## Data preparation for TruPrint

TRUMPF's own TruTops Print software ensures a seamless transition from the CAM preparation software and the preparation for your TruPrint machine. It is the link between digital data preparation and hardware. With the new functions of TruTops Print, you can seamlessly create your finished print file directly from your proven CAM solution using modern algorithms tailored to our TruPrint machines.

## Comprehensive service for a successful partnership

TRUMPF offers a unique global machine service staffed by highly qualified service engineers. Competent support is provided as needed: through on-site missions, via remote support or via app. A variety of service packages can be selected - from simple troubleshooting to all-round service including maintenance, spare parts and repair.

The TruServices portfolio also includes:

- **Financing concepts** customized to your personal needs
- The reliable delivery of **genuine parts**
- **Product enhancements** (e.g. Multiplate or Preform Option)
- **Training** for beginners and advanced users (e.g. programming courses)
- Support in **process optimization**
- **Support** for the TruTops Print program and integrated parameters

## Additive Manufacturing

Benefits

- The efficient production of large quantities
- Low material consumption
- A broad spectrum of applications
- The precise fitting of the parts produced
- Upgradeable with various options
- Geometric freedom enables:
- Undercut machining
- The attachment of retention points for veneering
- Complex constructions without the need for separation between bridge elements

You can find more information online at **www.trumpf.com/s/dental**.

Would you be interested in seeing the machines or having a virtual demonstration of our 3D printers? Make an appointment now at **www.trumpf.info/am-showroom**!

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TRUMPF

# PRINTING A BRIGHT FUTURE

Thinking of making metal dentures with a highly productive 3D printer? Investing in such a system is your opportunity to open up the lucrative future sector of implant prosthetics. TRUMPF systems are also ideally suited for telescopic prosthetics, removable partial dentures and the like – thanks to numerous functions that support the highly automated and efficient production of quality dentures.

TRUMPF

## Metal:

Printing instead of milling!

If you want to produce metal dental prostheses today, you have the choice between casting, milling and 3D printing. The most cost- and time-efficient process with which numerous elements can be produced simultaneously in high quality is 3D printing using laser metal fusion (also known as selective laser melting or powder bed fusion). With this method, a large number of geometries can be easily produced within a very short time.
For the production of dentures, TRUMPF currently offers two 3D printers that are tailored to different needs.


## TruPrint 1000 Basic Edition:

Simple metal 3D printing: affordable and robust

The TruPrint 1000 Basic Edition is based on a machine concept that has been tried and tested over many years. It has a build plate with a diameter of 98.5 mm for the production of up to 100 sections (crowns and bridges). The machine is affordable and robust, intuitive to use and reliable. It also manufactures at a high speed. Optionally, it can be equipped with a glove box and an analog sensor for monitoring the very low oxygen level in the build cylinder for titanium components.

## TruPrint 1000:

3D printing in premium quality: highly productive and compact

With its build plate (ø 98.5 mm) and innovative features, the TruPrint 1000 is equipped for versatile use in dental technology. The Multilaser and Multiplate options ensure maximum productivity, while optimized gas flow ensures top component and surface quality. Fitting surfaces can be reworked by milling, and implant abutments can be produced with the Preform option. Other equipment options include a glove box, motorized optics, powder bed monitoring and sensors for high-precision analog and digital measurement of the oxygen content.



## TruPrint 2000:

Productivity squared

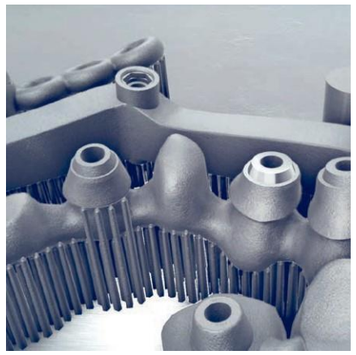
Thanks to its larger square build plate (L 202 x W 202 x H 200 mm), the TruPrint 2000 is particularly suitable for the production of larger elements such as removable partial dentures. With its 300W laser power, the Multilaser option (2 x 300 W) and a beam diameter of 80 µm, it produces components not only in premium quality but also highly productive. Print times of approximately 8 min per removable partial denture can be achieved with the new TruPrint 2000.

The process and component quality are automatically monitored during the printing process. The production process is based on a closed powder circuit under shielding gas. This allows for easy and practical handling, with the highest operator safety.

## The Multiplate* option:

Easily coping with high order volumes

The Multiplate option extends the machine runtime of the TruPrint 1000. The system accommodates up to four substrate plates in the build cylinder and changes them automatically as soon as a print job is completed. It starts the next job seamlessly, so no manual intervention is required. In this way, order peaks can be easily managed overnight or on weekends saving you time and money.



## Hybrid production:

Finishing the fitting surfaces perfectly

Whether telescopic prosthetics or complex, directly screwed implant super-structures: In some cases, it is also necessary to mill dentures made in the fitting surfaces. This is easily possible with the TruPrint 1000 3D printer thanks to the flexible connection to milling machines. Compared to production with only milling, this process is faster and more cost-effective.

## Model casting prosthetics:

Optimal production of complex geometries

3D printing is predestined for the production of removable partial dentures (RPDs). Because the structure is built layer by layer, the geometries can be realized without additional effort. Lattice structures (fine structures adapted to the load paths) enable optimal design and increase stability for a nearly supportless palate area. The printed elements have a precise fit and the clasps have similar properties to cast clasps.

## The Preform Option*:

Efficient production of individual abutments

The Preform option for the TruPrint 1000 offers a possibility of producing individual single abutments - no longer made laboriously one after the other, but in large quantities at the same time. Here, an individual proportion of a cobalt-chromium or titanium alloy is printed on a preform (a base with prefabricated connection geometry and flat platform) made of the same material. Up to 64 individual abutments can be produced cost-effectively in one run.

*Only available with TruPrint 1000