strengths
■ High speed. ■ High angle accuracy. ■ Applicable with different bending methods.	
■ Special fields of application: – Acute and open angles. – Thick sheets. – Large radii. ■ No setup effort. ■ Easy to use. ■ Use with special tools. ■ Maximum surface quality.	■ Special fields of application: – Short sides. – Reflective surfaces. – Internal flanges. ■ Quick station bending. ■ Fast multi-point measurements. ■ No interference contours. ■ An inexpensive entry into angle measuring.

Awards for TruBend 5130:

DESIGN AWARD 2015

reddot award 2015
winner

GERMAN DESIGN AWARD WINNER 2016

Award for Touchpoint control:

reddot award 2016
winner interface design

Technical data

	TruBend 5085	TruBend 5130	TruBend 5170	TruBend 5230	TruBend 5320
Press force	850 kN	1300 kN	1700 kN	2300 kN	3200 kN
Bending length	2210/2720[1] mm	3230 mm	3230/4250[1] mm	3230/4250[1] mm	4420 mm
Width between columns	1750/2260[1] mm	2690 mm	2690/3680[1] mm	2690/3680[1] mm	3680 mm
Maximum table/ beam distance	505/735[1] mm	505/735[1] mm	735 mm	735 mm	735 mm
Usable open height	385/615[1] mm	385/615[1] mm	615 mm	615 mm	615 mm
Throat	420 mm	420 mm	420 mm	420 mm	420 mm
Operating height[2]	1095 – 1115 mm	1095 – 1115 mm	1095 – 1115 mm	1095 – 1115 mm	1110 – 1130 mm
Inclination of beam	±10 mm	± 10 mm	± 10 mm	± 10 mm	± 10 mm
Speeds[3]					
Y rapid	220 mm/s	220 mm/s	220 mm/s	220 mm/s	220 mm/s
Y working[4]	max. 25[4] mm/s	max. 25[4] mm/s	max. 25[4] mm/s	max. 25[4] mm/s	max. 25[4] mm/s
Y return traverse speed	220 mm/s	220 mm/s	220 mm/s	220 mm/s	220 mm/s
X axis[6]	1000/1750 mm/s	1000/1750 mm/s	1000/1750 mm/s	1000/1750 mm/s	1000/1750 mm/s
R axis	330 mm/s	330 mm/s	330 mm/s	330 mm/s	330 mm/s
Z axis[6]	1750/2500 mm/s	1750/2500 mm/s	1750/2500 mm/s	1750/2500 mm/s	1750/2500 mm/s
Precision					
Y axis position accuracy	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm
X axis position accuracy	0.04 mm	0.04 mm	0.04 mm	0.04 mm	0.04 mm
R axis position accuracy	0.08 mm	0.08 mm	0.08 mm	0.08 mm	0.08 mm
Working range					
Y axis stroke	215/445[1] mm	215/445[1] mm	445 mm	445 mm	445 mm
Travel path X axis	600 mm	600 mm	600 mm	600 mm	600 mm
Max. gauge area in X[6]	860/1000 mm	860/1000 mm	860/1000 mm	860/1000 mm	860/1000 mm
Travel path R axis	250 mm	250 mm	250 mm	250 mm	250 mm
User interface	Touchpoint TruBend	Touchpoint TruBend	Touchpoint TruBend	Touchpoint TruBend	Touchpoint TruBend
Connection values					
Connected load	13[4]/32[5] kVA	17.5[4]/42[5] kVA	24[4]/61[5] kVA	33[4]/69[5] kVA	40[4]/90[5] kVA
Oil capacity	70 l	115 l	180/220[1] l	180/220[1] l	220 l
Dimensions and weight[7]					
Length x Width	3020 x 1800 mm 3530 x 1800[1] mm	3980 x 1800 mm	3980 x 1900 mm 4970 x 1900[1] mm	4150 x 2055 mm 5140 x 2055[1] mm	5180 x 2055 mm
Height	2375/2835[1] mm	2375/2835[1] mm	3000 mm	3200 mm	3200 mm
Weight	8000/8700[1] kg	10700/11800[1] kg	14150/17850[1] kg	17200/19850[1] kg	23400 kg

[1] Second figure relates to extended version (optional).

