#### BROCHURE

# Mayku Multiplier: Understanding pressure forming in education



From product design to aerospace and beyond, engineering professionals are embracing pressure forming technology, making it a growing part of everyday life. Many educational programs now feature pressure forming in their courses. However, for it to be widely adopted, there needs to be a better understanding of its numerous benefits in education.

In this guide, we'll explore the benefits of pressure forming. We'll cover enhanced student engagement, teamwork, workforce growth, diverse thinking, and boosted creativity. Plus, we'll see how pressure forming complements other fabrication methods.



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# Desktop pressure forming: An introduction

# What is pressure forming?

Pressure forming is a method of shaping heated plastic sheets using air pressure, producing molds or parts with rich detail and texture.

It's a similar technology to vacuum forming, but it can apply multiple times the amount of pressure, making it a more powerful manufacturing technique. Both pressure forming and vacuum forming are examples of `thermoforming technology'.

Thermoforming technology is notable among manufacturing methods for its versatility, as it can accommodate a variety of materials used in final products. The technology is relatively easy to master, and can produce impressively detailed results in a short amount of time. Since the process is completed in minutes, it's an ideal method for mass production.

#### Learn more: Introduction to pressure forming



Pressure forming technology: A visual explanation

The Mayku Multiplier applies a force of up to five tonnes on a heated plastic sheet over a template. The higher force in pressure forming allows for more detailed parts and the use of thicker materials, making it especially suitable for professional applications.

) Learn more: Comparison: Vacuum forming vs pressure forming

Technology benefits	Vacuum Forming	Pressure Forming
<b>Affordability:</b> Small production runs often cheaper than injection molding, due to lower tooling cost.	$\bigcirc$	$\bigcirc$
<b>Speed.</b> The creation process is often faster than other manufacturing methods.	$\bigcirc$	$\bigcirc$
Flexibility. Test and iterate quickly and cost-effectively.	$\bigcirc$	$\bigcirc$
<b>Toughness and durability.</b> Compatible with materials that offer great mechanical properties.	$\bigcirc$	$\bigcirc$
<b>Consistency.</b> Very little variation between individual parts.	$\bigcirc$	$\bigcirc$
<b>Food-safe materials.</b> Viable manufacturing method for food-safe containers.	$\bigcirc$	$\bigcirc$
<b>Level of detail.</b> The parts and molds are able to capture small details such as text or textures (less than <1µm)	(limited details)	$\bigcirc$
<b>Precise part tolerances.</b> The parts made offer precise tolerances when using female molds.	(less precise tolerances)	$\bigcirc$
<b>Surface finish.</b> The parts and molds made capture the template's exact surface finish	(limited surface finish quality)	$\bigcirc$
<b>Material thickness.</b> Up to 5mm material thickness.	(mostly used with thin sheets)	$\bigcirc$

Comparison table between vacuum forming and pressure forming

# Introducing the Mayku Multiplier

#### Precision plastic fabrication on your workbench

The Mayku Multiplier is a benchtop 3D former powered by industrial pressure forming technology. It's compatible with polymer materials of various thicknesses and is capable of heating sheets at a higher temperature compared to standard thermoforming machines. This results in highly detailed final parts and molds. When filled with compressed air, the Multiplier's dome exerts up to five tonnes of force. This pressure forces a heated plastic sheet into every crevice of a template, and can capture details of less than <1µm.



The Mayku Multiplier: A powerful desktop pressure forming machine

# Benefits of pressure forming in education

# Empowering students with hands-on learning

In education, pressure forming is a key method for hands-on learning. It enhances problem-solving skills and increases engagement.

Students can delve into an industrial process, bringing their ideas to life as tangible parts and prototypes. This not only strengthens their understanding of the topic, but also cultivates creativity and critical thinking by challenging them to think innovatively, problem-solve, and explore different design possibilities within the constraints of pressure forming technology.

Pressure forming is straightforward for beginners. After initial training, students can operate equipment independently. Plus, a wealth of online resources are available, ensuring even teachers new to the subject can quickly get up to speed and assist their students effectively.



### Ease-of-use and safe student operation

The Mayku Multiplier shines in educational settings due to its user-friendly design. Its guided operations direct students on each step to take, and built-in safety measures ensure a safe exploration space.

An intuitive user interface allows students to work autonomously, boosting their confidence and encouraging hands-on learning. The process of pressure forming uses ready-made molds, so students don't need to master complicated setups or specialized knowledge to get going quickly.



