TruBend Center:

Panel bending on the road to success.
With the TruBend Center’s unique panel bending technology, TRUMPF unlocks the widest range of parts for this machine class. Create complex components quickly and flexibly, well beyond what is possible with the classic panel bending range. From filigree edges to large-scale forms, you can produce parts suitable for a broad range of industrial uses and applications – thanks to the automatic tool changer, all this can be done in a highly productive way and without tool setups.

In panel bending, sheets are inserted horizontally and fixed in place by blank holders. Upper and lower bending tools are mounted directly on the bending frame. A bend is formed by the movement of the bending tool. In this process, only the tool moves during the bending operation; the workpiece remains stationary in the horizontal position and does not need to be held by the operator.

TruBend Center:
Your benefits at a glance.

1. Highly productive bending.
3. Automatic setup.
4. Optimal accuracy.
5. Easy operation.
A broader bending range.

TruBend Center’s machine concept allows you unprecedented formats in panel bending technology, such as extremely short side lengths, deep boxes and small profiles, as well as part with formed sections, recesses, diverse radii or multiple negative bends.

The basis for this part variety is the patented 2-axis part manipulator, which fixes the parts in place during the manufacturing process. Thanks to its vertical axis, a great variety of part geometries are possible. The 2-axis part manipulator is used with both the semi-automatic and the fully-automatic machines.

The ergonomic handling of workpieces is remarkably user-friendly and also provides an enormous productivity advantage.

Various bending methods are available to fulfill every requirement. Production is especially flexible thanks to the ingenious combination of automatic and manual parts handling. The TruBend Center merges speed and versatility for unprecedented productivity.

The machine that matches your requirements.

The semi-automatic panel bender TruBend Center 5030.

The fully-automatic panel bending center TruBend Center 7030.
Endless application variety.

Mild steel housing cover, 3 mm thick.

Optimal accuracy, even for thicker materials.

Stainless steel drawer, 1 mm thick.

Radial bending with a doubled sheet.

Stainless steel display housing, 1 mm thick.

Short side in combination with a radius bend.
Mild steel container, 0.8 mm thick, made of two parts.

Highest accuracy during production of slide-in connections.

Mild steel guard sheet, 1 mm thick, made of two parts.

High repeat accuracy for a vast variety of bends.
Driven to perfection.

With its ingeniously simple continuous path control, the TruBend Center’s innovative angle drive provides optimal accuracy. The interaction of the two axes creates an ideal travel path, protecting your workpiece’s surface. Furthermore, the construction of the drive makes your TruBend Center especially robust for industrial environments.

Lightning-fast programming.

TecZone Fold offline programming is the fastest and easiest programming option for panel benders. With just a few clicks, your parts are ready. TecZone Fold automatically generates the program and the 3D simulation for your parts, including collision monitoring. If required, changes and modifications can be carried out manually at any time.
An eye for the perfect angle.

The optical angle assistant supports the operator during the loading of new components. Its integrated camera conveys a visual representation of the actual angle to the control. The target angle is also shown automatically. During machining, the operator can monitor the angle and adjust it as necessary. With the help of the optical angle assistant, even the first piece is a good piece – an invaluable advantage.

Precision is your strength.

With TRUMPF’s ACB Laser, you use a non-contact optical system for angle measurement. This involves a laser projecting a line onto the sheet while a camera detects the angle. To this end, a measuring unit is conveyed to the right place via CNC axis.
Two axes, infinite possibilities.

The 2-axis part manipulator automatically positions the sheet for all bends for that component edge. The part manipulator can travel forwards and backwards. Thanks to the additional vertical axis, parts can be fixed at different positions. What’s more, the vertical axis ensures that parts with negative bends can be removed reliably. This results in a significant increase in your part flexibility. This also allows you to produce very small profiles or components with multiple downward bends, for instance. Parts with preformed sections or cutouts can also be processed reliably. The 2-axis part manipulator is available not just with the semi-automatic TruBend Center 5030, but also with the fully automated TruBend Center 7030 panel bending center – unique in the world of panel bending.

Efficient part handling.

