CASE STUDY

Scaling Digital Dentistry: TEAMZIEREIS Unlocks Safer, Faster Resin Cleaning

OVERVIEW

Based in Engelsbrand, Germany, **TEAMZIEREIS** provides advanced digital dental solutions for laboratories and clinics. They operate a production and design center that manufactures prosthetic and orthodontic components using a variety of materials and technologies.

Since 2008, TEAMZIEREIS has embraced innovations like 3D printing, milling, and laser sintering to deliver accurate and patient-specific solutions. Their focus on sustainability and innovation has enabled them to produce durable dental components inlcuding complex geometries like telescopic crowns.

This case study explores how TEAMZIEREIS improved their post-printing process by implementing the **PostProcess® DEMI 430™**, shifting from manual IPA-based cleaning to an automated approach that increased efficiency, enhanced safety, and reduced costs.

THE CHALLENGE: WHEN MANUAL WORKFLOWS CAN'T KEEP UP

To meet growing demand in the dental industry, TEAMZIEREIS runs multiple Carbon® printers, alongside Axtra3D and Formlabs systems, to produce high-quality dental parts for labs and clinics.

However, their traditional post-printing process relied on IPA baths and two orbital shakers, with capacity limited to just eight models per cycle.

This manual workflow created challenges, such as:

- Production bottlenecks due to limited throughput
- High labor costs from manual handling and supervision
- Significant IPA consumption, utilizing 20–30 liters per month

- Safety and sustainability concerns tied to solvent usage

These barriers led TEAMZIEREIS to begin searching for a more professional, automated approach that could scale with their expanding production.

THE SOLUTION: SCALING WITH SMARTER, SAFER AUTOMATION

Looking to streamline their workflow and address these challenges, TEAMZIEREIS turned to the **PostProcess DEMI 430** - an automated resin removal solution designed to deliver precise, consistent, and scalable results. The solution combines advanced hardware, proprietary chemistry, and smart software to ensure reliable resin cleaning for every cycle.

PostProcess DEMI 430 Resin Removal Solution

With the DEMI 430, TEAMZIEREIS can now process **three to five times more parts per cycle** compared to their orbital shakers, all while eliminating reliance on IPA thanks to safer, non-flammable PostProcess detergents. This automated workflow also dramatically reduces manual labor, helping the team increase throughput while minimizing operator intervention.

By integrating this solution, TEAMZIEREIS aimed to increase efficiency, reduce labor costs, and create a safer, more sustainable post-printing environment.

THE RESULTS: MEASURABLE GAINS IN SPEED, SAFETY & COST

The transition to automated resin removal with a PostProcess solution quickly delivered tangible results in efficiency, safety, and cost savings for TEAMZIEREIS:

- **IPA usage reduced** from 20–30 liters per month down to ~5 liters
- **Washing time cut in half**, accelerating overall part turnaround for customers
- **Throughput expanded** - enabling TEAMZIEREIS to confidently scale production with room to add even more printers
- **Manual labor minimized**, lowering costs and freeing technicians to focus on higher-value tasks
- **Improved safety and sustainability**, reducing exposure to harsh chemicals and cutting chemical waste

TEAMZIEREIS is impressed with the solution and its capabilities, highlighting how it enables a smoother, automated post-printing process that aligns with their advanced dental production workflows.

With the PostProcess DEMI 430, TEAMZIEREIS has strengthened its position as a digital dental leader in Germany - proving that scalable, safe, and efficient post-processing is key to unlocking the full potential of additive manufacturing in the dental industry.

TEAMZIEREIS Engelsbrand Headquarters

About TEAMZIEREIS

TEAMZIEREIS GmbH, headquartered in Engelsbrand with a facility in Munich, specializes in complete digital workflows for dental labs and clinics. Founded around 2000, the company provides scanners, milling machines, 3D printers, software, design services, and full digital manufacturing setups. Leveraging technologies such as 3D printing, milling, laser sintering, and digital design, TEAMZIEREIS delivers precise, durable, and patient-specific dental solutions. Learn more at https://teamziereis.de.

About PostProcess Technologies

PostProcess is the leader in automated and intelligent post-printing solutions for 3D printed and additive manufactured parts. Founded in 2014 and headquartered in Buffalo, NY, USA, with international operations in Mougins, France, PostProcess removes the bottleneck in the final stage of the 3D printing workflow, post-processing, through a combination of patent-pending software, hardware, and chemistry technologies. The company's solutions automate industrial 3D printing's most common post-printing processes including support removal, resin cleaning, and surface finishing, enabling customer-ready 3D printed parts at scale. The PostProcess portfolio has been proven across all major industrial 3D printing technologies and is in use daily in every imaginable manufacturing sector. Learn more at postprocess.com.