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SUDOKU PUZZLE

The 9x9 grid has to be filled with the letters A, E, I, L, M, Q, T, U and Y so that each column, each row and each of the nine 3x3 sub-grids contains each letter only once. The letters in the yellow squares add up to the solution. Have fun!

Please send your solution by email to vision@sirona.com or by regular mail to Sirona Dental GmbH, Sirona Straße 1, 5071 Wals/Salzburg, Austria. The submission deadline is October 31, 2014.

GOOD LUCK!

All Sirona and ergo Kommunikation staff, as well as all persons involved in the organization of the competition, are excluded from participation. The name of the winner will be published in the next edition of Vision Magazine. Legal recourse is excluded.

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Sirona Dental GmbH
Sirona Strasse 1
5071 Wals/Salzburg, Austria
Email: vision@sirona.com
Telephone: +43(0)662.2450-0
Fax: +43(0)662.2450-0
www.sirona.com

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Nadine Friederichs (management), Oliver Wilke

Design
Daniel Sanjuan (management), Oliver Wilke

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Image credits
DEAR READERS,

“Getting to the top takes a great deal of effort and skill. The major challenge is staying there year in and year out.” This common saying from elite competitive sports essentially means that it is more difficult to consistently deliver top performance. This is why being number 1 in the world is a very special claim. We don’t just want to satisfy our customers; we want to exceed their expectations – with new solutions to make working in their practices and labs better, safer, easier, more efficient and more economical. This requires continuous improvement, innovation and a world-class team to accomplish our goals.

Every innovation begins with a vision. Sirona’s vision is to improve dentistry and patient care around the world. Our 3,200 employees are committed to bringing this vision to life. Together, we are entering the new era of digital dentistry. The possibilities created by digital data and networking, allow us new ways of diagnosing and advising patients, performing minimally invasive treatments and collaborating with labs. At our Center of Innovation and our other locations around the world, our 300 highly-qualified scientists and engineers have the opportunity to be creative, imaginative and to make our vision a reality. One powerful example of this is the integration of CAD/CAM and 3D x-rays. This integrative system provides solutions for implantology, endodontics and functional diagnostics. At Sirona it is not just about improving dentistry, but also changing dentistry as we know it – just as our company has done for over 130 years.

We invite YOU to be part of this vision with our newly designed customer magazine. In this semi-annual, easy-to-read publication, we will share topics that are currently important to us in a way that provides high added value for you. Furthermore, we will offer practice-relevant reports on user experiences from around the world.

In this special edition, we focus on quality made in Germany. As you may know, Sirona’s location in Bensheim/Germany is the largest production site in the dental industry. Read what ‘Quality Made in Germany’ and ‘German Engineering’ means to us and how we guarantee quality in development and production to ensure that our innovations exceed the expectations and desires of our customers.

We hope you enjoy and benefit from our first issue as much as we value being part of the dental industry.

All the best,
Jeffrey T. Slovin
GERMANY STANDS FOR QUALITY

Companies from around the world and many different industries are establishing a presence in Germany because it is a well respected location both economically and also as a country of origin for goods and services. In this context, Sirona’s location in Bensheim is also the largest production site for the dental industry. Some facts and figures:

GERMANY IS THE LARGEST ECONOMY IN THE EUROPEAN UNION AND THE FOURTH-LARGEST IN THE WORLD.

GERMANY IS THE LEADER IN EUROPE IN TERMS OF PATENT REGISTRATIONS.

IN A GLOBAL CONTEXT, IT IS ONE OF THE THREE MOST INNOVATIVE COUNTRIES IN THE WORLD ALONGSIDE JAPAN AND THE USA.

THE WORLD’S 500 LARGEST COMPANIES MAINTAIN A PRESENCE IN GERMANY. IN TOTAL APPROXIMATELY 45,000 FOREIGN COMPANIES.

GERMANY IS HOME TO APPROXIMATELY 370 UNIVERSITIES. GERMANY IS THE MOST POPULAR COUNTRY FOR INTERNATIONAL STUDENTS AFTER THE USA AND THE UK.
The German economy, the reputation of German companies and the quality of the country’s education system is also attracting students from all over the world. Vision asked students enrolled in technical courses at the Cologne University of Applied Sciences what quality ‘Made in Germany’ means to them.

“MOST CHINESE CONSIDER ‘MADE IN GERMANY’ A GUARANTEE OF QUALITY. PRODUCTS FROM GERMANY ARE OF A HIGH QUALITY AND STAND FOR A HIGH LEVEL OF QUALITY ASSURANCE. THEREFORE, MORE AND MORE CHINESE ARE BUYING GERMAN GOODS, SUCH AS KNIVES, POTS AND SUITCASES.”

ZHANGQIAN HUANG [25], CHINA

“It is said that no one is as scrupulous and accurate as the Germans. In a production setting, it is exactly these characteristics that ensure a high level of quality and that are in demand around the world.”

RICHARD ORTH [28], GERMANY

“To me, quality ‘MADE IN GERMANY’ means accuracy, functionality and punctuality. A German product is not necessarily the best product in the market, but it does promise good quality.”

SILVIA SANTANO GUILLEN [23], SPAIN
Germans are known to be hard-working, reliable and punctual. This is the cliché at least. It doesn’t really sound very cool now, does it? But foreign companies, investors and customers take a different view. They have a great appreciation for the so-called ‘German virtues’. Similarly, export figures show year after year that products ‘Made in Germany’ are in high demand. But why is that? Tracing the roots of German quality workmanship.
Germans are good at drilling. It is not just dentists who enjoy an excellent reputation in this area. German tunnel drilling machines are also in great demand all over the world. Take, for example, the drills made by Herrenknecht, a family-owned company from Schwanau-Allmannsweier in Baden-Württemberg and the global market leader in machine-based tunnel drive technology. Whether you want to build a subway in Guangzhou [China], a pipeline through the Netherlands or a kilometer-wide access tunnel to a pumped storage power station in Switzerland – this established German company is a key international player in the Champions League of this industry. Herrenknecht attributes its international success to high quality and technical standards, as well as the fact that their products are targeted to meet the requirements of global markets. In other words: anyone who wants to build a tunnel anywhere in the world will get the tunnel they are looking for. And customers around the world clearly know that this is something they can absolutely rely on, both with regard to on-time delivery and the quality of work, products and services.

