Digitization in dental technology: Ivoclar's comprehensive digital workflows offer greater efficiency during fabrication

As the dental industry continues to evolve, the future of dentistry is becoming increasingly digitized. Thanks to state-of-the-art digital workflows that combine scanning of impressions, fabrication planning, design, and automated production processes, many process steps are now becoming more commercially viable, heralding the transformation of dental laboratories and dental practices. As one of the world’s leading manufacturers of integrated solutions for high-quality dental applications, Ivoclar enables a simple and straightforward introduction to innovative dental fabrication processes with a comprehensive product and system portfolio for dentists and dental technicians. The digital workflows combine almost 100 years of Ivoclar experience in the dental industry with leading-edge technology, premium-grade materials, and harmonized workflows – meaning greater flexibility, profitability, and efficiency in the daily routine for dentists, dental technicians, and dental laboratories.

Digital workflows: the future of dentistry?!
Dentistry is as individual as a patient's anatomy. No two cases are the same, and every treatment is specifically tailored thanks to a longstanding tradition of craftsmanship that puts the patient first. Just like any other craft, the quality of the final result depends on a number of factors such as the material, experience, planning, and precision during implementation. Creating superior quality dentures that are also cost-effective to fabricate and eliminate as many potential defects as possible is always a challenge. Now, thanks to digital dental technology, risks and uncertainties can be mitigated, enabling outstanding precision, accuracy, and efficiency throughout all phases of the workflow while also improving process reproducibility. In doing so, Ivoclar digital workflows – from the practice to the laboratory – blend traditional craftsmanship with digital fabrication strategies, optimising workflows while minimising the time required for individual process steps. Regardless of the current level of digitization of a laboratory or of a dental technician – from beginners to seasoned professionals – Ivoclar has appropriate, innovative solutions for a forward-looking working environment. The range of digital devices here includes powerful equipment for scanning, milling, and sintering of zirconia – meaning maximum flexibility and profitability. As an integral part of modern dentistry, digital dental technology paves the way for completely new approaches that benefit everyone, from dental practices and patients to dental technicians and dental laboratories.

Going digital with Ivoclar: for efficiency, quality, and reliability into the future
Ivoclar's holistically designed digital workflows can start in the dental practice and offer a seamless transition to dental technicians. What's more, they can begin directly in the dental laboratory too. Here, digital design and digital fabrication increase productivity and reduce manual work, while in turn optimising production so that less time is required for each unit fabricated. Milling machines can combine jobs and operate unattended, helping to accelerate processes even further. All current Ivoclar product systems are adapted to one another for reliable fabrication results and simple, intuitive handling. As a result, the entire range of powerful devices can be seamlessly integrated into the digital workflow for improved control of daily work routines. Cutting-
edge equipment for scanning, milling, and sintering of zirconia are available for a wide variety of applications. Regardless of whether you are just about to launch digital fabrication processes or you have already established digital workflows – Ivoclar offers the right equipment and appropriate service for dental technicians and dental laboratories.

**Working hand in hand: digital thinking and digital fabrication**

The consolidation of workflows in the dental practice and in dental technology continues apace. Some dental practices already use digital impressions, while others still send conventional impressions to the laboratory where they can then be scanned using the laboratory scanner. That's why modern dental laboratories now offer maximum flexibility and the relevant solutions to provide optimum support for the various application scenarios.

With PrograScan PS5 and PS3, Ivoclar provides powerful, reliable partners for scanning in the laboratory. These devices are intuitive to operate, feature high precision and scanning speed, and deliver reliable scanning results to significantly accelerate the workflow. The connected exocad DentalCAD software also makes scanning simple. Impression scanning is fully automated using a third axis with the digital model shown in colour. Both laboratory scanners, PrograScan PS5 and PS3, are optimally integrated into the Ivoclar digital workflow. All process components such as technology, software, and materials ensure high process reliability, which saves time and ensures highly esthetic results.

With the PrograMill series, Ivoclar offers a variety of CAD/CAM milling machines, each with its own strengths. PrograMill PM5 and PM3 are the two midfielders you can rely on in the milling machine team. The 5-axis milling machine PrograMill PM7 is the outstanding striker in the team, setting new standards in digital fabrication of restorations in the dental laboratory. Suitable for a wide variety of indications, a diverse range of materials can be processed in both wet and dry mode. Moreover, fully automatic material management in combination with an intuitive user interface delivers reliably reproducible results. With PrograMill DRY, the Ivoclar squad also includes the ideal player for professional fabrication of zirconia restorations. This compact 5-axis dry milling machine fabricates zirconia crowns and bridges quickly and precisely, and with Ivotion, even complete digital dentures are possible using just a single disc. Thanks to its compact design, PrograMill DRY impresses with flexibility, enabling space-saving integration in any laboratory.

The Programat S2 is the state-of-the-art expert for a precision fit when sintering. This compact furnace can sinter frameworks or full-contour zirconia restorations at temperatures of up to 1600 °C. And thanks to integration in the Ivoclar workflow, the Programat S2 not only facilitates a seamless process, it ensures superior end-to-end quality too. The ergonomic design of the Programat S2 includes a large colour touch display for fast and intuitive operation. This furnace ensures reliable and precise sintering in record time.

The innovative Ivoclar workflows are also sure to shape digitization of the dental industry and drive it forward. Looking to the future, digital workflows from Ivoclar will continue to optimize processes in dental laboratories and dental practices – when it comes to efficiency, quality, profitability, and esthetics too. After all, the company aims to continue to establish itself as a digital pioneer going forward, with new, innovative products and services. What's more, to make it as easy as possible for customers to get started in the digital world of Ivoclar products, the company offers extensive consultation, detailed guidelines, step-by-step instructions, white papers, webinars, further training, discussions with experts, and much more besides.

About the Ivoclar Group

The Ivoclar Group, headquartered in Schaan, Liechtenstein, is one of the world's leading manufacturers of integrated solutions for high-quality dental applications. The company's success is based on a comprehensive portfolio of products, systems and services, strong research and development capabilities and a clear commitment to training and further education. The group of companies, which sells its products to around 130 countries, has 47 subsidiaries and branch offices and employs roughly 3,500 people worldwide. More information about the Ivoclar Group is available at ivoclar.com.

Company media contact
Ivoclar Vivadent AG
Waldemar Fischer
Bendererstrasse 2
9494 Schaan/Liechtenstein
D +49 7231 3705 309
E waldemar.fischer@ivoclar.com
ivoclar.com

Ivoclar PR agency
IsarGold GmbH
Carsten Bickhoff
Müllerstr. 39
80469 Munich
D +49 89 4141715-13
M +49 151 11325413
E ivoclar@isar.gold