TruLaser Center 7030

The first full-service laser machine
TruLaser Center 7030

The first full-service laser machine. Takes care of everything – from drawings to sorted parts.

Thinking outside the box
We have fundamentally questioned the entire process of laser processing. The result? A groundbreaking machine concept combining productivity and process reliability.

Hitting the ground running
Unlike conventional 2D laser machines, the TruLaser Center 7030 moves the sheet as well as the cutting head. With the additional axis on the cutting head, this machine achieves peak values in terms of cutting dynamics. The result of this are overlapping axis movements that make your machine extremely powerful. Equipped with a laser power of 6000 W, this enables you to cut through sheets with a thickness of up to 12.7 mm in a highly dynamic manner.

Intelligent automation
This fully automatic machine guarantees reliable part handling thanks to in-built intelligence with automation solutions such as SmartGate, SmartLift and SortMaster Speed. This eliminates the possibility of workpieces tipping over or tilting and the need to use microjoints.

Producing around the clock
Connect the TruLaser Center 7030 to your store and profit from a higher machine utilization rate because of the optimized material flow and lower material access time. The machine takes care of bothersome and monotonous work steps for you around the clock – this saves manpower and relieves the strain on employees.
Quick
Reliable
Intelligent
Independent

A comparison of the process steps

<table>
<thead>
<tr>
<th>Process start</th>
<th>Process end</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional 2D laser cutting</td>
<td>Cutting</td>
</tr>
<tr>
<td>TruLaser Center 7030</td>
<td>Cutting and unloading/sorting</td>
</tr>
</tbody>
</table>

The result: the TruLaser Center 7030 takes care of all processes involving laser cutting safely and reliably – reducing your processing costs considerably.

Depending on the country, the available product range and data may differ from the details listed here. The technology, equipment, price and available accessories are subject to change. Please contact your local contact person to find out whether this product is available in your country.
Working in perfect harmony for your success

Programming an order
At the press of a button, the TruTops Boost programming system performs a fully automatic calculation for a comprehensive proposal for the cutting, removal, sorting, and depositing of your parts.

Loading raw sheets
The loading cart (01) can be loaded parallel to production. The LoadMaster Center (02) places the raw sheet on the brush table in the clamping unit. High-performance peeling techniques separate the sheet reliably from the stack.

Cutting parts
The clamping unit moves the sheet in the Y direction, the cutting unit (03) processes it in the X direction and also in the Y direction using a highly dynamic additional axis. The SmartGate supports the cutting process.
Anyone who wants to manufacture using laser cutting in an economical way, needs a machine in which all steps are interlinked. This is where the TruLaser Center 7030 scores with the close interaction between integrated intelligence and new automation solutions.

**Removing parts and scrap**
The intelligent SmartGate (04) removes slugs, scrap, and small parts reliably. The sorting flap separates finished cut parts from scrap. Finished parts are sorted into eight containers (05). Scrap and slugs fall into a slag cart (06).

**Unloading parts onto stacks**
The SmartLift uses its pins to push the parts out of the scrap skeleton. The finely structured suction plates of the SortMaster Speed (07) remove the cut parts, and sort and stack them on the parts deposit. The suction plates and pins prevent any tilting of the parts.

**Unloading finished parts and scrap skeletons**
The parts (08) are removed from the machine, sorted, and stacked parallel to production. The clamping unit unloads the scrap skeleton onto the sheet skeleton cart (09). A forklift truck can empty this un rushed while the machine is operating.
100% self-reliant

The compact machine will take over your complete laser cutting process – from the drawing to the sorted part. Time-consuming manual tasks are done away with completely.

Unloading in record time

You can look forward to the fastest and most versatile unloading system on the market. The SortMaster Speed removes and stacks both large parts and the smallest of parts with intricate contours at lightning speed.

Quick and reliable

The machine unites revolutionary productivity and dynamics with absolute reliability. The additional axis, SmartGate, brush table, and SmartLift all contribute to this.

Easy programming

The programming is also fully automatic. TruTops Boost delivers, in one step, thought-through suggestions for the laser cutting, removal, sorting, and depositing of your parts.

Intelligent cutting

At the right place, at the right time: before the SmartGate discharges a part, the clever cutting process component ensures that your workpiece cannot tilt.