[2] With lower tool height 100 mm. Working height varies with the height of the installation material.

[3] Speeds freely programmable.

[4] With a working speed of 10 mm/s.

[5] With increased working speeds at maximum press force (option).

[6] Depends on backgauge selected.

[7] Data refer to basic machine without options.

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

TruBend Series 7000

TruBend Series 7000: Benefits at a glance.

1. Outstanding productivity.
2. Maximized, multiaxis dynamics.
3. Engineered for maximum comfort.
4. Low energy consumption.
5. Reduced footprint.

Working without fatigue at the TruBend Series 7000.

Ergonomic high-speed machine.

The TruBend Series 7000 is a perfect example of the coordinated interaction between operator and machine. You can be sure of achieving outstanding productivity at every stage of the process thanks to its high speed and acceleration, and the optimized working environment provided by its ergonomic features. It is a particularly cost-effective solution for bending small- and medium-sized parts.

Certified ergonomic quality.

Human factor engineering played a significant role in the conceptual design of the TruBend Series 7000. As a result, the machines are a pleasure to use, operators can work quickly and efficiently, and part quality is consistently high. It is the first press brake to be awarded a quality certificate specifically for its ergonomic design.

Better quality assurance.

An integrated bending line laser projects a line of light onto the surface of the sheet metal, indicating precisely where it will be bent and enabling the operator to verify that the workpiece is in the correct position.

The integrated bending line laser ensures spot-on positioning.

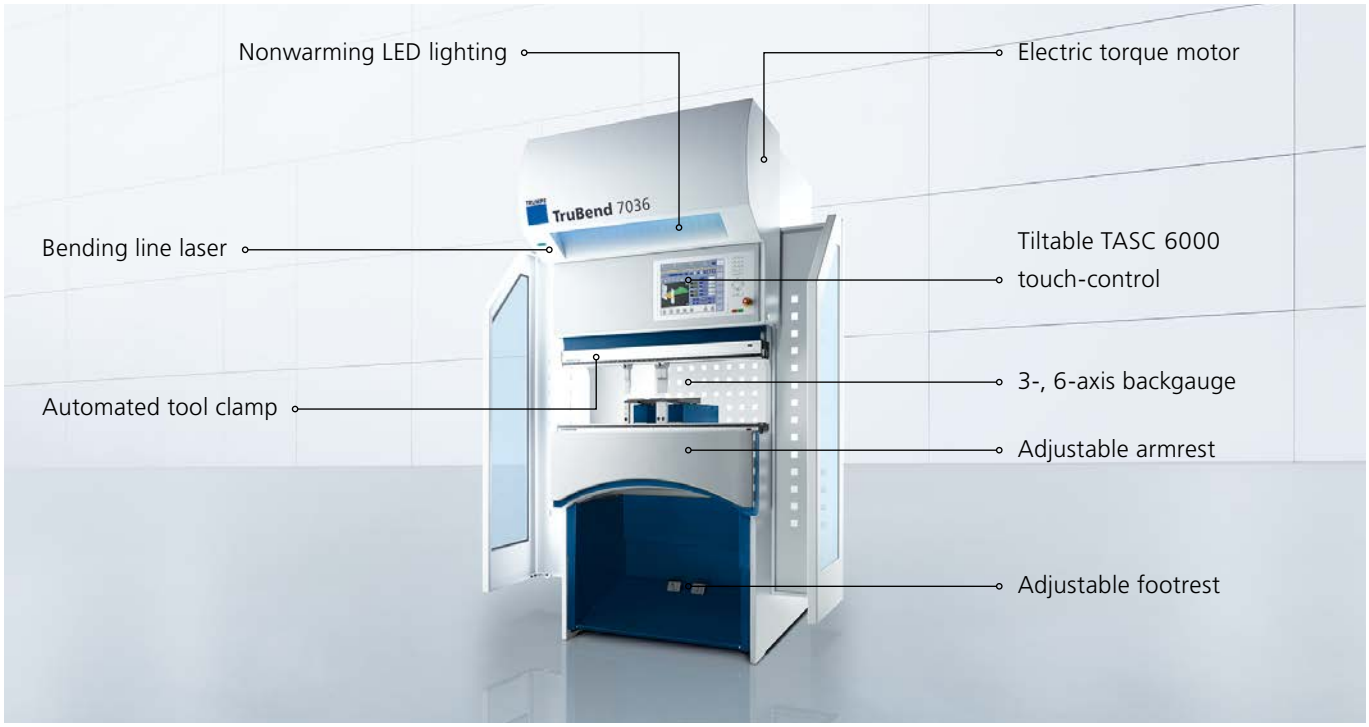
Outstanding productivity.