This is starting to sound a lot like those German virtues that were mentioned earlier. But are they really so exemplary? German entrepreneurs definitely think so. And what is so bad about being hardworking and reliable? Many business people tell stories about how often the topic of German craftsmanship comes up in their dealings with foreign investors and business partners. The label ‘Made in Germany’ is equivalent to a high quality standard. This is well-known around the world and, according to them, a feature that we can, and should, use for growth. In other words, German virtues as a competitive advantage?

---

**THE WORLD’S FOUR LARGEST EXPORT NATIONS**

In terms of export surpluses (the difference between exports and imports), Germany leads all others with a wide margin, according to the Ifö Institute. Germany ranked third behind China and the US for the total sum of exports in 2013.

- **1. CHINA** (2,210)*
- **2. USA** (1,579)*
- **3. GERMANY** (1,453)*
- **4. JAPAN** (715)*

*2013 in USD billions.
One thing is clear: German products are top sellers around the globe. And there are lots to choose from, including cars, such as Porsche, Audi, BMW or Mercedes, medical technology or the ICE from Siemens, steel from Thyssen Krupp, beer brewed according to German purity law, microscopes from Zeiss or men’s fashion from Hugo Boss – German quality goods enjoy an excellent reputation everywhere they are sold. In this regard, German expertise is in particularly high demand. This is because quality is not defined solely by long-lasting materials and precise workmanship, but also by skill. Expertise and innovative knowledge are among the basic prerequisites for the success of German products, as are technical skills and, by international comparison, the excellent qualifications of the employees who make the products. Economists agree that the combination of these factors make German goods competitive in a global market, despite their relatively high price tag.

This was not always the case. The label ‘Made in Germany’ has been around since 1887. It was established by the English parliament as part of the ‘Merchandise Marks Act’ and was designed to protect British companies from cheap and allegedly low-quality competition from Germany. But the plan soon backfired: instead of preventing German imports into Britain, the label soon became a guarantee for quality and reliability. ‘Made in Germany’ established its importance over a long period of time and its significance continued to increase over the decades that followed. The label has now been a synonym for German craftsmanship for more than 125 years – and not just in the UK.

‘MADE IN GERMANY’ ENJOYS CONSIDERABLE PRESTIGE

It is true that German quality goods have faced increasing competition over the past few decades from cheaper products that keep getting better on a technical level. But in this competitive environment, the positive image of “Made in Germany” also represents a clear competitive advantage. People looking for high quality products are still willing to spend more money for German brands and this awareness of quality continues to spread around the globe. As China, India, Brazil and many other countries become more wealthy, German products are also making more inroads in these markets. Electronics stores are proud of their German section featuring razors, irons, refrigerators and washing machines.

The Solingen-based company Zwilling, for example, caused a sensation with its knives and scissors – a feat accomplished without advertising and mainly through word of mouth. These products are offered in almost every shopping center in China and have legions of fans who swear by German craftsmanship, even if they cannot all afford the significantly more expensive products. And if the product does not come with a ‘Made in Germany’ label, the reference ‘hen deguo’ – (‘very German’ at least from a quality point of view) – is enough to motivate people to buy. Of course, the global popularity of German products is also reflected in global sales figures: in 2013, Germany was able to regain its title as the world’s number one ex-
porter: German exports achieved a global record surplus of USD 260 billion, ahead of China, which generated a surplus of USD 195 billion.

**FRANCE LOVES GERMAN QUALITY**

The global enthusiasm for German quality is not restricted to technological products or cars. Beer, chocolate and baked goods, particularly whole grain breads, have become global classics. Take the ‘Tante Emma-Laden’ [a typical German mom and pop store], which is located at the St. Quentin market in the heart of Paris and is a favorite among locals. According to the owner, his French customers mainly come to buy three items: beer, bread and Christmas specialities. Other popular items include sausages, Black Forest Ham and an excellent Riesling from the Mosel or Rheingau. And although his food products do not carry the label ‘Made in Germany,’ their German origin and the traditions behind them are nevertheless a guarantee for sales.

France’s enthusiasm for German products is not a rarity; the country is home to many German beer fan clubs, plus many French even think that brands such as Haribo or Nivea are French brands.

“CUSTOMERS OF THE GERMAN DELICATESSEN STORE ‘TANTE EMMA-LADEN’ IN PARIS BUY MAINLY BEER, BREAD AND CHRISTMAS SPECIALITIES.”

**QUALITY AT SIRONA: EXAMPLES OF THE INNOVATION LEADER’S TEST PROCESSES**

Sirona produces the majority of its products in Bensheim, Germany, the largest production site for the dental industry. Quality, innovation and state-of-the-art technology are big priorities here:

- All components of an ORTHOPHOS XG 3D are tested twice. The first test is conducted on the component itself. The second test involves calibration and tests the equipment delivery process, which takes between four to six hours.

- Before packaging, each CEREC unit undergoes a thorough testing process: important components are painstakingly removed and the PC in the imaging unit is tested under full load with the corresponding temperature formation.

- Each milling machine must go through seven stages of testing and mill a specimen to demonstrate its accuracy down to the micrometer.

- The company has spent more than USD 300 million on research and development since 2007. Approximately 300 developers and engineers work on new innovations at the company’s Center of Innovation every day.
Design and everyday life are inextricably linked. This is what Dr. Peter Zec, Manager of the Red Dot Design Museum in Essen, firmly believes. The museum presents everyday items with unusual designs. Zec’s formula for good design: a balanced synthesis of function, temptation, handling and responsibility.

GOOD DESIGN DOES NOT FALL FROM THE SKY
It is the ideal place to talk about design. At the Red Dot Design Museum in Essen, industrial architecture meets product culture – breathtakingly staged by Lord Norman Foster. In the middle of the 1990s, the British star architect converted the empty and almost 40 meter high boiler house of the Zeche Zollverein into an inspiring exhibition and event location. The building is home to one of the world’s largest exhibitions of contemporary product design.

Approximately 2,000 exhibits are housed over more than 4,000 square meters of exhibition space. They consist mostly of everyday items that are actually quite unusual due to their unique design. And this is why they can be found in the Red Dot Design Museum. Manager Dr. Peter Zec is convinced that design and everyday life are inextricably linked. “Everything we use is design. Toothbrushes, coffee cups, cars, work utensils, posters, food packaging – all of this is design and determines the way we live every day.”

‘THAT EXTRA SOMETHING’

Good design does not have to be expensive. Zec: “The luxury aspect of a product lies in its implied added value. That extra something – that is good design. And what automatically turns a product into something irresistibly luxurious.”

