



## FOOTWEAR INSOLE EXCELLENCE

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1. Superior fit, fast.
2. Material and cost efficient.
3. Decimated lead time.

Insoles are traditionally produced with a costly and time-consuming process of thermoforming. Our state-of-the-art DLP Station 5 EXZ printer range, Operator Station software and Curing Station now enable an easier, faster, and more efficient process. By combining our open 3D print platform with application-specific resins from leading suppliers like Loctite and BASF, it is now possible to create insoles with exceptionally thin walls and overall thickness without compromising stiffness or strength, in a fraction of the time. Imagine offering your customers the perfect fit much faster, with in-store production and marginal waste.

**atum 3D**

3D Manufacturing Excellence

## FOOTWEAR INSOLE EXCELLENCE

Combining high stiffness with exceptional dampening, the specialty resin range from suppliers like Loctite and BASF is optimally suited for scan-to-print solutions and forms the perfect fit with the footwear insole application. By combining specific material properties with the speed, accuracy and 45-centimetre-high build envelope of the DLP Station 5 EXZ range, this all-in-one production solution offers versatility and exceptional value. The result? Create series of personalised insoles, save costs, and offer customers a superior insole in a fraction of the time.

## PRINT PERSONALISED INSOLES, FAST

We bundle everything the footwear fitting professional needs to start printing pre-modelled insoles immediately.

### HARDWARE

- **3D Foot Scanner**

» 3D Foot scanning and automated 3D modelling of insoles is a highly specialised area of expertise. atum3D has teamed up with several leaders in the field, as we feel you should be able to select your scanning/modelling solution of choice. Contact us for more information about 3D scanning solutions.

- **DLP Station 5 EXZ range**

» DLP Station 5 EXZ is based on atum3D's proprietary open platform DLP technology, offering exceptional speed and high accuracy. This printer offers an extended Z-axis, which results in an 80% higher build envelope that allows printing series of insoles in any size - up to 45 centimetres in height. This future-proof, industrial printer is available with our powerful 365 nm or 405 nm light engines, which allows build speeds of up to 75 mm per hour with specialty resins in the insole application.

- **Post-processing Automation**

» To optimize your workflow and further reduce lead times, both post-processing steps, cleaning and post-curing, can be automated. Cleaning Station is based on the cavitation effect resulting from high frequency shockwaves, meticulously cleaning printed insoles. Next, Curing Station combines a large capacity vacuum chamber with powerful UV light and radiated heat for up to 10x faster and truly thorough post-curing.

### SOFTWARE

- **Operator Station Professional**

» After modelling, preparing a print job for DLP Station is a matter of just a few clicks thanks to our intuitive Operator Station software. Features like the unique, touch-enabled user interface and MAGS AI algorithms to swiftly position multiple models let you create and export the print job in minutes.

### RESINS

- **Loctite & BASF**

» Together with leading resin suppliers Loctite and BASF, we selected several high-performance resins that offer material stiffness comparable to conventional, thermomoulded insoles. Combined with high elongation, these materials allow creating insole designs with exceptionally thin walls and overall thickness. They also feature improved dampening properties compared to traditional insole materials, and several resins are biocompatible. Our team is ready to advise the material that best fits your requirements and process.

## TRAINING & SUPPORT

- **Installation & Operator Training**

» atum3D offers customised, integral solutions with optimal ease-of-use. We include the option to have an expert set up hardware and software on-site and train operators in using Operator Station and DLP Station 5 EXZ in a hands-on session.

- **DLP Support**

» Our support doesn't end with installation and training. atum3D offers a choice of different support level and on-site maintenance options to fit your requirements.

## YOUR BENEFITS

Footwear Insole Excellence is an end-to-end 3D printing solution based on our DLP Station 5 EXZ range, featuring a best-in-class combination of build envelope, speed, accuracy, versatility, and cost efficiency. You will be able to spend more time with customers by speeding up the technical side of things.