Mayku Multiplier used in the Coventry University workshops

### **Rapid cycle times**

Pressure forming is a quick process, making it perfect for educators on tight schedules. Students can easily modify their designs and see the results, keeping both lessons and their attention fresh. With projects completed in minutes, students stay motivated and interested. Rapid cycle times mean teachers can accomplish more within a class period, maximizing student learning opportunities.

The table below highlights the efficiency of the Multiplier. Car light covers, designed as end-use parts, can now be made in about 20 minutes, down from the typical 8-12 hours it would take using other manufacturing methods. This translates to nearly a 90% reduction in production time. In addition, the cost per part is more affordable while still offering the best part quality

Technology	Part cost	Manufacturing time (per part)	Overall fit
Resin 3D printing	\$30 (tough resin)	8-12 hours	<b>Low.</b> Light covers needed to be split into two parts. Expensive.
Filament 3D printing	\$17.85 (42g of filament)	8-12 hours	<b>Low.</b> Light covers aren't optically clear and or resistant enough.
Pressure forming	\$13.99	20 minutes (Average template manufacturing: 12 hours)	<b>Perfect.</b> Consistent thickness, resistant and optically clear.

•) Learn more: <u>Creating custom PMMA car light covers with the Mayku Multiplier</u>

#### Experiencing the full product development cycle: From prototyping to end-use parts

Pressure forming is a versatile manufacturing technology that allows for the production of everything from basic prototypes to high-quality end-use parts, with part quality similar to injection molding.

It's not just about fabrication – it's about delivering results fast. Using pressure forming, students can rapidly refine their designs and assess their functionality in a shorter space of time than other fabrication technologies.

It's also more than just a learning tool. Pressure forming equips students to produce market-ready products with professional finishes, setting them on the right path for careers in multiple industries.





(Above) Pressure forming allows for the production of everything from basic prototypes to high-quality end-use parts

(Left) The Mayku Multiplier brings industrial pressure forming technology to any workbench

# Making industry tech accessible in classrooms

Just like 3D printing, pressure forming has mostly been limited to large companies for many years, limiting widespread understanding and usage.

Mayku has worked hard to change that. We've scaled down this industry-grade technology to fit on a workbench with the Mayku Multiplier, a compact yet powerful pressure forming machine.

This brings an essential industrial process right to students, equipping them with hands-on experience and a competitive edge in sectors reliant on thermoforming.

#### Teamwork across disciplines: Boosting education through pressure forming

Today, it's essential for product development stages such as ideation, research, and manufacturing to work hand-in-hand. Pressure forming plays a crucial role in making this process seamless and enabling the integration of different disciplines.

Educational institutions with makerspaces or fabrication labs can leverage pressure forming for cross-disciplinary projects. This allows students from various fields to work together, benefiting from faster development cycles, and enhancing their interdisciplinary learning experience within the context of pressure forming,



Pressure forming is an effective way to boost interdisciplinary learning and collaboration

# Pairing pressure forming with 3D printing

Pressure forming integrates smoothly with educational environments already equipped with existing lab technologies, such as 3D printers. These technologies work hand in hand, boosting students' creative potential.

Students can use 3D printing for intricate designs, and achieve quick results with high-quality end products using pressure forming. Together, these technologies offer students a comprehensive toolkit for their projects.

# 👯 UltiMaker 🛛 formlabs 😿



A Mayku Multiplier beside an Ultimaker S5, a filament 3D printer

### How 3D printing complements desktop pressure forming

3D printing is ideal for creating templates for thermoforming, and a technology we recommend for this. These templates, sometimes called bucks, formers, or tools, are placed inside a thermoforming machine to give shape to a plastic sheet. When this sheet is heated, it becomes flexible and takes on the template's shape, resulting in the desired part or mold.

Popular 3D printing methods such as filament (FDM), resin (SLA), and powder (SLS) can all be used to create these templates when combined with temperature-resistant materials.



Learn more: Thermoforming and 3D printing



An SLA 3D printed thermoforming template

# Integrating pressure forming into a 3D printing workflow

3D printing can be more than just producing a final object; it can be a vital stage in a broader process. By combining it with pressure forming, 3D printed pieces become tools in a more sophisticated workflow.

