

Expertise: Product Development

Industries: Manufacturing

An eco-friendly innovation in shoe care



Overview of the partnership

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| Partners: | Brunngård Group and Consat Engineering |
| Objective: | To develop an automatic shoe impregnation machine that delivers high performance with a fully biodegradable solution. |

Together with Brunngård Group, Consat developed a unique machine – EXPRO – that automatically impregnates shoes in just one minute, entirely without PFAS chemicals.

Challenge

Brunngård needed a machine that could automatically impregnate shoes with a biodegradable liquid – combining high performance, strong design, and patent protection.

Solution

Consat developed EXPRO – a machine that impregnates shoes evenly and efficiently in just one minute. The project brought together Brunngård's shoe care expertise with Consat's engineering know-how, as well as external design and patent expertise.

When Brunngård Group wanted to take the next step in their sustainability journey, they turned to Consat. The goal was to create an automatic impregnation machine for retail environments – a solution combining performance, design, and eco-friendliness.

A pragmatic partner

Brunngård Group is Sweden's leading expert in shoe care and wanted to combine their water-based impregnation liquid with a new type of machine. In close collaboration with Consat Innovation Partner and Consat Engineering, a prototype was created, refined, and finally developed into a fully functioning machine.

“Designing a machine from scratch is like a treasure hunt. The key is to define what the treasure is before you start searching.”

Emil Brandt, CEO of Consat Innovation Partner

The challenge

Brunngård had already eliminated PFAS from its products but needed a solution that combined:

- High-performance impregnation without harmful chemicals
- An automated process suited for retail environments
- Attractive design and patent protection

The solution

Consat Innovation Partner developed a spray prototype that evenly applied the impregnation liquid. Consat Engineering then took over and transformed the technical specification into a finished construction.

To meet the requirements, the project involved external experts in both design and patents. The result was a machine that not only works optimally but is also aesthetically appealing.

Key outcomes

- Impregnates shoes in about one minute
- Uses a biodegradable liquid, free from PFAS
- Designed for retail use with patent-protected technology

Summary

- Brunngård aimed to develop an automatic and eco-friendly impregnation machine
- Consat developed EXPRO – from prototype to completed construction
- The machine impregnates shoes quickly, evenly, and toxin-free
- The project combined sustainability, design, and technical precision

The result

Brunngård Group now has a finished machine ready for production. It impregnates shoes quickly and toxin-free, works seamlessly in retail environments, and represents the next step in sustainable shoe care.

Value-driven innovations

EXPRO is a strong example of Consat's cross-functional approach to transforming vision into tangible products. Through collaboration between Brunngård, Consat Innovation Partner, Consat Engineering, and external specialists, a new type of machine was created – from idea to finished solution.

Contact us

Are you interested in exploring how Consat Engineering can support your organisation with value-driven innovations? Get in touch with us today for more information or to book a demo.