Summarised, your benefits of Footwear Insole Excellence include:

- Fast, in-store production of high-quality, personalised insoles;
- Accurately print series of insoles up to 45 centimetres in height;
- Exceptional materials with properties to meet your requirements;
- Intuitive software, easy to operate and calibrate hardware;
- Automated post-processing: ease-of-use and shorter lead times;
- Custom solution: hardware, software, resin, training & support;
- Our partners can supply your choice of 3D scanning hardware;
- High cost efficiency, reusable surplus resin & marginal waste.

## WE ARE HERE FOR YOU

Adopting 3D print technology and incorporating our solutions in your existing workflow can call for tailored advice. Are you curious how insoles printed in our specialty footwear resins feel to the touch? Our team is flexible and facilitating to answer questions, provide material samples and tailor your specific application solution to size.



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).

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## SCIENCE & RESEARCH EXCELLENCE PACK

This versatile atum3D product includes everything science and research institutes need to start working straight away. Instantly start creating new standards using the open platform hardware and our dedicated *developer's* software. Accuracy, speed and extensive setting options offer full process control. Explore, test and get results, fast.

### WHAT'S INCLUDED?

We've bundled the most popular products and services for science and research to comprise the Science & Research Excellence Pack.

#### HARDWARE

- **DLP Station 5-405**
  - » State-of-the-art DLP Station with a purpose-built and exceptionally powerful 405 nm or 365 nm wavelength light source, 50-, 75- or 100-micron resolution, exceptional speed, accuracy and an open material platform.
  - » Thanks to the industrial quality of the anodised aluminum Build Platform and Resin Tray with a very high chemical resistance and atum3D's proprietary coating that prevents prints from sticking, you can use virtually all photopolymer materials imaginable.

#### SOFTWARE

- **Operator Station Developer (single workstation)**
  - » This dedicated *Developer* version of our Operator Station software allows you to control many more variables than the Professional version for regular users. This way, you can adjust and test different settings and benefit from the full potential of DLP Station 5-405.
  - » The Pack includes a 1-year license for a single workstation.

#### CONSUMABLES

- **Starter Kit**
  - » All consumables you need to start working straight away! The Starter Kit includes: Build Platform, Resin Tray, Resin Puller, Resin Curing Flashlight, Spatula, Spray Bottle, Funnel with Filter, Nitrile Gloves.

#### TRAINING & SUPPORT

- **Operator Training (online)**
  - » We'll kickstart your DLP experience with an interactive training session, explaining how to set up and use our hardware and software.

### WE'RE HERE FOR YOU!

At atum3D, we understand that pushing the boundaries of technology sometimes calls for specific solutions. Although we believe our open platform Science & Research Excellence Pack offers an exceptional starting point for research and development, our team is open to requests for support services.

#### SERVICES

- **Material R&D Service**
  - » Our Material R&D Service was introduced to offer additional support on request. Depending on your requirements, it can serve as a valuable add-on to the Science & Research Excellence Pack. With this service, our extensive experience in Digital Light Processing, both in terms of hardware, software and chemistry, is at your disposal.

### YOUR BENEFITS

At the heart of the Science & Research Excellence Pack is our industrial grade DLP Station, with a powerful light source that allows speed in accurate and consistent repetition. Thanks to our Resin Tray with a very high chemical resistance and proprietary coating that prevents sticking, you can use a wide range of materials. Efficiently prepare for print with the Operator Station *Developer* edition software, which allows you to control a wide range of variables.

Summarised, your benefits of the atum3D Science & Research Excellence Pack include:

- Build speed of up to 90 mm/hour
- Resin Tray with proprietary coating and a very high chemical resistance
- Industrial quality Build Platform made of anodised aluminum
- Use a very wide range of potential materials with different properties
- Control many of DLP Station's resin lighting variables with the Operator Station *Developer* edition
- Exceptional accuracy, surface finish and truly round openings
- Create series of parts with production specifications
- Large Build Platform: create many parts in a single run
- Integral product: includes software and consumables
- Includes training and support from atum3D and selected partners



For more information and specifications, please contact:



**3D Center**

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