Many companies have known for a long time that good design is a quality criterion and thus a sales argument. But what exactly makes a well-designed product? Zec has his own rule of thumb. “Design has many facets. But four qualities are key: function, temptation, handling and responsibility.” Depending on what the product is used for, any of these qualities can come into the foreground or disappear into the background. “When all four qualities reach a balanced synthesis, we speak of good design.”

PURELY A MATTER OF TASTE

The challenge for designers is to create designs that represent this all-in-one package. A product must be self-explanatory and easy to use. The form should give clues as to function. A product should awaken emotions and – to put it simply – be fun to use. It must be pleasant to touch, as well as usable and long-lasting. What good is a pen that does not write? A product should be environmentally friendly when it comes to production, and also sustainable. And when we add the requirement that design concepts should also be feasible on an economic and technical level, then we get an idea of the hurdles that these products face until they find their way onto the market. Finally there is the question that ultimately decides whether a product will be successful: Does it appeal to consumers? “That is purely a matter of taste,” says Zec. A product can meet all rational characteristics of good design and still fail to meet the aesthetic requirements of the observer. “Much of this takes place at the emotional level.”

IT IS OKAY TO TOUCH

Coming back to the Red Dot Design Museum: It is visited by approximately 120,000 people every year. It is a place of contrasts. A car is suspended from the ceiling, surrounded by steam boilers. Chandeliers form a contrast to the fittings. Chairs and wooden chairs are surrounded by scaffolding and stones. The intention is that...
visitors experience good design and understand the quality of everyday objects. This is how the association that runs the facility, the Design Zentrum Nordrhein Westfalen, defines the mission of the museum. Most of the objects can be touched.

AGAINST THE ‘UGLIFICATION’ OF THE WORLD

There is tradition behind the exhibition. Sixty years ago, the Krupp company and the Bundesverband der Deutschen Industrie (BDI) established the ‘Verein Industrieform’ as a ‘protest against the uglification of the world.’ Krupp and the BDI recognized that they had to improve the image of German products after the war – with a consumer goods show, for example. In 1955, the ‘Ständige Schau Industrieform’ opened in the ‘Kleines Haus’ of the Villa Hügel, the ancestral seat of the Krupp family in Essen. Jumping forward in time: in 1990, the ‘Verein Industrieform’ became the ‘Design Zentrum Nordrhein Westfalen,’ dedicated to the promotion of design, art and culture. In 1997, the association moved into the converted boiler house of the Zeche Zollverein. In 2005 and 2013, additional Red Dot Design Museums opened in Singapore and Taipei respectively. Design ‘Made in Germany’ is going around the world. “The idea of German design is akin to a reference letter abroad,” Zec explains. “There are many

RED DOT DESIGN AWARD: ASSESSMENT CRITERIA

<table>
<thead>
<tr>
<th><strong>DEGREE OF INNOVATION</strong></th>
<th><strong>DURABILITY</strong></th>
<th><strong>ECOLOGICAL COMPATIBILITY</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the product new or does it feature a new and desirable quality?</td>
<td>Is the product designed for a long service life?</td>
<td>Are materials, cost of materials, production and energy consumption proportionate to the benefit offered?</td>
</tr>
<tr>
<td><strong>FORMAL QUALITY</strong></td>
<td><strong>SYMBOLIC AND EMOTIONAL CONTENT</strong></td>
<td><strong>SELF-EXPLANATORY QUALITY</strong></td>
</tr>
<tr>
<td>What is the relationship of form to function?</td>
<td>What does the product offer in terms of sensual quality?</td>
<td>How intuitive is the product?</td>
</tr>
<tr>
<td><strong>ERGONOMICS</strong></td>
<td><strong>FUNCTIONALITY</strong></td>
<td><strong>PRODUCT PERIPHERY</strong></td>
</tr>
<tr>
<td>Does the product adapt to the user?</td>
<td>Does it meet all requirements (handling, usability, safety, ease of maintenance)?</td>
<td>Have packaging and waste disposal issues been addressed?</td>
</tr>
</tbody>
</table>
exceptional designers in the German market who have become very well known on the international stage and are considered luminaries in their field.” German products and companies are known for their consistency and their recognition value. These are criteria that are very valuable in a highly competitive global environment.

One thing is clear — the design world continues to change. “Design is driven by a constant optimization process,” says Zec. No product is so perfect that it could not be improved upon.

Dr. Peter Zec, born in 1956, is a design consultant, author, speaker and columnist. He has been in charge of Design Zentrum Nordrhein Westfalen since 1991. Between 2005 and 2007, he held some of the top official mandates in the design world: President of the International Council of Societies of Industrial Design (ICSID) and Chairman of the International Design Alliance (IDA). From 1993 to 2010, he also taught business communication at the University of Applied Sciences in Berlin. In 2006, ‘WirtschaftsWoche’ magazine honored him as one of the ‘20 creative lateral thinkers who changed the face of their companies or created entirely new markets.’ Zec has three children and lives in Berlin and Essen. He admires designers Charles and Ray Eames for their seating furniture and loves to think about how the properties of a glass influence the taste of wine.

INFO: HTTP://EN.RED-DOT.ORG
As an internationally active company, Sirona has just invested in a new instrument production line in Bensheim. Why there rather than in a region that offers more competitive production conditions?

— We produce large, precision-engineered series while simultaneously taking into account a certain number of variants and extremely high quality requirements. This is only possible in Central Europe because these processes require an extraordinarily high level of experience and education, a highly-developed engineering sector and suitable suppliers who provide high quality parts in small to medium quantities. These things are not available everywhere, also not always in the same composition or with the same material properties. Only skilled workers are able to correctly assess the impact of a change and the interaction between machine and material.

What is Sirona doing to educate its workforce?

— Bensheim offers a great pool of well-qualified workers who simply need to be taught the required specialized knowledge. But we also invest considerable sums in providing extensive apprenticeships to our 120 apprentices and also offer positions for graduates from dual courses of studies, who usually already have professional training when they start their studies.

How does Sirona ensure the high quality of its products?

— Germany imposes high industry standards for quality management and Sirona meets all of these requirements. But there is also something else that plays a key role in this regard: our work never ends. We constantly try to improve ourselves and our products, while simultaneously maintaining a competitive advantage. This is not a trivial matter. To this end, we continually review our structures along the entire value chain from the supplier to the customer. The reality of constant change always offers new opportunities for the further development of our technologies and to distinguish ourselves from the competition.