The gearless, direct-drive motor delivers high torque even when rotating at low speed – the optimum requirements for achieving a high press force coupled with a high throughput rate. This extremely energy-efficient electric motor helps you to reduce energy costs.

Maximized, multiaxis dynamics.

The time required to bend small parts depends only partly on the operating speed of the ram. An even more important factor is the acceleration of the backgauges. To enable them to be positioned more rapidly, they are built to a special design using a lightweight, stable carbon-fiber material. The machine can operate much faster because the mass it has to move is significantly lower. The system is available with either 3 or 6 axes.

The user-friendly touch screen with intuitive menus can be tilted to avoid reflections.




TRUMPF
TruBend 7036

Technical data	
	TruBend 7036
Press force	360 kN
Bending length	1020 mm
Width between columns	932 mm
Maximum table / beam distance	420 mm
Usable installation height	295 mm
Throat	150 mm
Operating height[1]	1150 mm
Speeds[2]	
Y rapid	220 mm/s
Y working	max. 25 mm/s[3]
Y return traverse speed	220 mm/s
X axis	1000 mm/s
R axis	330 mm/s
Z axis	1000 mm/s
Precision	
Y axis position accuracy	0.002 mm
X axis position accuracy	0.02 mm
R axis position accuracy	0.02 mm
Working range	
Y axis stroke	120 mm
Travel path X axis	235 mm
Max. gauge area in X	500 mm
Travel path R axis	75 mm
Control	TASC 6000
Connection values	
Connected load	6 kVA
Dimensions and weight	
Length x Width	1805 x 1330 mm
Height	2380 mm
Weight	2600 kg

[1] For dies with a height of 100 mm.

[2] Speeds freely programmable.

[3] Depending on die width and application. May vary in accordance with local regulations.

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

TruBend Series 8000

TruBend Series 8000: Benefits at a glance.

1. **Bends oversized parts.**
2. **Can handle up to 6,000 kN/m.**
3. **Precise angles from the very first part.**
4. **Designed with the operator in mind.**
5. **Surface-mounted machines up to 6 m.**

Designed for special cases.

The TruBend Series 8000 is a great choice if you're looking for high precision and versatility, a generous open height, and press forces of up to 1,000 t.

With a length of up to 8 m, these machines can be used to process extra-large parts or bend smaller workpieces at multiple tool stations.

Another benefit of the TruBend Series 8000 is that the machines can partly be mounted directly on the floor, eliminating the need for expensive foundations.

Concentrated power.

The TruBend Series 8000 comes with a sophisticated automatic crowning system. It even lets you selectively tailor the crowning curve to your specific bending task every 250 mm.

Automatic crowning.

Precise angles from the very first part.

The user-friendly Laser Controlled Bending (LCB) angle measuring system ensures you get exactly the right angle from the very first part of every new series. The optical system works independently of the tool selected.

Designed with the operator in mind.

The multi-touch display makes the machine easy and intuitive to use. Useful functions such as MobileControl reduce the necessary walking and keep non-productive time to a minimum. Each bending aid enables you to process parts weighing up to 300 kg.

Angle measuring system LCB.

Bending aids.

Multi-touch control.

Do you need even more bending force, a greater bending length or a customized bending machine? Whatever the application you want to implement, TRUMPF Werkzeugmaschinen Teningen GmbH offers tailor-made solutions to meet your needs.


