

A detailed close-up photograph of a metal bending process. The image shows a metal sheet being bent into a sharp angle. The metal has a brushed, metallic finish. In the upper left, a white rectangular box contains the text 'TruBend: More bending freedom.'. The background is dark, making the metallic surfaces stand out. The lighting highlights the texture and the sharp edges of the bent metal.

TruBend:

More bending
freedom.

The best bending solutions.

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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.

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





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 set-up 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.

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.

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.

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.



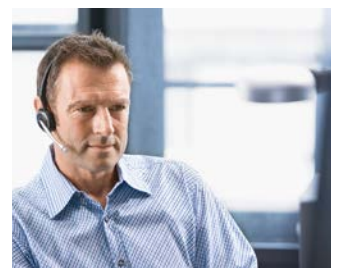
The footrest increases operator ergonomics.



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.





| 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 Cell

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.



ToolShuttle



The right tool always at hand.

The tool shuttle 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 automatically provided. 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.

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.

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 400 N/mm²

Press force required for 90° air bend

| s | 6 | 8 | 10 | 12 | 16 | 20 | 24 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 120 | w | b | Ri |
|------|-----|-----|-----|-----|-----|-----|-----|------|-----|------|-----|------|------|------|-----|-----|---|---|----|
| | 4.5 | 6 | 7.5 | 9 | 12 | 15 | 18 | 22.5 | 30 | 37.5 | 45 | 52.5 | 60 | 67.5 | 75 | 90 | | | |
| | 1 | 1.3 | 1.6 | 1.9 | 2.6 | 3.2 | 3.8 | 4.8 | 6.4 | 8 | 9.6 | 11 | 13 | 14 | 16 | 19 | | | |
| 0.75 | 52 | 39 | 31 | 26 | | | | | | | | | | | | | | | |
| 1 | 93 | 70 | 56 | 47 | 35 | | | | | | | | | | | | | | |
| 1.25 | 145 | 109 | 87 | 73 | 55 | 44 | | | | | | | | | | | | | |
| 1.5 | 209 | 157 | 126 | 105 | 79 | 63 | | | | | | | | | | | | | |
| 1.75 | | 214 | 171 | 143 | 107 | 86 | 71 | | | | | | | | | | | | |
| 2 | | | 223 | 186 | 140 | 112 | 93 | | | | | | | | | | | | |
| 2.5 | | | | 291 | 218 | 175 | 145 | 116 | | | | | | | | | | | |
| 3 | | | | | 314 | 251 | 209 | 168 | 126 | | | | | | | | | | |
| 3.5 | | | | | 428 | 342 | 285 | 228 | 171 | 137 | | | | | | | | | |
| 4 | | | | | | 447 | 372 | 298 | 223 | 179 | 149 | | | | | | | | |
| 4.5 | | | | | | 566 | 471 | 377 | 283 | 226 | 189 | 162 | | | | | | | |
| 5 | | | | | | | | 466 | 349 | 279 | 233 | 200 | 175 | | | | | | |
| 6 | | | | | | | | 670 | 503 | 402 | 335 | 287 | 251 | 223 | | | | | |
| 7 | | | | | | | | | 684 | 547 | 456 | 391 | 342 | 304 | 274 | | | | |
| 8 | | | | | | | | | | 715 | 596 | 511 | 447 | 397 | 358 | 298 | | | |
| 10 | | | | | | | | | | | | 798 | 698 | 621 | 559 | 466 | | | |
| 12 | | | | | | | | | | | | | 1005 | 894 | 804 | 670 | | | |