Bensheim is home to the largest production site in the dental industry — despite the trend toward globalization. Or perhaps it is precisely because of this trend. According to Rainer Berthan, Executive Vice President at Sirona and Managing Director at Bensheim, this well-established German location not only offers research and development but also the best production conditions.

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Why is a well-educated workforce so important for quality?

— High-precision parts do not have a lot of tolerance. Based on my experience, the thing that is lacking in Asia is the understanding and skill to accurately adjust machines over and over again. These types of operations and the process of independent quality control require a lot of knowledge, for example about the quality of materials. This knowledge is not available everywhere, also not always in the same composition or with the same material properties. Only skilled workers are able to correctly assess the impact of a change and the interaction between machine and material.

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PROFILE

Rainer Berthan has been the Executive Vice President and Managing Director of the Bensheim plant since August 2012. Previously, the business administration graduate held top management positions at machine builder Demag Cranes, at the Chinese subsidiary of the German electrical engineering group Weidmüller, at the supplier of cellular network infrastructure New Tech Com Europe and also at RWE and Daimler-Benz.
1860  Edouard Heuer founded his workshop in the Swiss Jura.
1916  First mechanical stopwatch accurate to 1/100th of a second.
1963  Jack Heuer designs the Carrera Series.
2014  Carrera Automatic Flyback Chronograph Calibre 36.
Since left-handers naturally move in a different way to right-handers, there are left-handed centers that are tailored to their needs, such as models C4+, C5+ and C8+ Turn from Sirona. But there are also many left-handed people who intentionally choose right-handed products — especially if they work with right-handers in a group practice. “In this case, right-handed centers with flexible support arm systems and adjustment settings, such as the SINIUS TS, offer the ideal solution,” says dentist Dr. Sigrid Frank.
Many things we encounter in daily life are tailored to right-handed people: scissors and can openers are designed to be operated with your right hand, in cars the gear stick is operated from the right and the spout on a ladle is located on left-hand side, allowing right-handers to pour the sauce forward while left-handers are forced to perform this operation backwards. As a left-hander, these and many other situations have led me to become used to making adjustments. It is much the same in my daily work life, as I sit on the same side as my right-handed colleagues. It is not easy because everything is farther away from my working hand. It means that I would need longer hoses and more reach distance in many treatment centers and the tray table would be in my way during treatment. Sometimes I have to watch that it doesn’t end up in the patient’s face, or I have to move it very close to the patient.

**FLEXIBLE SYSTEMS ALLOW FOR CUSTOMIZED ADJUSTMENTS**

When left and right-handers share a treatment center, it helps if all elements can be independently adjusted. This means that height differences, such as between myself and my husband, are no longer a problem and that both the practitioner and the assistant can adjust everything to their individual needs. This allows for an ergonomic work posture and optimized reach distances. Our new center, the SINIUS TS, is a very good example of this. The center features a dentist element with hanging hoses and a separate tray. It offers the advantage that the practitioner can adjust each element independently – not just horizontally, but also vertically. In addition, the dentist element is now within easy reach and can be easily moved into the desired position thanks to the pneumatic brake. The SINIUS TS also makes it easy to save these settings, so you simply have to select the correct practitioner. This is done using the EasyTouch user interface that is integrated in the dentist element and allows for the fast and easy selection of various functions.

**LEFT-HANDED CENTERS ARE NOT PRACTICAL FOR GROUP PRACTICES**

Of course there are treatment centers that are tailored to left-handers but they pose more of a challenge than a benefit for our practice: my husband and I work in a group practice and use different rooms for different treatments. Therefore, we want to be able to work in all rooms. Moreover, the entry position on the treatment chair is usually on the side closest to the door through which the patient enters the room. If the center was designed for a left-handed person, the patient would have to walk around the entire center or the room would have to be set up differently. Another factor is that most dental assistants, like most people, are right-handed. If the dentist element is tailored to a left-handed person and the assistant element to a right-handed person, treatment becomes difficult. For these reasons, I have accustomed myself to working on treatment centers for right-handers.

---

**ERGONOMIC POSITIONING**

- The dentist element of SINIUS TS can be easily set to any position between 8 and 12 o’clock.
- The dentist element offers a vertical movement range of 420 millimeters – for sitting and standing treatments, without limiting patient legroom.
- Functional clip system for removal of the tray and rotary handle for intuitive height adjustment.

---

The model with hanging hoses allows for flexible positioning of the dentist element. This also allows left-handers to perform treatments while maintaining an ergonomic posture.
It is no longer only American coffeehouse chains that try to lure customers with free WiFi – this practice is also becoming increasingly popular among dental offices. The younger generation in particular appreciates the ability to utilize waiting times with their smartphones or tablets. But wireless data transfer is not only a good service for patients, it is also well suited for optimizing practice workflows. Thanks to recent developments in IT, it is no longer very difficult to convert from analog to digital technology.
Digital practice networks, which allow for centralized collection and storage of data, have been around for over 20 years. They offer the benefit of being available at each workplace for different uses: diagnostics, consultation, therapy, documentation, archiving, administration of patient data and billing. This saves a lot of time, not to mention space. What used to be relatively cumbersome in the days when practices could only be linked with a cable network is now quick and easy thanks to rapid technological advances in IT and dentistry. Digital technology offerings are becoming ever smarter. For example, wireless connections now enable smaller and simpler solutions that do not require the re-engineering of the entire practice.

DIGITAL TECHNOLOGY OFFERS ADVANTAGES FOR RADIOGRAPHY

The shift in the case of radiography is particularly relevant to daily practice routines, as classic film has been replaced by digital panoramic x-rays and intraoral exposures. Sirona offers the high-resolution intraoral sensor XIOS XG Supreme in three sensor sizes and with a wireless PC connection. Therefore, it can be adjusted to each patient’s individual anatomy and, moreover, is so simple to position that the entire practice team can easily learn this task. Sensors also offer other advantages – otherwise it would be hard to explain why almost half of all dentists are already working with them. In addition to brilliant image quality, sensors also offer an efficient workflow: in contrast to analog x-rays, where treatment is interrupted for the development of the film, digital images can be immediately retrieved on a monitor. Sharpness, contrast or brightness levels can also be changed with the click of a mouse if required for different diagnostic areas.