TRUMPF
TruBend 8400

Technical data

	TruBend 8230	TruBend 8320	TruBend 8400	TruBend 8500	TruBend 8600	TruBend 8800	TruBend 8010
Press force	2300 kN	3200 kN	4000 kN	5000 kN	6000 kN	8000 kN	10000 kN
Bending length	5050/ 6050 mm	5050/ 6050 mm	4050/5050/ 6050 mm	4050/5050/ 6050 mm	4050/5050/ 6050 mm	6050/7050/ 8050 mm	6050/7050/ 8050 mm
Width between columns	4050/ 5050 mm	4050/ 5050 mm	3550/4050/ 5550 mm	3050/4050/ 5050 mm	3050/4050/ 5050 mm	5050/6050/ 7050 mm	5050/6050/ 7050 mm
Surface-mounted	Yes	Yes	Yes/Yes/–	Yes/–/–	–	–	–
Maximum table/ press beam distance[2]	620/820[1]/ 1020[1] mm	620/820[1]/ 1020[1] mm	620/820[1]/ 1020[1] mm	620/820[1]/ 1020[1] mm	620/820[1]/ 1020[1] mm	820/ 1020[1] mm	820/ 1020[1] mm
Usable open height	475/675[1]/ 875[1] mm	475/675[1]/ 875[1] mm	475/675[1]/ 875[1] mm	475/675[1]/ 875[1] mm	475/675[1]/ 875[1] mm	675/ 875[1] mm	675/ 875[1] mm
Throat	420/620[1] mm	420/620[1] mm	420/620[1] mm	420/620[1] mm	420/620[1] mm	420/620[1] mm	420/620[1] mm
Operating height	1165 mm	1165 mm	1065/1165/ 1065 mm	1065 mm	1015 mm	1015 mm	965 mm
Inclination of beam	± 10 mm	± 10 mm	± 10 mm	± 10 mm	± 10 mm	± 10 mm	± 10 mm
Speeds							
Y rapid	220 mm/s	150 mm/s	170 mm/s	160 mm/s	120 mm/s	140 mm/s	100 mm/s
Y working	10 mm/s	10 mm/s	10 mm/s	10 mm/s	9 mm/s	10 mm/s	8 mm/s
Y return traverse speed	220 mm/s	150 mm/s	170 mm/s	160 mm/s	120 mm/s	140 mm/s	100 mm/s
X axis[3]	1200 mm/s	1200 mm/s	1200 mm/s	1200 mm/s	1200 mm/s	1200/800/ 800 mm/s	1200/800/ 800 mm/s
R axis[3]	200 mm/s	200 mm/s	200 mm/s	200 mm/s	200 mm/s	200/140/ 140 mm/s	200/140/ 140 mm/s
Z axis[3]	1200 mm/s	1200 mm/s	1200 mm/s	1200 mm/s	1200 mm/s	1200/800/ 800 mm/s	1200/800/ 800 mm/s
Precision							
Y axis	0.01 mm	0.01 mm	0.01 mm	0.01 mm	0.01 mm	0.01 mm	0.01 mm
X axis[3]	0.02 mm	0.02 mm	0.02 mm	0.02 mm	0.02 mm	0.02 mm	0.02 mm
R axis[3]	0.05 mm	0.05 mm	0.05 mm	0.05 mm	0.05 mm	0.05 mm	0.05 mm
Working range							
Y axis stroke	300/500[1]/ 700[1] mm	300/500[1]/ 700[1] mm	300/500[1]/ 700[1] mm	300/500[1]/ 700[1] mm	300/500[1]/ 700[1] mm	500/ 700[1] mm	500/ 700[1] mm
Travel path X axis[3]	600 mm	600 mm	600 mm	600 mm	600 mm	600 mm	600 mm
Max. gauge area[3] in X	1000 mm	1000 mm	1000 mm	1000 mm	1000 mm	1000 mm	1000 mm
Travel path R axis[3]	200 mm	200 mm	200 mm	200 mm	200 mm	200 mm	200 mm
User Control	T8000T Multi-touch	T8000T Multi-touch	T8000T Multi-touch	T8000T Multi-touch	T8000T Multi-touch	T8000T Multi-touch	T8000T Multi-touch
Connection values							
Connected load	35 kVA	44 kVA	53 kVA	62 kVA	74 kVA	97 kVA	97 kVA
Oil capacity	400 l	400 l	600 l	600 l	700 l	1000 l	1000 l
Dimensions and weight on request							

[1] Figure relates to extended version (optional).