- 3D printed pressure forming tools: 3D printing excels at fabricating intricate designs. Various 3D printing methods can be used to create tools for pressure forming. Instead of 3D printing being the endpoint, it becomes the starting line. Your 3D printed piece acts as a master template, setting the stage for pressure forming to replicate the design in various materials.
- Material portfolio: While 3D printing has its own set of material choices, pressure forming opens up a whole new world. Whether you're aiming for a transparent finish or a robust exterior, pressure forming can achieve it. Detailed designs can be fabricated in everyday plastics, giving them special textures or finishes. It's also a great way to make clear and see-through items, something other manufacturing methods struggle with.
- Fast production: Need multiple copies of your design? With a 3D printed template, pressure forming can quickly churn out duplicates. You only need one 3D printed template to produce lots of pieces rapidly. It's much simpler and more economical to store 3D printed templates than to have a large inventory.
- **Mechanical properties:** Pressure formed pieces retain their material's inherent characteristics and isotropic properties, ensuring final products that adhere to their design and are strong and functional.
- Streamlined workflow: Pressure formers and 3D printers can operate side by side. This setup creates an efficient workflow with quick turnaround times: 3D printers produce the templates, and pressure formers rapidly produce the final pieces. The combined approach is like having an assembly line right in your workspace. Start with a 3D printer and finish with a pressure former. It's streamlined, efficient, and tailored for rapid results.



Combining technologies expands possibilities: This transparent object is impossible to fabricate with 3D printing alone, but using a 3D printed template and pressure forming together makes it possible

# Incorporating the Mayku Multiplier into the educational curriculum

Incorporating pressure forming into your curriculum is a straightforward process. Here's what you need to know:

#### Ease of use

The Mayku Multiplier is userfriendly. In fact, you can create your first form within just 15 minutes of unboxing the machine.

#### Versatility

The machine complements other workshop resources. Whether you're using templates made of wood, plastic, foam, or other materials, the Multiplier is adaptable.

#### **Dedicated support**

Have questions? Mayku has a committed team of product experts available through their customer support network, ready to assist you.

At Mayku, we're happy to provide guidance and consulting to educational institutions. We can recommend ideal materials to use, help to identify applications, suggest manufacturing methods that work well together, and offer tips to get the most out of your Multiplier. Below are some services offered:

#### Maintenance and support

- The machine automatically handles maintenance on a schedule
- Intermittent firmware updates for the Multiplier add value to the machine
- We offer a strong customer support service and warranty to provide additional assurance

#### **Material strategy**

- Identify suitable applications
- Definition of material requirements
- Craft material profiles

#### CAD design

 Training tailored for thermoforming design

#### Workflow adaptation

Incorporating pressure forming with existing processes like 3D printing and laser cutting

#### **Educational resources**

- Rich knowledge base for CAD design guidelines
- Dedicated application support

# The Mayku Multiplier in education

The Mayku Multiplier offers students hands-on experience in manufacturing and design, combining theory with real-world STEM applications. Recognizing the indispensable role of STEM in preparing students for an ever-evolving, fastchanging world, Mayku has been a steadfast supporter of STEM educators and students since our inception in 2016.

We've teamed up with the UK organization 'CREATE Education' to offer schools the latest in manufacturing tech, including desktop pressure forming. Together, our partnership provides schools, colleges, and universities with all the tools they need for effective and engaging lessons. This partnership doesn't just provide technology; we support educators with training and guidance. Our goal is to help them confidently incorporate desktop pressure forming into STEM programs across the world.

> For both education and industry, the Multiplier has unlocked the ability to cheaply create forms at submicron resolutions, develop custom materials, and open up whole new areas for research projects.

Alex Martinucci, Education Adviser at CREATE Education

#### Who is the Multiplier for?

- Engineering students: Understanding the principles and applications of pressure forming can be essential in product development and manufacturing courses. It's especially beneficial for those in mechanical, materials, or manufacturing engineering programs.
- **Design, art, and architecture students:** Pressure forming can be used by industrial design and product design students to prototype or to create final products.
- Lab technicians: The Multiplier is easy-to-use, easy to maintain, and safe to operate from any workbench. It already has proven applications in microfluidics research and other similar fields, which is covered in more detail in a later section.
- Educators: Those teaching courses on manufacturing processes, materials science, or design.

# Who's already benefiting from the Multiplier?

#### **Kingston University**

The Engineering Design department has integrated the Multiplier into their curriculum, exposing students to cutting-edge fabrication techniques.

#### **MIT Play Labs**

Renowned for its innovative approaches, MIT Play Labs has incorporated the Multiplier into their projects and research.