A particularly easy and cost-effective network variant consists of a PC with diagnostic monitor, which may be installed near a digital panoramic x-ray machine, and a router to secure a stable WLAN connection to mobile devices – such as an iPad with special SIDEXIS iX software. This does away with the need for cables in the practice while simultaneously ensuring that all information is available on a mobile basis – wherever it is needed. It can also establish the exposure readiness of digital x-ray units. After an x-ray image has been taken using a WiFi sensor, the practitioner can access the image in the original database on the PC and also in the SIDEXIS iX app for immediate viewing. Using SIDEXIS iX, the dentist has direct access to intraoral and panoramic x-rays in his database, which he can also immediately use for patient consultations on his iPad. Therefore, the solution has minimal installation requirements. No cables have to be installed in walls, everything is simply ready to go.

SOME CALL IT WIFI, OTHERS CALL IT WLAN.

WLAN (Wireless Local Area Network) is a wireless network for short distances. A consortium of companies has established a joint wireless standard to ensure that devices from different manufacturers can communicate with each other (IEEE-802.11). This consortium guarantees that WLAN compatibility can be secured through the WiFi interface (Wireless Fidelity). The WiFi logo can only be applied to equipment produced by participating manufacturers, which has been successfully tested under the conditions of the consortium.
MODEL S

MAXIMUM PERFORMANCE, MAXIMUM COMFORT, MINIMUM MAINTENANCE

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0 - 100 KM/H

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JOIN THE ELECTRIC REVOLUTION!
More than six million people worldwide suffer from temporomandibular joint disorders. The diagnosis and treatment of craniomandibular dysfunctions (CMD) has always been a complex and time-consuming process but the new SICAT Function software from SICAT, a subsidiary of Sirona, now offers an integrated workflow for the first time: The patient’s movement of the lower jaw is recorded using the associated Jaw Motion Tracker in a highly-precise process and merged with the GALILEOS 3D data in the software. What follows is a three-dimensional representation of the jaw in movement. This makes it possible to illustrate the spatial relationship between condyle and fossa during movement. After the diagnostic and planning process, practitioners can order a customized Michigan treatment splint from SICAT, using the movement, GALILEOS and CEREC data as a basis. For more information, see: www.sirona.com/sicatfunction

The high-pitched sound of turbines is not just a problem for patients. It also represents considerable noise pollution for dentists and the entire team, which can lead to concentration problems, stress or hearing loss. This is not only the result of operating and drilling sounds, but also due to the spray that is used for cooling, an independent acoustics study conducted by the Berlin engineering firm advacoustics confirmed. Most dental turbines were significantly louder when operated with spray, sometimes up to 10 dB(A), which is equivalent to doubling the noise level. The smallest differences in acoustic pressure were found with the Sirona turbines T1 Control S and T2 Boost S, which were only 2.2 or 0.2 dB(A) louder when using spray than without. The reason – Sirona’s turbines feature an innovative four-nozzle spray, enabling them to outperform the other devices. In the oral cavity simulation, the acoustic pressure of Sirona’s turbines was 60.1 or 61.1 dB(A). In contrast, competitor products reached values ranging from 63.5 to 73.8 dB(A).
Dentists who work with x-ray sensors appreciate, in addition to high image quality, the immediate availability of images. Therefore, it is practical to install x-ray units in treatment rooms so they can be accessed at any time. Now, however, the intraoral x-ray tube assembly HELIODENT PLUS can also be used on a mobile stand, in addition to wall or ceiling installations. The medium support arm length with a total reach of 1.5 meters is designed to cover all conceivable situations in the treatment center. The mobile stand is also delivered with an instrument holder that can accommodate a weight of up to five kilograms. It can be used for laptops, intraoral sensor systems or documents.

CEREC BLOCKS FOR A NATURAL SMILE

Most people associate a beautiful smile with the position, form and size of the anterior teeth, as well as bright and natural coloring. The special esthetics of chromatic dentin and translucent incisal edges made it very difficult to use monochromatic CAD/CAM blocks for a long time. The process is now facilitated with the introduction of the CEREC Blocs C In. The blocks feature an opaque core, which is similar to the natural dentin core, and an overlying highly translucent layer of enamel. To enable correct positioning of the restoration in the block, Sirona offers an algorithm that ensures a match with the tooth shade selected by the CEREC user. The milled restoration can then still be customized with paint colors. Now high-grade anterior teeth treatments can be produced chairside.

MILLING INSTEAD OF CASTING

Despite the success of dental ceramics in dentistry, more than half of all restorations are still performed with non-precious metals. The large number of cuts also harbors considerable potential for error. Things become much easier with non-precious metals that can be sintered for CAD/CAM production. Sirona offers inCoris CC for this purpose, a cobalt-chromium alloy that is machined on the inLab MC XL milling machine and subsequently sintered in the inFire HTC speed sintering furnace. Since the material is milled wet, there is no metal dust and no health hazard. The material is prefabricated, hence there are no voids or inclusions. The milling process is clean and a great fit for dental laboratories that specialize in esthetics and the processing of ceramics but also use metallic crown and bridge frameworks made with non-precious metals on the client’s request. A finished restoration is easily and cleanly produced from the design in very little time.

MOBILE IS KING

Dentists who work with x-ray sensors appreciate, in addition to high image quality, the immediate availability of images. Therefore, it is practical to install x-ray units in treatment rooms so they can be accessed at any time. Now, however, the intraoral x-ray tube assembly HELIODENT PLUS can also be used on a mobile stand, in addition to wall or ceiling installations. The medium support arm length with a total reach of 1.5 meters is designed to cover all conceivable situations in the treatment center. The mobile stand is also delivered with an instrument holder that can accommodate a weight of up to five kilograms. It can be used for laptops, intraoral sensor systems or documents.
THE NEW DNA
OF HIGH STRENGTH GLASS CERAMICS

www.degudent-celtra.com
www.dentsply-celtra.com
FRANK POERSCHEK / Crowns made of a metal-free material and with very little need for reworking – the efficient production of fully anatomical single tooth restorations made of lithium disilicate ceramics using CAD/CAM methods is already well established for the posterior tooth region. But until recently, ‘cut back technology’ was required to achieve an esthetically pleasing result in the anterior tooth region: the ceramic crown was reduced by one layer during the design, milled and then manually veneered.

CEREC BLOCS C IN IMPRESS IN THE ANTERIOR TOOTH REGION

The first CAD/CAM blocks with ceramic layers, which were graduated for opacity, translucence and color, were not altogether convincing because they lacked a smooth transition from dentin to the incisal edge. This has changed in the case of the new CEREC Block C In from Sirona, which features an interior, high-chromatic dentin core and a translucent surrounding layer of enamel. The material of the dentin core is very opaque and thus also covers discolored tooth stumps very well, excluding the possibility of them adulterating the shade of the tooth. The dentin core is surrounded by a translucent layer of enamel. The special structure of this block makes it possible to create a variety of esthetically pleasing results in the anterior tooth region, such as veneers and single-tooth crowns.