The 3-surface suction module has suction cups on the front, top and bottom sides. TRUMPF offers additional gripper systems for parts that do not provide sufficient suction surface; for these mostly smaller parts magnet and gripper modules are used.
Tools for every challenge.

With the TruBend Center’s standard tools, you can successfully handle the majority of all possible applications. For special geometries, your machine keeps sophisticated additional tools at the ready:

- Depending on the part geometry, special blank holders prevent collisions and increase the machine’s application flexibility.
- Additional bending tools are automatically loaded as needed and are available for parts with staggered bends.

Due to the extensive range of perfectly compatible tools, you gain maximum part flexibility and cost-effectiveness.
Tools for every challenge.

Horn blank holder

You can very easily produce boxes with internal bends thanks to the horn blank holders. The so-called “horns” move diagonally into and out of place. Because of this, the blank holder can move downwards without colliding with a previously bent side. This is a simple and yet utterly impressive technique.

Extra blank holder tool

The extra blank holder tools expand your application range so that you can also produce very small profiles or parts with formed sections near bending lines. The machine automatically swivels in the extra blank holder tools as needed; there’s no need to remove or modify the standard blank holders. This concept enables you to make full use of your machine’s potential.
Extra bending tool
Extra bending tools can be loaded automatically to bend flanges or staggered bends. These tools are found on the right and left sides of the machine. The tools are deployed from their lateral resting place as needed, move to the correct position and work autonomously on the sheet, without help from the remaining bending tools.

Automatic tool changer
The integrated tool changer ToolMaster Bend automatically sets up the correct blank holders. It reduces your workload even more by preventing setup errors, shortening your tool setup time and enabling the profitable manufacture of components in single part production.
# Technical data

<table>
<thead>
<tr>
<th></th>
<th>TruBend Center 5030</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>Min. bending length</td>
<td>200 mm</td>
</tr>
<tr>
<td>Min. bending depth (standard tool)</td>
<td>145 mm</td>
</tr>
<tr>
<td>Min. bending depth (ENW(^1))</td>
<td>40 mm</td>
</tr>
<tr>
<td>Max. box height</td>
<td>220 mm</td>
</tr>
<tr>
<td>Max. mild steel thickness</td>
<td>3 mm</td>
</tr>
<tr>
<td>Max. stainless steel thickness</td>
<td>2.2 mm</td>
</tr>
<tr>
<td>Max. aluminum thickness</td>
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</tr>
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<td>Min. material thickness</td>
<td>0.5 mm</td>
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\(^1\) ENW (Extra blank holder).

Subject to alteration. Only specifications in our offer and order confirmation are binding.
Panel bending with highest productivity.

Turn up your productivity.

With the TruBend Center 7030, the fully-automatic panel bending center, your bending operations are even more productive than with the semi-automatic TruBend Center 5030. This is made possible by the innovative rotary part manipulator, which fixes the blank and, if required, turns it to the required position. Every bending operation is fully automated. This frees up the operator, who is responsible only for loading and unloading. In this way, the bending operation becomes highly productive.

The frontgauge travels to the right position for the respective component size, making it very easy to load your machine. Thanks to its speed of 3,000 mm/s, nothing stands in the way of quick starts for automatic processing. For more complex components with angled bending lines, the frontgauge can even travel 50 mm forward and back, centering your component optimally.

The loading pincer transports the metal sheet to the rotary part manipulator. It possesses a sensor system for accuracy so that the blank stays in the right position. This ensures maximum precision.
Does your blank have to be bent on different sides? With the TruBend Center 7030, you do not have to turn the sheet yourself – that is done for you by the rotary part manipulator. It turns the sheet and positions it with a speed of up to 3,000 mm/s inside the machine, accelerating the bending process considerably.

A further highlight of the TruBend Center 7030: the interplay of the rotary part manipulator and the 2-axis part manipulator. The TruBend Center 7030 is the only fully automated panel bending machine to have such a combined system. The cooperation between the two components is what makes the machine’s diverse range of applications at this speed possible in the first place. This permits the highly productive manufacture of features such as narrow profiles.
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<td>Max. component size</td>
<td>3120 x 1500 mm</td>
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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 additional information see www.trumpf.com/en/quality)