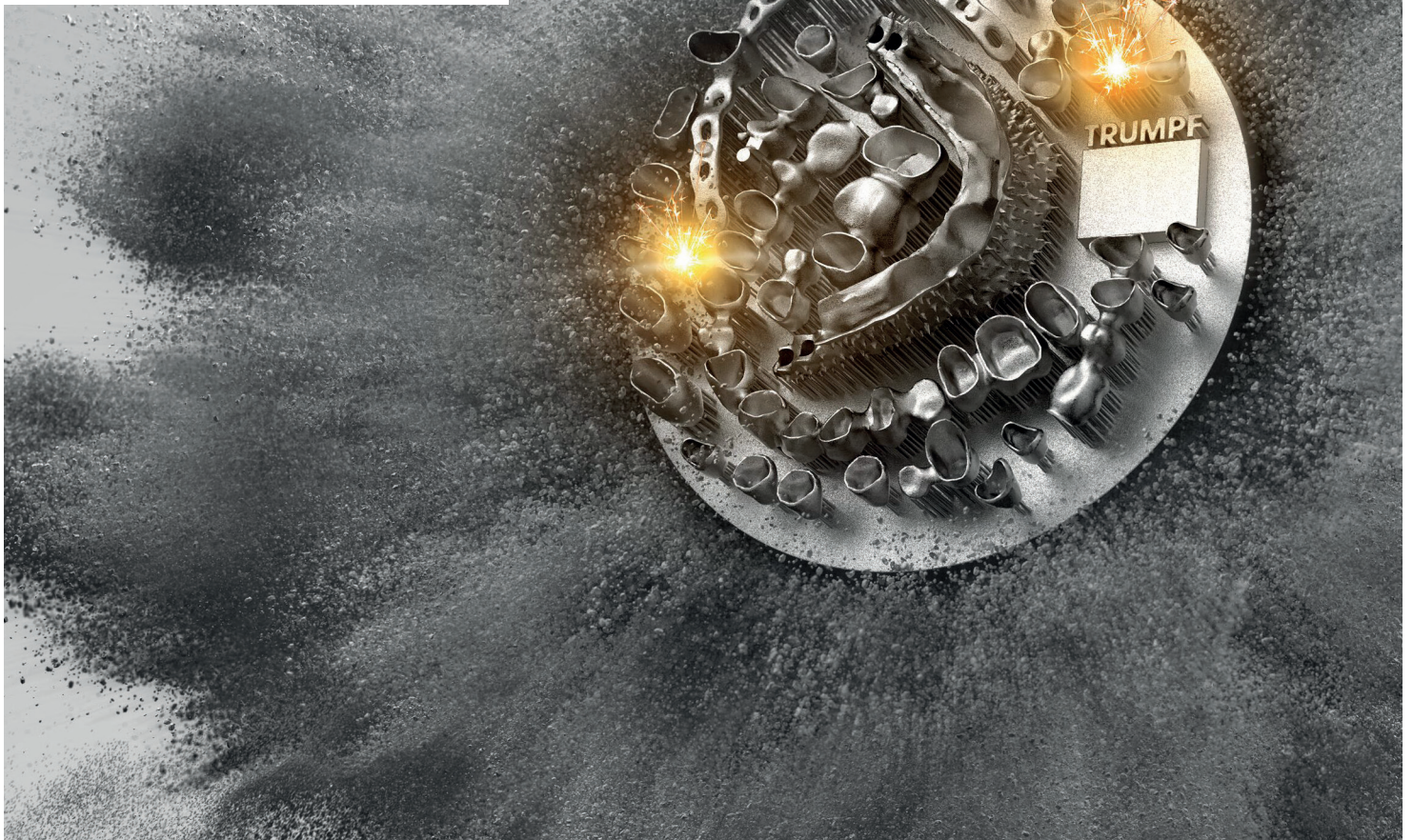


## PRINTING A BRIGHT FUTURE

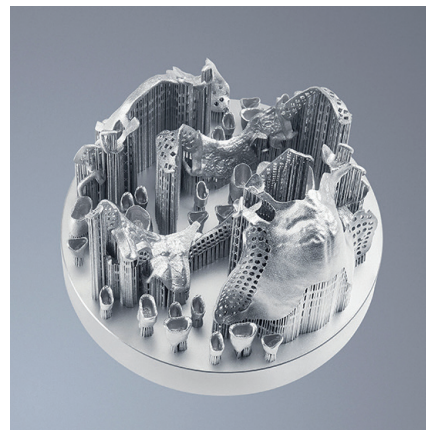


Thinking of making metal dentures with a highly productive 3D printer? Investing in such a system is your opportunity to open up the lucrative future sector of implant prosthetics for yourself. TRUMPF systems are also ideally suited for telescopic prosthetics, model casting and the like – thanks to numerous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