[2] Values for tool clamp with a maximum load of 3000 kN/m.

[3] Figures refer to 2-, 4- and 5-axis backgauge.

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

TruBend Series 8000 in tandem installation

TruBend Series 8000 in tandem installation: Benefits at a glance.

1. Greater part variety by doubling press force and bending length.
2. Increased capacity by virtue of both machines possessing stand-alone capability.
3. Longer side length thanks to greater throat depth.
4. Lower setup costs with surface-mounted installation.
5. Greater flexibility through lower tool displacement.

Doubled up to make one flexible large-format machine.

You have parts that are 6 or 8 m long, but you also bend short sheets? Then a flexible solution is exactly what you need: the TruBend 8000 Series in tandem installation. Two machines work in sync and allow you to double the bending length and the press force. However, each machine can also be used separately, meaning that you have two machines available for short parts. The result: more capacity, more productivity, more jobs processed.

Easy operation even over 8 m.

Clever helpers such as MobileControl, multi-touch control, and bending aids are also available in the tandem version: they facilitate work over long distances and make your production highly professional.

Productivity and safety from end to end.

Both aspects are ensured: Using the lower tool displacement, you can carry out two different bending operations with one tool, even in tandem mode. This increases your part variety while reducing setup times and investment costs. BendGuard efficiently secures the working range over the entire tandem bending length.

Technical data				
Tandem installation	**2 x TruBend 8230 (4 m)**	**2 x TruBend 8320 (3 m)**	**2 x TruBend 8400 (4 m)**	**2 x TruBend 8500 (4 m)**
Press force	2 x 2300 kN	2 x 3200 kN	2 x 4000 kN	2 x 5000 kN
Connected load (approx.)	2 x 35 kVa	2 x 44 kVa	2 x 53 kVa	2 x 62 kVa
Bending length	8100 mm	6100 mm	8100 mm	8100 mm
Width between columns	3050 mm	2050 mm	3050 mm	3050 mm
Throat depth	820 mm	820 mm	820 mm	820 mm
Length	9280 mm	7280 mm	9340 mm	9460 mm

The TruBend 8000 Series is available in four different versions with the right and the left machine type always being the same.

TruBend Cell

Outstanding features of the TruBend Cell 5000:

1. Huge increase in productivity thanks to fully automated operation.
2. Processes a wide range of components.
3. Convenient offline programming.
4. Less physical strain for the operator.
5. Individual material flow.

Productive all-purpose bending cell.

TruBend Cell 5000 enables you to process parts cost-efficiently and achieve high productivity. The BendMaster relieves the operator of many onerous tasks, especially when processing large and heavy workpieces weighing up to 100 kg. The bulk of the work is handled by the machine – working around the clock, seven days a week, if necessary. You can always rely on our automated bending solutions to produce parts of a consistently high quality.

Innovative high-speed bending cell.

Ideally suited for the automatic bending of small parts, the TruBend Cell 7000 is the compact solution for fabricators looking to increase their productivity. The innovative bending units are a unique feature of the machine, with their lightweight backgauges and modern drive concept. All in all, the TruBend Cell 7000 is the fastest bending cell in its class.

Outstanding features of the TruBend Cell 7000:

1. **Lowest part costs through minimum costs per bending operation.**
2. **Lower setup time.**
3. **Convenient offline programming.**
4. **Compact overall system.**
5. **Optimized material flow.**

ToolShuttle

The right tool always at hand.

The ToolShuttle quickly and ergonomically sets up your tools and accommodates 160 linear meters of bending tools. The compact tool storage can directly supply up to two bending machines, with the transfer carriage transporting the tools to the machines.