#### **Bristol Department of Aerospace Engineering**

Embracing advanced manufacturing methods, this esteemed department is utilizing the Multiplier for aerospace engineering applications.

#### **Coventry University**

Students from the School of Mechanical, Aerospace, and Automotive Engineering have explored the capabilities of the Mayku Multiplier, innovating pressure forming techniques over a term. Faculty members have also closely examined its potential and evaluated its advantages for instructional purposes.

### Improving the learning experience

Pressure forming is a versatile tool that enriches hands-on learning across various academic settings, from specialized research labs to expansive makerspaces and innovation hubs. This technology not only aligns academic training with industry practices, but also offers several benefits:

- Space-efficient: Despite its powerful capabilities, the machine's compact design fits comfortably into tight workspaces.
- User-friendly interface: Its intuitive design ensures students can get started without extensive assistance, streamlining the learning curve.
- Clarity in concept: Explaining the Multiplier technology to students is straightforward, making it a great teaching tool.
- Quick turnaround: With cycle times ranging between two to 20 minutes, students can see their ideas take shape in a short span, enhancing engagement.
- Specialized applications: In smaller labs, a desktop pressure former becomes invaluable for projects needing bespoke parts. It's an affordable means to produce various design iterations.
- Comprehensive learning for engineering students: Beyond theoretical knowledge, hands-on exposure to pressure forming imparts vital insights into material dynamics, design boundaries, and processing variables.
- Industry-relevant skills: Familiarity with this technology prepares students for sectors like automotive, aerospace, medical, and consumer goods, bridging classroom knowledge with real-world applications.



#### ΜΙΤ

Using the Multiplier in the workshop to provide access to advanced manufacturing techniques in the workshop.



#### Harvard University

Elevating the workshop's manufacturing capabilities with the Multiplier for advanced research.



#### **Bristol University**

Using the Multiplier in the Department of Aerospace Engineering to prototype and fabricate UAVs.

### Construct3D

Construct3D is an annual conference that centers on the application of 3D printing and digital fabrication. It emphasizes academic uses, best practices, and professional growth for educators, staff, and students across settings from informal to K-12 and higher education.

The conference serves as a hub for enthusiastic educators and innovators to share ideas, expand their networks, and deepen their knowledge of 3D printing in educational settings.

While the event maintains a brand-agnostic approach, top sponsors and collaborators include UltiMaker, Autodesk, and Onshape. At the previous Construct3D event, Mayku played an active role:

- Mayku led workshops on thermoforming in education.
- They introduced design techniques specific to thermoforming.
- Attendees learned about the powerful combination of thermoforming and 3D printing.
- Mayku facilitated a workforce development workshop with renowned companies like Onshape and Stratasys.
- Educator Tanveer Sayed guided a pressure forming segment.



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At Construct3D 2023, the Mayku Multiplier made a notable impression. Attendees praised its easy-to-use interface, speedy performance, and wide range of materials. Its ability to precisely mirror the surface texture of 3D printed templates was particularly impressive. For many, it was their introduction to pressure forming, and experiencing the machine firsthand was a standout moment of the event.

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At Construct3D, the excitement around the Multiplier was palpable. Hosting the Mayku team shortly after its launch, the device truly exceeded expectations. Makerspaces, known as hubs of innovation, often struggle with scalability. Many budding entrepreneurs can design promising products but hit roadblocks due to manufacturing costs. While 3D printing excels for prototypes, it's not ideal for midscale production, and alternatives like injection molding are costly. This gap, often termed the "valley of death" in product design, makes tools like the Mayku Multiplier a breath of fresh air. Offering a scalable, cost-effective manufacturing solution, it disrupts the pressure-forming industry with a significant reduction in equipment costs. It's no wonder the Mayku session was a standout at the 2023 Construct3D event.

Lizabeth Arum - Co-founder, Construct3D

Chip Bobbert - Co-founder, Construct3D

### **DfAM Skills Challenge**

Mayku, Onshape, Stratasys, and nTop all took part in the Design for Additive Manufacturing (DfAM) Skills Challenge. This event aimed to immerse participants in product design tailored for additive manufacturing, introducing them to DfAM's core techniques.

Mayku's segment was led by Tanveer Sayed, a Professor and Program Coordinator in Electro-Mechanical Engineering at Georgian College. He guided participants on using pressure forming to craft an engine's oil pan using a template. Attendees learned to design and craft parts through pressure forming, mastering the creation of quality components with materials like ABS.