The fully automatic overall concept lowers your processing costs dramatically. This is ensured by the efficient method with integrated, stable processes.
TruLaser Center 7030

Technical data

<table>
<thead>
<tr>
<th>Laser TruDisk 6001</th>
<th>Max. laser output</th>
<th>W</th>
<th>6000</th>
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<tbody>
<tr>
<td></td>
<td>Wavelength</td>
<td>µm</td>
<td>1.03</td>
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<table>
<thead>
<tr>
<th>Working range</th>
<th>Nominal working range, X-axis</th>
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<th>3000</th>
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<tbody>
<tr>
<td></td>
<td>Nominal working range, Y-axis</td>
<td>mm</td>
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<tr>
<td></td>
<td>Nominal working range, Z-axis</td>
<td>mm</td>
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<tr>
<td>Max. workpiece weight</td>
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<table>
<thead>
<tr>
<th>Machine dimensions and weight*</th>
<th>Length</th>
<th>mm</th>
<th>10100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cart width, pushed in/pulled out</td>
<td>mm</td>
<td>6500 / 10000</td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>mm</td>
<td>3050</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>kg</td>
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</table>

<table>
<thead>
<tr>
<th>Loading and unloading</th>
<th>Max. loading weight</th>
<th>kg</th>
<th>5000</th>
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</thead>
<tbody>
<tr>
<td>Dimensions of parts deposit</td>
<td>mm</td>
<td>5000 x 1600</td>
<td></td>
</tr>
<tr>
<td>Max. part size with SmartGate</td>
<td>mm</td>
<td>160 x 160</td>
<td></td>
</tr>
<tr>
<td>Max. part size with SortMaster Speed</td>
<td>mm</td>
<td>2000 x 1500</td>
<td></td>
</tr>
<tr>
<td>Min. part size with SmartGate</td>
<td>mm</td>
<td>30 x 30</td>
<td></td>
</tr>
<tr>
<td>Min. part size with SortMaster Speed</td>
<td>mm</td>
<td>90 x 60</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Max. sheet thicknesses</th>
<th>Mild steel</th>
<th>mm</th>
<th>1 – 12.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stainless steel</td>
<td>mm</td>
<td>1 – 12.7</td>
<td></td>
</tr>
<tr>
<td>Aluminum, copper, brass</td>
<td>mm</td>
<td>1 – 6</td>
<td></td>
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</table>

* Approximate values. Dimensions including all of the modules and the safety areas. The exact data can be found in the respectively valid installation plan. Subject to alteration. Only specifications in our offer and order confirmation are binding.

Easy programming

Intelligent cutting

Quick and reliable
Leaves behind the fundamental dilemma of laser processing
Reliable or fast? The TruLaser Center 7030 nullifies for the very first time the classic conflict of laser processing. This full-service machine guarantees process reliability thanks to its integrated intelligence, for example, with the SmartGate, SmartLift and SortMaster Speed. The novel machine concept with its additional axis and superimposed axis movement provides revolutionary productivity.

**Reliable**

Reliable cutting and removal of parts

**SmartGate:**
Comprehensive part support

The SmartGate along with the brush table prevent the tilting and unwanted welding of parts. The intelligent support system moves along with the cutting head and provides complete support for your parts. The ejector cylinder automatically finds the best point to push the part out through the scrap skeleton. In the process, the part is fixed between the ejector cylinder and the SmartGate and is released from the scrap skeleton in a guided, downward movement. After this, the SmartGate opens and the part is reliably removed.

**SmartLift and SortMaster Speed:**
Perfect part removal

The SmartLift and SortMaster Speed form a dream team, which is the fastest, most flexible automation system on the market. The cut-out parts are pushed upwards against the suction plate by the flexibly positionable pins of the SmartLift. At the same time, the suction plate of the SortMaster Speed fixes the part from above. Fixed in this way, the part is taken out of the scrap skeleton by a synchronous lifting movement. As such, the part is securely held and cannot tilt in the hole. The necessary flexibility comes from the self-activating suction cups of the SortMaster Speed, which can hold and stack even intricate parts with their 9 mm diameter.

Parts are fixed between the ejector cylinder and the SmartGate, and are therefore removed with process reliability.

