

PRODUCT CATALOGUE 2025

Dental Manufacturing Unit's product catalogue for clear aligner production equipment! Our company provides the latest and most innovative solutions for dental professionals seeking to produce high-quality clear aligners.

Our product range includes state-of-the-art equipment and technology designed to streamline the aligner production process and ensure precise and accurate results. Whether you're a seasoned professional or new to the field, our equipment is tailored to meet your specific needs.

Dental Manufacturing Unit

At DMU, we develop advanced automation technology for the dental industry, optimizing aligner production with precision and efficiency.

Founded in 2014 in Pfarrwerfen, Austria, DMU has rapidly grown into a global technology provider, with our solutions now utilized in 36 countries. Our journey began with a dedicated team of engineers developing a technology platform for the dental sector, and our passion for automation continues to drive us forward.

Driven by Innovation

Our expertise extends beyond dental technology. At DMU, we excel in firmware and software development, electronic component engineering, and precision mechanics. From system testing to the design of automated processes, our team of highly

qualified engineers is committed to pushing technological boundaries.

A Strong Team Culture

We believe teamwork drives innovation. Our founders, Martin Huber and Alfons Wörmer, cultivate an agile work environment where creativity thrives, shaping the future of dental automation.

From our headquarters in the picturesque region of Salzburg, we are proud to contribute to advancements in the healthcare sector. With a relentless drive for excellence, DMU remains at the forefront of dental automation technology.



AutoTrim

AutoTrim automatically identifies the optimal cutting line - fully automated. Simply open the model STL file, generate the cutting line, export, and you're done!

AutoTrim goes a step further by analyzing the dental arch to automatically determine the best cutting line. You can choose between a straight or a shell cut, and manually adjust individual line points as needed.

The software is compatible with any STL 3D file used for 3D printing. With just one click, the matching trimline (PTS file) is exported to perfectly align with your 3D model, an essential tool in treatment planning.

Now, with advanced features, AutoTrim enhances your workflow even further:

The 3D model of the dental arch can be equipped with a bar that facilitates easy separation of the printed tooth model from the thermoformed aligner using the "Separator - Pin Over Bar" product.

This bar can be assigned an ID tag, enabling the LAC - Laser Aligner Cutter to automatically select the corresponding cutting file from the





filesystem and assign it to the aligner.

This automation dramatically speeds up and streamlines the aligner production process, minimizing the need for manual interaction with the LAC's web interface. Simply load the aligner into the LAC, let the camera identify it, and the machine will automatically select the correct file, cut the aligner, and get it ready for the next one - no guesswork required.

License models





System requirements

Supported operating system:

Microsoft Windows 10 (64-bit) or higher CPU: Intel x86 architecture with 64-bit support (x86-64) or comparable with at least 2.00 GHz clock speed

RAM: At least 4 GB of RAM

GPU: Standard Intel HD Graphics 620 or

equivalent sufficient HDD: 100MB for installation

Separator - Standard

Elevate your results with our simple and time-saving solution. Our product enables comfortable detachment of aligner foils from the model without causing any deformations.



Introducing our innovative solution for safe and easy separation of aligner foils from the model, compatible with any model and all common thermoformers. With our product, you can separate the aligner foil from the model in less than 10 seconds using a simple lever - no electricity or compressed air required. Our solution is user-friendly and can be used without any special skills or training. Save time and effort with our product and achieve outstanding results.

How it works



Place the tooth model on the vacuum disc under the separation threads and tighten them.



Insert the vacuum disc into the thermoforming unit using the adaptor ring suitable for your unit.



Thermoforming: Insert the aligner foil into the thermoforming unit and thermoform the aligner.



After thermoforming, insert the aligner with the vacuum disc into the separator.



Place the vacuum lid on the separator and secure it with a rotary motion.



Use the lever on the lid to create a vacuum, which is used as counterpressure for the separating process.



Pull the lever towards you and down to separate the tooth model from the aligner foil.



Unlock and remove the vacuum lid. Now the separated aligner can be removed and is ready for further processing.

Adaptors for Separator - Standard

Adaptors come in different sizes depending on the thermoforming unit and manufacturer. Please select the appropriate one for your device.