The tools are stored in drawers and are provided automatically. In the process the tools are provided in setup position and at the right height, so the operator is optimally assisted. No time is lost looking for and transporting tools anymore, and setup times are reduced to a minimum. This will save you 60% time with every tool setup operation.

ToolMaster

Productive bending thanks to automatic tool changes.

Automatic tool changes in seconds, space for 60 upper and 48 lower tools, and it can even be used for your standard tools – that is the automatic tool changer ToolMaster. It takes care of your setup processes for you, an incalculable advantage, especially for small batch sizes. Search and transit times simply disappear.

While the retrofittable ToolMaster changes your standard or special tools, you can get on with other work. Benefit from user-friendly work processes and from high positioning accuracy, which make station bending easier. Another advantage: its closed storage protects your tools from corrosion.

Bending tools.

Tailored to your requirements.

Bending tools from TRUMPF enable you to meet any challenge, however complex it may be. They are backed by the extensive experience of our experts, who are always there to help you:

- Customized advice and tailored design solutions.
- Development and testing of application-specific systems.
- Fast availability.
- High precision and a long service life.
- A single source for machines and tools.

The LASERdur process used to harden the tools.

Everything you need from a single source.

Bending tools from TRUMPF live longer.

Precision and quality are the characteristics that count when manufacturing bending tools. Our unique LASERdur technique results in extremely hard-wearing tools. We use a laser hardening process to selectively strengthen tools in those areas that are most subject to wear.

Flexible standard tools.

We offer a range of over 150 punches and dies from which to choose those best suited to your application. And, you are free to decide whether you wish to order a complete set or compile your personal selection. Lightweight tools are available as well.

Custom-designed tools.

If your requirements are out of the ordinary, TRUMPF will develop a customized tool solution, just for you. To ensure that it meets the quality requirements for your parts, we will test the tools using the materials you specify and produce prototype parts for you to evaluate.

Measuring tools.

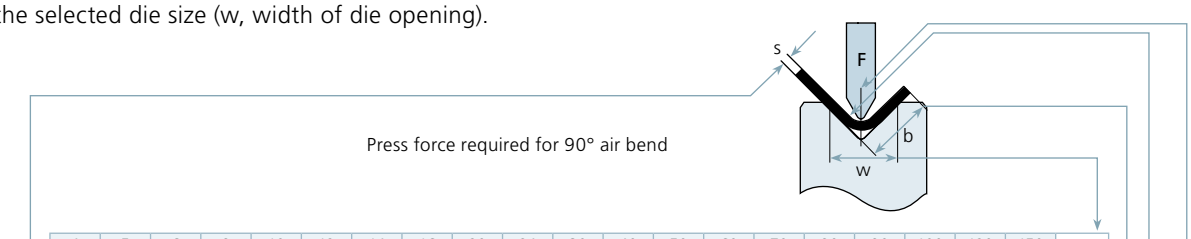
We can provide automeasuring tools based on our proven ACB system for almost every standard tool in our range. Sensor disks incorporated in the forming tool send back measurement data directly from the operating zone. With ACB, you can reproduce angles of the highest accuracy.

Press force calculator.

TRUMPF calculation table.

The charts allow you to simply read off the required bending force (F) for a part measuring 1 m in length. The necessary force varies as a function of the sheet thickness (s, vertical scale) and the selected width of the die opening (w, horizontal scale). The tables also show the minimum leg length (b) and the inside radius (Ri) associated with the selected die size (w, width of die opening).

Calculation table also available as app.