Process-reliable part removal: SortMaster Speed and SmartLift.
**Fast**

Highly dynamic cutting with a minimum of non-productive time

**Optimal dynamics because of the superimposed axis movements**

In the machine, the movement of the sheet and that of the cutting head are superimposed. The movement of the sheet is superimposed by the highly dynamic additional axis of the cutting head. This means that you cut corners and complex contours at high speeds. Thanks to this strong combination, you get the most out of the high feed rates of the solid-state laser.

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**SmartGate:**

Intelligent removal of parts, slugs, and scrap within seconds

Within seconds, the SmartGate discharges small parts into up to eight containers. Slugs and scrap fall into a slag cart. Your key for maximum throughput: the removal of rest material causes only minimal interruption to the cutting process – a result of the intelligent control and sensor system of the SmartGate.

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**SortMaster Speed:**

Part sorting in record time

The SortMaster Speed stacks parts at lightning speed and with perfect order on up to eight pallets. As soon as the SortMaster Speed takes the part, the machine continues cutting. The part is taken to its deposit position parallel to production. Because of this there is only minimum interruption to the machining process.
Programming at the press of a button

The TruTops Boost programming system automatically creates a proposal not only for the cutting, but also for the removal, sorting, and depositing of your parts. In doing so, it takes even physical principles into consideration. For example, how the part can best be pushed out of the scrap skeleton, to eliminate any chance of it tipping. This technique cannot be found anywhere else in the world.

Intelligent separation of finished parts and scrap

Using a sorting flap, finished parts are reliably separated from scrap because it can tell a finished part from scrap. The SortMaster Box Linear sorting unit distributes small parts into up to eight containers parallel to production. The containers are assigned intelligently by the software program.

Self-reliant

Unattended operation and plannable work

This processing cell works reliably in unattended shifts. It loads and unloads independently and announces when the operator is needed again. Because of this, he can plan his work at the machine better, and gains time for other tasks. Waiting times, manual sorting, and reworking are a thing of the past. The Touchpoint user interface also enables an intuitive dialog with the machine.
Production around the clock

Utilize the enormous productivity of your full-service laser machine and connect the TruLaser Center 7030 to a store. Adapted to your material flow, the store supplies your machine around the clock with unprocessed material and can save finished parts.

Your advantage: You benefit from a higher machine utilization rate and low material access times.
Side storage connection for unprocessed material

The unprocessed material is fed into the machine from the side. Finished parts stacked on pallets and small parts in boxes are fed out of the machine at the front.

Storage connection on the short side for unprocessed material

Unprocessed material enters the machine via the rear side. Finished parts are stacked onto pallets and sorted into boxes. These can be accessed from the front of the machine.

Side storage connection for unprocessed material and finished parts

The unprocessed material enters the machine from the side. Stacked finished parts are returned to the store on pallets, small parts are fed out of the machine at the front in boxes. A tandem changer enables direct access to the next pallet and reduces waiting times.

Side storage connection with flexible access to parts

The unprocessed material is fed into the machine from the side. You can handle finished parts with flexibility; unload these during the day at the machine, for example, and place them back in the store at night. Remove the parts from the unloading cart directly, using an unloading base that is compatible for use with a forklift truck, or a europallet.

Side connection of large stores

You can connect your TruLaser Center 7030 to all conventional storage systems. These include TruStore stores from TRUMPF as well as large-scale storage systems from STOPA. The modular stores can be adapted to your requirements and expanded at any time.
TruConnect. Your Smart Factory

80%

Indirect processes make up 80% of your production time – this represents the greatest potential for savings.

Discover the potential networked production could unlock for you with these two example scenarios: www.trumpf.com/s/ smart-factory
The TruLaser Center 7030 is a milestone on the path to the Smart Factory: all of the work steps for consistent laser processing are integrated in the machine. TruConnect – synonymous with Industry 4.0 at TRUMPF – goes even further and optimizes processes outside the machine. Use the pragmatic solutions from TRUMPF to make your laser systems and your entire process more transparent, more flexible, and, above all, more efficient.

For companies big and small

From the simple product solution right through to fully networked production.

- **Getting started** with machines that are equipped for networking as standard
- **Improving gradually** with automated machines or autonomous processing cells embedded in a production solution
- **Entirely connected** with a continuous production solution, from the order to delivery

Smart functions and Industry 4.0

With the MobileControl app you can operate and monitor your machine easily and flexibly. It transfers the standard control panel interface to the touchscreen of your tablet. Thanks to the Central Link interface, your TruLaser machine is ready for Industry 4.0.