Stainless steel 700 N/mm²

| s | 6 | 8 | 10 | 12 | 16 | 20 | 24 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 120 | w | b | Ri |
|------|-----|-----|-----|-----|-----|-----|-----|------|-----|------|-----|------|------|------|------|------|---|---|----|
| | 4.5 | 6 | 7.5 | 9 | 12 | 15 | 18 | 22.5 | 30 | 37.5 | 45 | 52.5 | 60 | 67.5 | 75 | 90 | | | |
| | 1 | 1.3 | 1.6 | 1.9 | 2.6 | 3.2 | 3.8 | 4.8 | 6.4 | 8 | 9.6 | 11 | 13 | 14 | 16 | 19 | | | |
| 0.75 | 87 | 65 | 52 | 44 | | | | | | | | | | | | | | | |
| 1 | 155 | 116 | 93 | 78 | 58 | | | | | | | | | | | | | | |
| 1.25 | 242 | 182 | 145 | 121 | 91 | 73 | | | | | | | | | | | | | |
| 1.5 | 349 | 262 | 209 | 175 | 131 | 105 | | | | | | | | | | | | | |
| 1.75 | | 356 | 285 | 238 | 178 | 143 | 119 | | | | | | | | | | | | |
| 2 | | | 372 | 310 | 233 | 186 | 155 | | | | | | | | | | | | |
| 2.5 | | | | 485 | 364 | 291 | 242 | 194 | | | | | | | | | | | |
| 3 | | | | | 524 | 419 | 349 | 279 | 209 | | | | | | | | | | |
| 3.5 | | | | | | 570 | 475 | 380 | 285 | 228 | | | | | | | | | |
| 4 | | | | | | | 621 | 497 | 372 | 298 | 248 | | | | | | | | |
| 4.5 | | | | | | | | 628 | 471 | 377 | 314 | 269 | | | | | | | |
| 5 | | | | | | | | | 582 | 466 | 388 | 333 | 291 | | | | | | |
| 6 | | | | | | | | | 838 | 670 | 559 | 479 | 419 | | | | | | |
| 7 | | | | | | | | | | 912 | 760 | 652 | 570 | 507 | | | | | |
| 8 | | | | | | | | | | 1192 | 993 | 851 | 745 | 662 | 596 | | | | |
| 10 | | | | | | | | | | | | 1330 | 1164 | 1034 | 931 | 776 | | | |
| 12 | | | | | | | | | | | | | 1675 | 1490 | 1340 | 1118 | | | |

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!

Talk to your TRUMPF contact to find out when TruTops Boost will be available to you. Until then, our TruTops Bend software can offer you optimum support. We recommend our TruTops Fab software as the ideal production control system for your requirements.

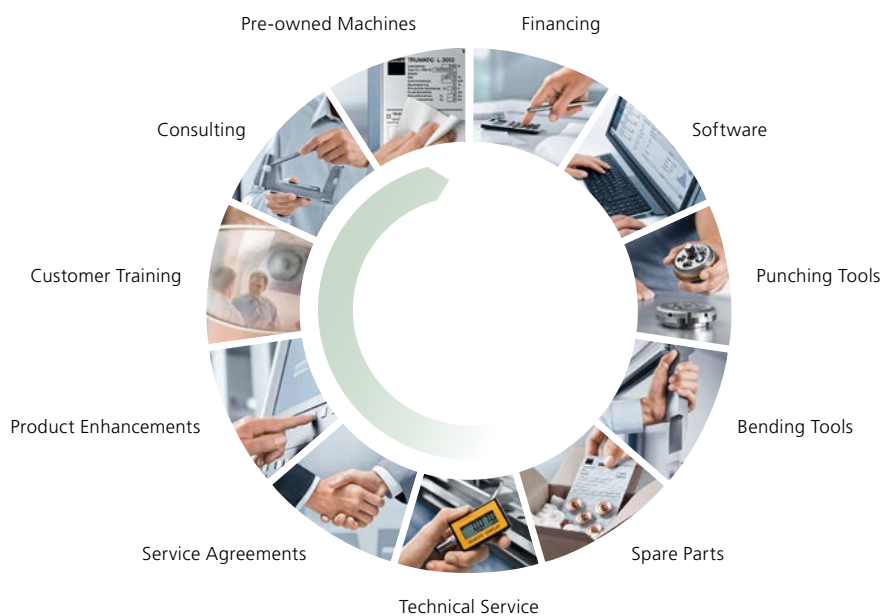
TruTops Boost: Your benefits at a glance.

- 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 = TruTops Boost

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.com/en/quality)

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