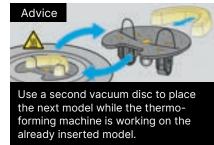


You can also produce several aligners simultaneously by using more vacuum discs (not included) and by equipping additional thermoforming units with adaptors.

Spare parts







If you do not find a suitable adaptor for your device or have any other questions, please contact us at sales@dmu-gmbh.at for assistance.

Separator - Pin Over Bar

This innovative "Pin over Bar" Separator makes separating the thermoformed model from the foil easier than ever before.



The new separator no longer requires separating threads, but separates with the help of a hook. This also means that there are no more follow-up costs for separating threads. The standard adaptors are also available for the Pin Over Bar Separator (Scheu Ministar™, Scheu Biostar™, Erkodent **Erkopress** Motion™, Erkodent Erkoform™, Dreve Dentamid Drufomat Scan). The adaptor and vacuum plate for the respective thermoforming unit are no longer separate.

How it works







To use this device effectively, the model must be printed with a bar connecting both sides of the dental arch. This bar can be easily created using the AutoTrim software, ensuring precise integration into your workflow.

Additionally, it is essential to use

an appropriate resin specifically designed for dental model production to ensure optimal results and durability during the separation process.

For detailed bar specifications and material information for 3D printing, please contact us at sales@dmu-gmbh.at

Adaptors for Separator - Pin Over Bar

Adaptors come in different sizes depending on the thermoforming unit and manufacturer. Please select the appropriate one for your device.













Biostar® 4-Aligner – High-Capacity System

High-capacity thermoforming for up to 4 aligners at once – increase efficiency and streamline your production with our compatibility upgrade kits.

The Biostar® 4-Aligner by Scheu Dental sets new standards in aligner manufacturing, enabling the simultaneous thermoforming of four aligners. This high-capacity system optimizes production speed while maintaining precision and quality.

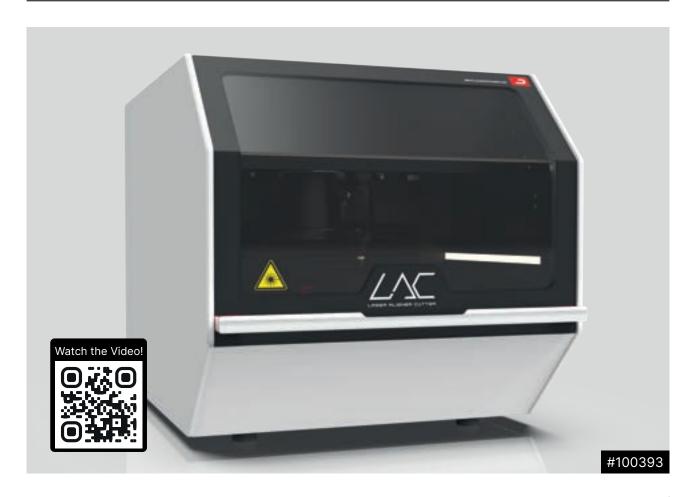
To ensure full compatibility with our Separator - Standard and Separator - Pin Over Bar, we provide specially designed upgrade kits (adaptors). These allow seamless integration into your workflow, enhancing efficiency and ease of use.

et needs,

For a customized solution that meets your exact needs, request a quote at sales@dmu-gmbh.at, and we will put together the perfect setup for you.

LAC - Laser Aligner Cutter

With LAC, you'll enjoy improved efficiency and ultimately resulting in higher quality outcomes. Don't miss out on this opportunity to streamline your processes.



Introducing LAC - Laser Aligner Cutter, the fully automatic cutting solution for clear aligners. With a process time of just one minute, our product provides excellent cut and edge quality, without the need for post-processing like polishing. LAC is compatible with any 3D printing model and all common thermoforming devices, making it a versatile and essential tool for orthodontic practices.

Our integrated control system with web interface allows for easy monitoring and control of the cutting process. Additionally, our camera-based aligner to trimline matching ensures precise cutting every time, eliminating any guesswork.

LAC also offers digital interfaces to the best suppliers such as Dental Axess (Xflow/Xplan) and ArcadLab; data compatibility to all major vendors like 3Shape, OnyxCeph or ORTH'UP.