This challenge enriched participants' grasp on desktop manufacturing, equipping them for future projects. It also offered them the chance to display their DfAM expertise and engage with industry frontrunners. The emphasis was on innovative design, optimizing the potential of desktop manufacturing.

Mayku's participation highlighted how pressure forming complements additive manufacturing, underscoring the Mayku Multiplier's potential in education. This hands-on workshop deepened participants' knowledge of thermoforming, setting them up for diverse industry applications.



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The Mayku Multiplier is an excellent product to use in engineering education, and its role in the workshop, along with the integration of advanced technologies, demonstrated the transformative potential of this tool. It is an excellent resource for fostering creativity, enhancing problem-solving skills, and preparing students for a rapidly evolving world. I am excited to continue using it to inspire the next generation of innovative thinkers.

Tanveer Sayed - Professor and Program Coordinator in Electro-Mechanical Engineering

#### Coventry University and the Mayku Multiplier: Elevating pressure forming techniques

At Coventry University's School of Mechanical, Aerospace, and Automotive Engineering, students used the Mayku Multiplier to innovate pressure forming techniques. Over a term, they explored its potential, while faculty assessed the machine's benefits for teaching.

#### Streamlining education

The university faculty oversee many students in the department, and there is a high demand for fabrication equipment. The Mayku Multiplier's user-friendly interface and guided operations proved invaluable: students quickly adapted to it, experimenting safely without the need for constant faculty supervision. Compared to other popular fabrication methods like 3D printing, pressure forming with the Multiplier delivers results much faster – in minutes, not hours, which means more students can fabricate the parts they need quickly and efficiently.



#### An innovative solution

Several student teams spent an entire term exploring the Multiplier's potential uses. At the same time, university faculty were able to explore how it could enhance course delivery and student instruction. Mayku actively supported students and faculty throughout the process, starting with an initial meeting to discuss ideas and viability, followed by routine check-ins. Each project concluded with a presentation of the team's discoveries.

One standout application was the blend of dye sublimation with pressure forming. This method embedded dyes into materials, producing durable, vibrant results. The Multiplier's Custom Mode further simplified dye transfer, eliminating the need for an external heat press.

#### **Results achieved**

The integration of the Multiplier led to many positive benefits:

- Students were able to experiment with a wide range of thermoformable materials
- Students produced final parts with production-grade PETG
- A student team produced different models that experimented with dyes and PETG to prototype topographical 3D data

#### Key takeaways

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- The Mayku Multiplier provides an intuitive and efficient approach to desktop pressure forming
- Its versatility allows for diverse applications, such as creating colored forms using dye sublimation
- This tool not only complements traditional educational equipment but also stands out with its unique advantages, such as fast and efficient part turnaround
- Students and educators can benefit from its faster production times and enhanced usability, enriching the overall learning experience and enabling more students to access pressure forming

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We've had a great experience with the Mayku Multiplier at Coventry University. Its userfriendly design and the fast prototyping it has enabled has improved our educational processes, allowing students to experiment more effectively and enhance their learning experience. It complements other tools like 3D printing, and even has process advantages, particularly in terms of speed and ease of use, which is a huge benefit when you have 600 students working on their final year projects!.

Dr. Mashid Yazdi Far - Coventry University School of Mechanical, Aerospace, and Automotive Engineering



A dye sublimation colored form displaying land topology information

# Multiplier real-world applications

# Product design and pressure forming

Pressure forming has redefined design prototyping, bringing several advantages to the table:

#### Speed and precision:

This method lets designers swiftly iterate and refine their concepts, ensuring precise outcomes every time.

#### Market-ready prototypes:

Beyond just conceptual models, designers can create functional prototypes that are ready for the market.

#### Desktop manufacturing:

With a convenient desktop solution, it democratizes a process that was once reserved for large-scale manufacturing setups.

#### Superior finish:

The resulting products have excellent surface finishes, instilling confidence when showcasing designs.

#### Industry-standard materials:

Students have the opportunity to work with the same materials that are used in large-scale production, giving them a realworld experience.

#### Rapid prototyping:

The technology supports swift model iterations, speeding up the prototyping process and encouraging experimentation.

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Quick and effective thermoforming is not easy. The Mayku Multiplier resembles the dimensions of a standard desktop 3D printer, and can carry out pressure forming at the press of a few buttons. The design is foolproof and step-by-step instructions on the display make it an excellent, user-friendly machine for both education and research. Custom Mode takes things further, empowering users to fine-tune pressure, temperature, and timing settings to unlock their creative potential.