## 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: Small substrate plate, many options

The compact TruPrint 1000 3D printer was developed primarily for the production of crowns and bridges and has a substrate plate with a diameter of 98.5 mm for up to 100 units. This easy-to-use 3D printer can optionally be equipped with a second laser (Multilaser: 2 x 200 W), an automatic substrate plate change (Multiplate) and a system for the production of individual implantation abutments (Preform). A layer thickness of 20 µm and a 55 µm laser beam ensure excellent surface quality and precise fit.

### TruPrint 2000: Large substrate plate, broadest range of applications

Thanks to its larger substrate plate (diameter: 200 mm), the TruPrint 2000 is particularly suitable for the production of larger elements such as removable partial dentures (RPDs). It is also available with the Multilaser option (2 x 300 W) and produces components with premium quality and precise fit. The process and component quality are automatically monitored during the printing process. Up to 40 model casting elements can be produced on one substrate plate in a single printing process. Unpacking and powder preparation are carried out free of contamination in inert gas.

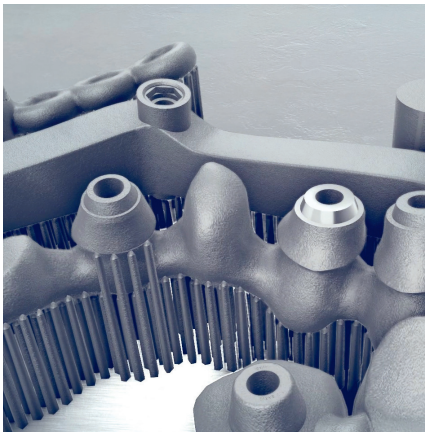


### Additive Manufacturing Benefits

- 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

## 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.

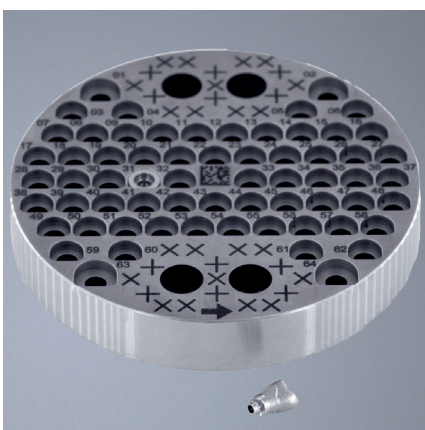
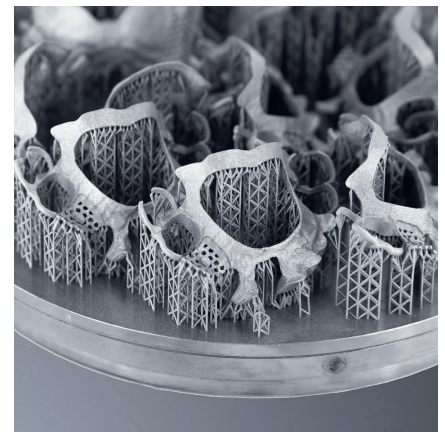


## Hybrid production: Finishing the fitting surfaces perfectly

Whether telescopic prosthetics or complex, directly screwed implant super-structures: In some cases, it is also necessary to mill dentures made in the 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.

## Software TruTops Print

The TruTops Print program provides problem-free importing of the CAM data and professional data preparation. It is compatible with all common dental CAM software solutions.

## Comprehensive service for a successful partnership

TRUMPF offers a unique global machine service staffed by highly trained service engineers. Competent assistance is provided as needed: through on-site missions, 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 the 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



You can find more information online at [www.trumpf.com/s/dental](http://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!](http://www.trumpf.info/am-showroom!)