WIKARUS

Business Award for Innovation

LAC is the most innovative clear aligner laser cutting solution on the market.

That is why Dental Manufacturing Unit was awarded the WIKARUS trophy and first place at the WIKARUS 2022 Business Award for Innovation.

Tech Specs

Aligner

Process time (Aligner cut)	approx. 60-90s
Aligner foils diameter	ø120-125mm
Aligner foils height	0,25-1mm
Repeat accuracy	±0,1mm

Interfaces

Hardware Interface	Gigabit Ethernet (IEEE 802.3)
Software Interface	Import of universal aligner
	data (model as STL and trim
	line as PTS, CSV or XYZ file)

Laser

Laser type	. CO2
Laser power	. 20W
Wavelength	. 9,3µm
Laser class of product	Class 1
Cooling	Air-cooled

Suction Unit (requirements)

Connection diameter	ø50mm
Air flow rate (unimpeded)	. 240m3/h
Filters	Prefilter mat G4,
	• HEPA filter H13,
	 Activated carbon

Power

Voltage	Single-phase
	110-230, 50/60Hz
Power consumption	900W

General

W / L / H (opened)	. 620x880x640mm (980mm)
Weight	. 78kg
Noise level	. 65db(A)



Purchase a LAC - Laser Aligner Cutter and enjoy a massive 50% discount on the Separator!

Support & Device Updates

#SP1002

With our Technical Support and Device Software Updates package, you can rest assured that your software will continue to perform at its best and you'll have access to our team of experts.

Technical Support and Device Software Updates package

With this package, you'll receive 12 months of continuous software updates, including access to the latest version of LAC firmware and ongoing service packs. These updates will keep your device software up-to-date and provide new features and enhancements to improve your overall experience.

In addition to software updates, you'll also have access to our live technical support. Our certified DMU technicians are available to assist you with any issues you may encounter. We understand the importance of quick remedy, which is why we offer remote support from our DMU technicians to help you resolve your issues efficiently.

Mechanical maintenance, repair activities or device replacement are not included in this package.

Suction Unit

To ensure a clean and safe working environment and achieve high-quality cutting results, the LAC Suction Unit, which is specifically designed to match the LAC, is indispensable.



The LAC Suction Unit ensures optimal airflow, which is essential for achieving perfect cutting and edging quality.

With its three-stage filter system, including a pre-filter mat (G4), HEPA filter (H13), and activated carbon filter, the LAC Suction Unit effectively captures harmful pollutants, ensuring purified air for a healthier workspace.

Say goodbye to harmful emissions and hello to a healthier and safer work environment with the LAC Suction Unit.

Power	
Voltage	Single-phase
Power consumption	110-230, 50/60Hz 700W
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General	
W / L / H (opened) Weight	390x430x630mm 35kg
Noise level	. 56db(A)

Spare parts







Replacing the filter elements is crucial for a clean and high-quality cut and edge. The LAC - Laser Aligner Cutter web interface informs you when it is reasonable to change the respective filter element.

The new extraction system can now be remotely controlled by the LAC - Laser Aligner Cutter. It automatically activates as soon as the cutting process begins, ensuring efficient and seamless operation.

Count on our partner network

Our partner network is a group of companies and individuals who are authorized to resell our products and services to their own customers.

Our resellers are carefully vetted to ensure they have the knowledge and resources to provide world-class support and service to their customers. By working with our resellers, we are able to provide our customers with more localized support and a broader range of solutions. We are proud to have such a dedicated group of partners and look forward to continued growth and success together.



























Join our partner network

Are you looking to expand your business with innovative dental solutions? We are always looking for dedicated partners who share our commitment to quality and customer satisfaction. As an authorized reseller, you will benefit from our expertise, extensive product range, and comprehensive support.

Why Partner with Us?

- Cutting-edge aligner manufacturing solutions
- Comprehensive training and support
- Competitive pricing and exclusive benefits
- A strong global network

Let's grow together! Get in touch at sales@dmu-gmbh.at to learn more about partnership opportunities.



Request a quote today!



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We drive innovation and technology to create highly efficient, smart products. We love miniaturization, optimization and simplifying complex workflows.

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