Dr Pingfei Jiang, Lecturer in Engineering Design at Kingston University, London



# Engineering and pressure forming

Pressure forming introduces transformative benefits in engineering:

- **Industry-standard materials:** Pressure forming can use thick (0.5-5mm), robust engineering materials that are typically used in mass production.
- High precision: Engineers can validate and inspect parts that mimic injection mold quality, achieving an exceptional level of detail, with less than one micron of resolution.
- Fast fabrication: The process is complete in minutes, so production is quick and efficient.

Case study: Oertli Instrumente AG

Oertli Instrumente AG is a leading name in high-end surgical tools and medical equipment for ophthalmology. Based in Switzerland, they integrated the Mayku Multiplier into their prototyping process. By introducing desktop pressure forming, they reduced their design iteration cycle from three weeks to just one day. This also led to a reduction in prototyping expenses by more than 90%, without any compromises on quality. Besides this, they had the added benefit of moving prototyping in-house, giving them complete control over the entire production cycle, without the need for outsourcing.

Malte Heuer, Development Engineer and Project Manager at Oertli Instrumente AG, remarked:

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The fast cycling times that started in software now come down to the whole mechanical departments.



### Pressure forming in research labs and microfluidics

Pressure forming is an aid to R&D, particularly in fields such as microfluidics, due to its speed, precision, and cost-effectiveness. Some reasons include:

- **Precision replication:** This method facilitates accurate 1:1 replication of microfluidic channels at a sub-micron scale.
- Cost-effective prototyping: Researchers can now prototype small batches of microfluidic chips without the need for expensive tooling, which takes time to develop.
- Material authenticity: It enables the testing of microfluidics using the actual materials used in production.efficient.

Case study: Rapid Fluidics Ltd.

Rapid Fluidics Ltd. specializes in microfluidic chip production for medical diagnostics and scientific research. With the help of the Mayku Multiplier, they've managed to reduce the time taken to produce batches of microfluidic chips by 85%. This efficiency means they can now roll out higher volumes of chips at an accelerated rate, sidestepping both heavy tooling costs and the delays associated with tool production.

Paul Marshall, the CEO of Rapid Microfluidics, had this to say:

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The Mayku Multiplier has been a game-changer for us. It has widened our customer base, opening up more production opportunities, and enabled us to serve niche markets without the financial burden of injection mold tooling. Our team is thrilled with the results.



#### Learn more:

Revolutionizing microfluidics prototyping: Mayku Multiplier accelerates production without costly tooling

### Pressure forming in makerspaces and university workshops

The Mayku Multiplier transforms makerspaces and university workshops, offering students and educators an advanced manufacturing solution. Key benefits include:

- User-friendly design, allowing students to craft with confidence.
- Swift production cycles for rapid design iterations.
- Flexibility to produce everything from simple prototypes to high-quality final pieces.
- Seamless pairing with existing technologies like 3D printing and laser cutting.

With the Multiplier, students can now produce a prototype in just minutes, rather than the typical 20-hour wait. This allows for faster testing and swift adjustments.

Pavel Dagoro, Head of Workshops, FHNW University, Switzerland





Computer mouse shell prototype made with the Mayku Multiplier

#### **Entrepreneurial incubators**

Desktop pressure forming allows educational incubators to equip students with the tools to transform ideas into real products. Its user-friendly nature, speed, and adaptability help students refine designs efficiently and manufacture small product batches affordably. Combined with other lab tools, students get a holistic approach to prototype creation, setting them on a path to entrepreneurship.

- Enables rapid prototyping and iteration of product designs
- Offers cost-effective production of small-batch products
- Empowers students to create market-ready prototypes and launch their own businesses
- Prepares students for real-world entrepreneurial endeavors

# Get started with pressure forming in education

Preparing students for the future involves more than just gearing them up for their prospective careers. It's about equipping them with knowledge, honing their skills, and ensuring they can adapt to shifts and changes.

Pressure forming is undeniably impactful, with its benefits already evident across industries. From healthcare to aerospace and product design, pressure-formed products are making an impression. Educators who integrate pressure forming into their curriculum equip students with knowledge of a transformative technology that is shaping their world.

If you'd like to explore more about integrating the Multiplier in education, get in touch with a Mayku Expert today.

Talk to a Mayku Expert

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800-689-4344