Mild steel
450 N/mm²

s	4	5	6	8	10	12	14	16	20	24	30	40	50	60	70	80	90	100	120	150	w
	3	3.75	4.5	6	7.5	9	11	12	15	18	22.5	30	37.5	45	52.5	60	67.5	75	90	112.5	b
	0.7	0.8	0.9	1.4	1.7	1.9	2.2	2.6	3.2	3.9	4	5.1	6.3	7.7	9.1	10.1	12	12.9	15.7	15.5	Ri
0.5	45	35	28	21																	
0.75	102	78	64	46	36	30															
1		167	131	91	70	57	48	41													
1.25			204	142	109	88	74	64	50												
1.5			294	204	157	127	107	92	72												
1.75				278	213	173	146	126	99	81											
2					279	226	190	164	129	106											
2.5						353	297	256	201	166	131										
3							428	369	290	238	188	140									
3.5								503	394	325	256	190	151								
4									515	424	335	248	197	163							
4.5									652	537	424	314	249	207	177						
5											523	388	308	255	218	190					
6											754	558	443	368	314	274	243				
7												760	604	501	428	373	331	297			
8													864	705	595	515	454	406	335		
10															930	805	710	634	523	415	
12																1159	1022	914	754	597	
15																	1597	1427	1178	933	

Stainless steel
700 N/mm²

s	4	5	6	8	10	12	14	16	20	24	30	40	50	60	70	80	90	100	120	150	w
	3	3.75	4.5	6	7.5	9	11	12	15	18	22.5	30	37.5	45	52.5	60	67.5	75	90	112.5	b
	0.8	1	0.8	2	1.9	2.3	2.2	3.5	3.9	5.3	5.4	7.9	8.5	10.4	12.1	13.8	15.5	17.9	20.7	24	
0.5	71	54	44	32																	
0.75	159	122	99	72	56	46															
1		260	203	141	108	88	74	64													
1.25			317	221	169	137	116	100	78												
1.5			457	318	244	198	166	144	113												
1.75				433	332	269	227	195	153	126											
2					434	352	296	255	200	165											
2.5						550	462	399	313	258	204										
3								574	451	371	293	217									
3.5								782	614	505	399	296	235								
4									801	660	521	386	307	254							
4.5									1014	835	660	489	388	322	275						
5											814	603	479	397	339	296					
6											1172	869	690	572	489	426	378				
7												1182	939	779	665	580	515	463			
8													1344	1096	926	801	706	632	521		
10															1447	1252	1104	987	814		
12																1803	1590	1421	1172		
15																	2484	2220	1832	1451	

F in kN; **s, w, b, Ri** in mm = optimum die opening

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.

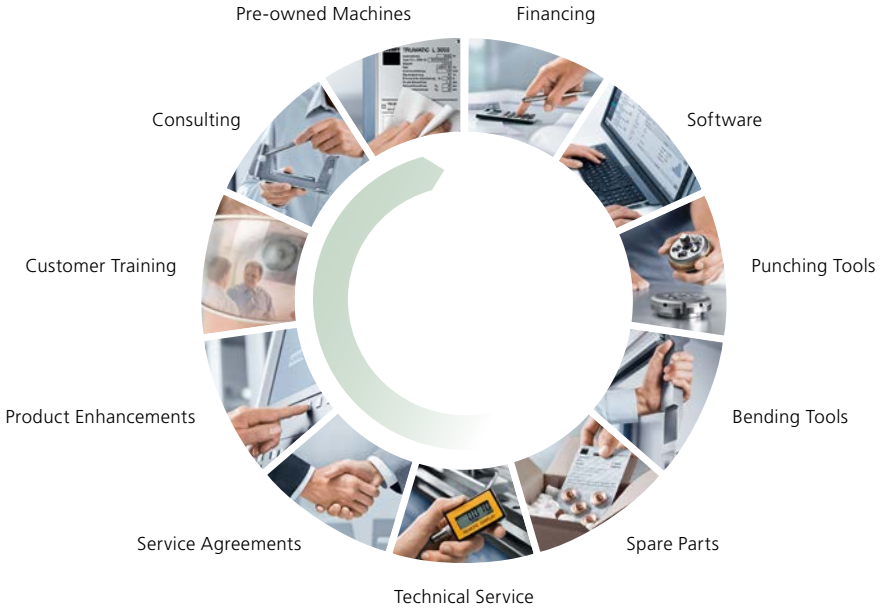
TruTops Boost: Your benefits at a glance.

- 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. TRUMPF 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 highest availability 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 further information see www.trumpf.info/quality)

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