An algorithm integrated in the software ensures correct positioning of the restoration in the block, so that the shade and translucency selected by the user can be exactly matched. A complete anterior tooth restoration for a 42-year-old patient demonstrates how this creates a harmonious transition between dentin and incisal edge.

EFFICIENT AND ESTHETICALLY PLEASING ANTERIOR TOOTH RESTORATION

The algorithm for positioning the restoration in the CEREC block is activated during the material selection process. The user then runs through the familiar design process using inLab software: preparation margins are drawn in with computer support and biogeneric reconstruction of the missing tooth substance is activated. Dentists using CEREC Blocs C In proceed along the same lines using CEREC software. After the user has checked the restoration and made manual corrections where necessary, the desired tooth shade can be

The natural transition from chromatic dentin to translucent incisal edges is a real challenge for dentists and dental laboratories. It has become much easier thanks to CAD/CAM technology with CEREC Blocs C In and the new CEREC software.
Designing six anterior tooth crowns with inLab software.

1

InLab automatically generates the progression of dentin to incisal edge that is matched to the tooth shade.

2

Positioning of the design in the block preview.

3

Perfect anterior teeth esthetics.

4

Restorations with natural esthetics.

5

selected in the color center. With regard to the incisal edge variation, the dentin core can be adjusted in an incisal or apical direction to suit the condition of the adjacent teeth in the patient’s mouth. To do this, the user clicks on ‘Incisal edge’ during the ‘Select color’ step and then uses a slider to adjust the incisal enamel portion over the dentin core. The algorithm in the software now positions the crown in the block in accordance with the selected parameters. In another step, a design tool can be used to adjust the amount of texture on the surface of the crown. This step can be used to achieve very natural looking light refractions. The design process is now complete. Following a last quick look at the milling preview, the user can then start the milling process with inLab MC XL or CEREC MC XL.

The milled crown does not need any additional layering. It is also not necessary to customize it with paint. Instead, the user can polish the ceramics to a high gloss finish using a handpiece. At the same time, glaze firing is recommended to achieve an esthetic look at minimal cost. In this case, we therefore simply corrected the proximal contacts and then performed a glaze firing process. The result: the crowns achieve a pleasant esthetic effect with a standard coating.

PROFILE

Frank Poerschke
Since 2007, the dental technician has been running his own dental laboratory, where he established the 'Trying out dental prostheses' treatment concept. Poerschke is a certified consultant for the TiF concept (total prosthetics in function) and also works as a consultant for the master school in Trier and various companies.
Dentistry is changing around the world. And not just because digital technology has given rise to entirely new treatments. People now have very different needs. Many patients no longer go to the dentist to treat clinical defects, but instead hope to improve their appearance with cosmetic corrections. Dr. Çağdaş Kışlaoğlu in Istanbul has also been observing this trend. In some ways, you could say that he is partly responsible for this development.
The door to the treatment room opens. In comes Emel Acar, a presenter from Show TV, with a female patient. As part of the reality TV show 'Emel Acar ile Yeniden,' the Turkish channel shows viewers every week how a team of fashion, cosmetics and nutrition consultants work with plastic surgeons to improve a woman’s appearance. Dr. Çağdaş Kışlaoğlu is also part of the group if the patients require cosmetic corrections to their teeth. He knows how important beautiful teeth are to a patient’s self-confidence, and the extent to which they contribute to well-being and general health. He greets his new patient, establishes the indication and explains the recommended treatment. This specific case calls for correcting gaps between her teeth and misalignments in her upper jaw. The patient sits down and Dr. Kışlaoğlu begins with the preparation.

Reality TV shows are popular in many countries, but dental procedures are rarely shown. This is not the case in Turkey. In the metropolis of Istanbul, which is home to 15 million inhabitants, people are very interested in all things esthetic. For many years now, the trend towards cosmetic dentistry has been similar to that seen in the United States. At the same time, many people have low incomes. Women especially save for many months to be able to afford treatment. “In my part of the show I explain everything – I want to make sure people understand what I do,” says Dr. Kışlaoğlu. “This means that people learn a lot about modern treatment options and see what is possible. As a result, there has been a growing interest in cosmetic dentistry.”

In the meantime, Dr. Kışlaoğlu has finished the preparation and begins the digital impression. The 37-year-old has been working with CEREC for almost two years. He is now a certified CEREC trainer and teaches courses to peers who are new to CAD/CAM technology. He tells them how practical it is to be able to take care of many indications in one session. “It facilitates treatment, as is the case with today’s patient. When she leaves in a few minutes, the treatment will be complete,” says Dr. Kışlaoğlu as he monitors the CEREC software that is now converting the image data into a virtual model. He uses this data to construct five veneers on the monitor and then sends the design data to the milling machine and inserts a small ceramic block.

Dr. Kışlaoğlu has inherited his penchant for esthetic dentistry from his father, so to speak. His father is a plastic surgeon. “I watched him operate when I was a child. From an early age it was clear to me that I would either become a plastic surgeon or a dentist,” Dr. Kışlaoğlu recalls. Even while he was still in school, he realized that both professions could complement each other. He completed some of his schooling in London, attended high school in California and got a dual high school diploma. He then studied dentistry at Marmara University in Istanbul. After a few years of working in prosthetic dental treatments, he opened his practice in 2000. At this point, he was able to turn his vision into reality and join his father in helping people improve their appearance. Dr. Kışlaoğlu: “A beautiful smile affects one’s social life and increases professional success.”

This was the case for the girlfriend of Volkan Demirel, the goalkeeper for Fenerbahçe Istanbul soccer team. She visited Dr. Kışlaoğlu’s practice in 2009: “She was planning to participate in a beauty contest in Belgium. I helped her and she won.” After that, more girlfriends/wives of the players came to Dr. Kışlaoğlu’s clinic. “They, in turn, sent their husbands and boyfriends. In a way, you might say that I became the team dentist for Fenerbahçe,” Dr. Kışlaoğlu says proudly. In the meantime, he has applied the veneers and handed the patient a mirror. Her smile tells him that she is satisfied, and presenter Emel Acar is also pleased with the successful outcome of the live treatment.
Implants are associated with risks, especially if they are not preceded by a diagnosis with three-dimensional x-ray images. The integration of x-ray data and prosthetic planning, along with the preparation of a drilling template, offers more security.

