

FROM 3D SCAN TO  
FULLY PERSONALISED  
3D PRINTED BRACE IN  
JUST  
1,5 HOURS!



**SPENTYS**  
REINVENTING ORTHOPEDICS

## **PERSONALISED BRACES**

1. Largely automated process.
2. Safe, durable & comfortable.
3. Ready while the patient waits.

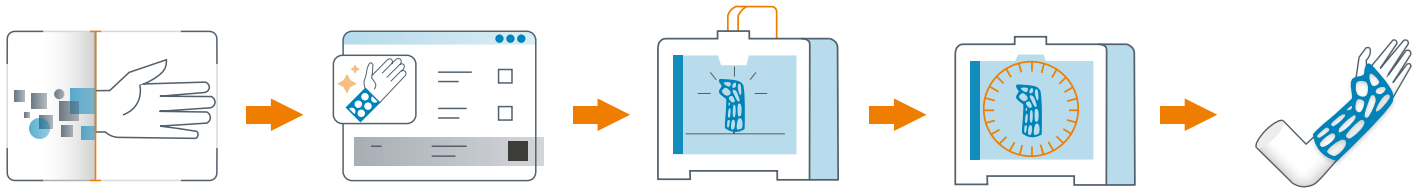
Patient-specific healthcare is on the rise in both general practices and hospitals. atum3D believes additive manufacturing offers unparalleled opportunities to enhance customised care. Imagine providing the patient with a personalised, accurate and exceptionally strong brace that's waterproof, light-weight and aerated - in just 1,5 hours. atum3D and Spentys joined forces to enable just-in-time production, right in the clinical practice - reducing costs and elevating both the patient's quality of care, comfort and satisfaction.

**atum 3D**

3D Manufacturing Excellence

## PERSONALISED BRACE EXCELLENCE

By combining the Spentys state-of-the-art modelling software and atum3D hardware, the Personalised Brace Excellence Pack offers the fastest 3D scanning, modelling and printing solution available. It allows healthcare professionals to replace traditional gypsum casts and splints with fully personalised 3D printed braces. Our on-site production solution has proven to fit all medical safety, quality, and process requirements. Unrivalled speed, high accuracy and automation results in an optimal workflow - which ultimately benefits patients with a superior solution.



SCAN

MODEL

PRINT

CURE

WEAR

## CUSTOMISE YOUR EXCELLENCE PACK

atum3D and Spentys bundle the hardware, software, resins, and services to comprise a tailored solution that fits your requirements.

### HARDWARE

- **3D Scanner**
  - » If there's no 3D scanner available, Spentys can provide you with the 3D scanning solution that best fits your needs. Scanning the patient's physical characteristics is painless, fast and easy.
- **DLP Station 5-405 EXZ**
  - » Industrial grade 3D printer with a 405 nm light source and a 70 micron resolution. This printer offers the build speed, accuracy and stability to print braces of up to 45 centimetres in height.
- **Optional Post-Processing Automation**
  - » Several post-processing automation options are available, such as the atum3D Cleaning Station and Curing Station. These allow simplifying and speeding up the process even more.

### MODEL & PRINT SOFTWARE

- **Spentys modelling software**
  - » PolyCast devices have a proprietary design, combining strength and comfort. Based on the 3D scan, the Spentys software automatically creates the personalised brace model in minutes. Next, atum3D Operator Station software prepares your brace for print in just a few clicks.

### BIOCOMPATIBLE-CERTIFIED RESINS

- **Personalised Brace resin**
  - » Depending on the type of device, several specialty resins are available. Some have been specifically engineered for speed and accuracy on DLP Station. Key material properties for personalised braces, such as strength, detail and ISO-certified medical safety are combined in these resins.

### TRAINING & SUPPORT

- **Installation & Operator Training**
  - » Our specialists set up your hardware and software on-site, and train operators in a hands-on training session.

## YOUR BENEFITS

This clinically proven patient solution offers a highly scalable integrated interdisciplinary workflow. Summarised, the benefits of Personalised Brace Excellence include:

- Replace traditional casts with personalised, waterproof, light-weight and aerated braces, printed in the hospital or practice;
- Full process time of just 1,5 hours - ready while the patient waits - thanks to the best-in-class print speed of up to 250 mm/hour;
- Intuitive end-to-end workflow including scanning, modelling, print job preparation, printing and post-processing;
- Large build envelope enables creating multiple braces up to 45 centimetres in height without impacting the print duration;
- Skin-safe, biocompatible ISO-certified materials, and customised printer settings to optimally balance speed and detail;

## WE'RE HERE FOR YOU!

We understand that incorporating additive manufacturing in your hospital or practice calls for a tailored solution that takes into account existing variables and requirements. Our team is ready to discuss any specific wishes and customise your Excellence Pack to order.



atum3D strives for 3-fold excellence. With proprietary **software, hardware** and an **open resin platform**, we offer exceptional **accuracy, speed** and **cost-effectiveness**. We aim to make your life easy with comprehensive **training, services** and **support**. Team up with atum3D and become a part of the next industrial revolution!

For more information and specifications, please call +31 (0)85 488 26 60 or visit [atum3D.com](https://atum3D.com).

**atum3D**

3D Manufacturing Excellence