**DR. ANDREAS FUCHS-MARTSCHITZ** / While many of us already exploit all of the possibilities of modern communication as part of our daily lives, in a time when information about the newest fashion trends reaches even the most remote locations and people keep in contact with friends from all over the world via social networks, most dentists are still not consistently using digital technologies in their daily work life. These technologies offer incredible advantages for dental practices: safe treatments and better diagnostic options, as well as information that is easier to understand, allowing patients to become more involved and making them more likely to consent to the recommended treatment. These advantages are particularly evident in the case of guided implantology using drilling templates. With Sirona as a systems supplier, dentists not only have entirely new diagnostic options for three-dimensional radiography at their disposal; the integration of perfectly aligned systems also results in totally new treatment approaches that can be implemented in a simple and rapid workflow. To do this, dentists require a DVT from Sirona (GALILEOS or ORTHOPHOS XG 3D) and a CEREC imaging unit with Bluecam or Omnicam. The process can be demonstrated with the case of a 63-year-old patient, who was no longer satisfied with the removable dental prosthesis in his upper jaw (region 16/17, 26/27). We decided on an implant-supported restoration that was made and inserted using the SICAT Optiguide method.

Conclusion: An uncomplicated workflow allows us to work very efficiently and hence profitably with a higher level of clinical safety. The treatment is well accepted by patients and increases patient trust and loyalty. In addition, the digital process also makes it easier to archive and document the treatment.

**CASE STUDY**

A 3D x-ray image with ORTHOPHOS XG 3D confirmed that there was enough substance for an implant-supported restoration despite signs of bone resorption. Therefore, nothing stood in the way of the patient’s wish to replace the existing removable treatment.

**CEREC** software uses digital impressions to create a virtual model that forms the basis for the recommended prosthesis. This recommendation (biocompatible initial suggestion) can still be edited by the dentist if required.

The recommended prosthesis is imported into the implant planning software GALILEOS Implant. The implants are planned once the data sets are merged – in this case an implant system from Biomet 3i was selected. The dentist then uploads the planning data.
THREE METHODS OF GUIDED IMPLANTOLOGY

CLASSICGUIDE. In the case of the CLASSICGUIDE method, the dental technician prepares a deep drawing splint, which the proposed crown is integrated into, and attaches it to a bite block plate. The patient wears this x-ray template during the 3D x-ray imaging; the reference balls on the bite block plate allow for optimum localization later on when the drilling template is produced. After the implant planning process, the dentist sends the three-dimensional x-ray data, including the planning data and the x-ray template, to SICAT; a drilling template is ready within a few days. This method is used for toothless jaws, large gaps or significant metal artifacts.

OPTIGUIDE. In the case of the so-called OPTIGUIDE process, the CEREC user can use CEREC to create an impression of the tooth situation and construct a prosthetic proposal. He imports the CAD data into the implant planning software and merges it with the 3D x-ray data from a Sirona DVT. This makes it possible to coordinate surgery and prosthetic planning on a virtual level. The user then uploads the digital planning data to SICAT for the creation of the drilling template. This method is used in the case of missing single teeth.

CEREC Guide. CEREC users with milling machines can also make their own drilling templates using the CEREC Guide method. In this case, the dentist covers a plaster model with heated thermoplastic material and inserts a reference unit approximately where he plans to put the implant. The resulting scan template in the mouth is used to create a DVT, which is then overlaid with CEREC data in the GALILEOS Implant software, and the implant is planned. The planning data is exported into CEREC software and used to make the drill sleeve on the milling machine. It is then inserted into the scan template, instead of the reference unit, and provides the finished drilling template. CEREC Guide is particularly suited to single tooth treatments.

After one week, the practitioner receives the drilling template prepared by drilling template manufacturer SICAT. Now the implant can be executed very precisely. It allows for flapless (minimally invasive) work. It speeds up healing and increases patient comfort.

For definite treatments, the implant was exposed after healing and screwed on a Sirona ScanPost, which is used to determine the precise position for the preparation of abutments and implant crowns.

The prosthetic treatment is provided after using CEREC Omnicam to create a digital impression. To this end, we design a crown, divide it into abutment and crown in the data set and mill both the abutment and the restoration from two different small ceramic blocks.

PROFILE

Dr. Andreas Fuchs-Martschitz
He specializes in dentistry and oral medicine and is a specialist for periodontology and implantology. He is a certified ISCD Trainer, a founder of the ÖGCZ and a board member for a number of dental companies in Austria. Dr. Fuchs-Martschitz introduced CEREC in his practice in 2002.
Dentists and dental technicians work as a team. The result can only be perfect when everyone does their best and when frictional losses are prevented at important interfaces. Leonardo Amorfini (dentist) and Massimo Merli (dental technician) from Lombardy in northern Italy are one such team and have optimized their collaboration using digital impression technology. Here they tell Vision Magazine what they have done to accelerate and standardize their processes.

DR. LEONARDO AMORFINI & MASSIMO MERLI / Rapid communication has become a fixed part of our social lives. Our smartphones have become an easy, fast and affordable way to post information, as well as send messages and pictures. More and more dentists want to take advantage of the benefits of digital technology in their daily practice routines. Fortunately, the number of labs that are ready and willing to use modern approaches is on the rise. Now dentists do not have to forego the dental technician’s expertise and the customary excellent esthetics and precision of the technician’s work if they want to use modern technologies. An important prerequisite is that systems used are completely compatible and that no frictional losses occur at the interface. It also helps when the dentist can use an online portal to send data directly to the lab without losing the time required to send a CD by mail. That’s why we use Sirona technology, which consists of APOLLO DI for digital impressions in the practice and the inLab system for production in the dental lab. Our
More of an office than a lab: Massimo Merli concentrates on the CAD/CAM production.

Dr. Leonardo Amorfini uses high-tech dental systems in implantology.

In 2007 when we had to create a secondary part for an implant project using CAD/CAM. Back then we were the only ones in the region – completely independent from one another – who did that sort of thing.

Given the proven clinical reliability, high degree of precision and constantly increasing technological possibilities, the next step in expanding our collaboration beyond CAD/CAM was a done deal. Even then, we only made our decision to purchase an impression system after conducting an elaborate test. In addition to the system’s cost effectiveness, the deciding factor in favor of APOLLO DI was that it is easy to use: The dentist applies a very thin layer of contrast spray to the teeth and then smoothly moves the intraoral camera around the mouth to take an impression of the jaw. After inspecting the virtual model, the data is sent to the dental technician via the Sirona Connect portal. The entire process is supported by an intuitive menu that the dentist controls with a touchscreen, which can even be operated while wearing gloves. The dental technician loads the digital model data from the Sirona Connect portal and processes it using the inLab system from Sirona. Thanks to the fast data transfer, the virtual model is immediately available to the dental technician. If needed, this means that the dental technician can immediately start discussing the best prosthetic restoration with the dentist and clarify any questions while the patient is still in the treatment chair. This also means that miscommunication can be avoided. The distance between the practice and the laboratory, which is about 50 kilometers in this case, has become virtually irrelevant.

The APOLLO DI has proven itself: we have a closer partnership and the workflow has become easier and faster. By optimizing our processes, we have also been able to lower costs. We are now using digital impressions in seven out of ten cases – and this trend is on the rise.

“THANKS TO DIGITAL IMPRESSION, I CAN WORK MORE PRECISELY AND MORE ACCURATELY WHILE BEING MORE PRODUCTIVE. I DON’T USE FURNACES OR INVESTMENT MATERIALS ANYMORE.”

Massimo Merli

A video with information and tips for the scanning process with an APOLLO DI camera.

IN PRACTICE — DAILY PRACTICE PAGE 31

PROFILE

Dental technician Massimo Merli has run a dental laboratory in Bellusco, north-east of Milan, since 1998. He introduced the inLab system from Sirona in 2005 and has been working exclusively with CAD/CAM technology since 2012. The certified inLab trainer also offers CAD/CAM courses for dental technicians.

PROFILE

Dentist Dr. Leonardo Amorfini has been practicing dentistry at a group practice with Dr. Corrado Moro in Gallarate (south of Lake Maggiore) since 2005. He specializes in implantology and oral surgery and is a member of various professional associations for implantology and periodontology (ITI, SIO, EAO and AAP).
The age of the smartphone is accompanied by the development of apps – applications that have been optimized for mobile devices and provide quick access to internet-based information. The market is booming: more than two million apps are available for download in the largest app stores. The dental segment also offers many applications for smartphones and tablets – for both patients and dentists. They range from funny games and useful software to comprehensive technical and informational offerings. Selected applications will be presented in each edition of Vision Magazine.

**DENTALNAVIGATOR**

**Apple:** free of charge, indications only available through in-app purchases  
**Android:** not available  
**Languages:** English  
**Compatibility:** Requires iOS 3.2 or newer. Compatible with iPad  
**Developer:** Dr. Jean Bausch GmbH & Co. KG

Patients cannot always picture what a recommended treatment actually involves. Now dentists can use the ‘DentalNavigator’ app to explain various treatment methods using interactive videos. The app features a modular design and allows for interactive control of 3D animations in real time via the display. The free version provides an insight into the app’s display and operation. Animated illustrations of various indications must be purchased separately.

**AG KERAMIK**

**Apple:** light version is free, full version € 14.99  
**Android:** to be released shortly  
**Languages:** Bokmål, Czech, Danish, Dutch, English, Finnish, French, German, Italian, Norwegian, Polish, Portuguese, Spanish, Swedish  
**Compatibility:** requires iOS 4.3 or higher, compatible with iPad  
**Developer:** Arbeitsgemeinschaft für Keramik

Do ceramic restorations require different preparation? What material is used for different indications? What attachment options are there and what are their advantages and disadvantages? These, and many other questions, are answered by the clinical guideline ‘Full ceramics at a glance.’ It introduces the author’s clinical longterm results, as well as step-by-step explanations and chemical background information. Illustrative image material also shows clinical results, the required systems and the various work steps.

**TOOTHBRUSH GAMES**

**Apple:** free  
**Android:** not available  
**Languages:** English, German  
**Compatibility:** requires iOS 6.0 or higher, compatible with iPad  
**Developer:** Ogilvy & Mather Deutschland GmbH

There are not many kids who rate brushing their teeth as a favorite activity. But this may change with ‘Toothbrush Games,’ where the game starts as soon as the app registers the sound of a toothbrush. It allows the child to slip into the role of a fireman to extinguish a fire or work as a zookeeper to wash the animals at the zoo. And there is no fun without work: the game stops when the child stops brushing. A must-have for all parents.
As part of a large-scale field study, Dr. Sebastian Werner from the Hygiene, Social and Environmental Medicine department at Ruhr-Universität Bochum, in collaboration with colleagues from Schwerin and Wuppertal, was successful in demonstrating the contamination of instruments after use. To this end, 152 instruments were sealed at the practice immediately after treatment, taken apart under laboratory conditions and examined to determine residual protein content. Protein content of up to 1,300 micrograms (μg) BSA per instrument was confirmed, and as much as 2,600 μg (BSA) in exceptional cases.1 These results are significantly higher than the standard maximum value of 100 μg BSA per instrument that is deemed to be hygienically safe.2 Therefore, an instrument may only be used without concern if it is prepared after each patient.

The combined autoclave DAC UNIVERSAL from Sirona offers a hygienically safe, practice-conforming and gentle method. The DAC UNIVERSAL is the only preparation system for rotating transmission instruments. It works with a thermal process and is recognized as a verifiable machine-based method by all authorities who conduct practice inspections. Thanks to its rapid process times and particularly gentle preparation of the instruments, it not only offers legal security for instrument preparation, but can also be used in daily work routines in a way that reduces costs.

Sirona has compiled a lot of information on the issue of instrument preparation in the ‘Hygiene Information Folder.’ This information folder offers practical information for risk assessment of instruments, planning of preparation processes and validation. It is available for download from the Sirona website.


What is the connection between sports and dentistry?
— In both disciplines, there is no such thing as a little thing – because even little things can lead to failure. There are no coincidences and it is not someone else’s fault when something goes wrong. Responsibility for the result rests solely with me. Therefore, I decided that I would never neglect anything in my profession or in sports. Diligence and precision are decisive factors from the very beginning.

What motivates you to achieve maximum performance?
— The joy of perfection. It is a great feeling to know that I did something absolutely perfectly.

What makes dentists successful in their work?
— Continuous improvement. To this end, it is not important to change too many things at once. Rather, it is akin to turning an adjusting screw and taking a look. If you are happy with the effect, you can work on the next screw. If you try to do too much all at once, you end up with nothing at the end.

What do you think a dental practice will look like in ten years?
— Dentistry is like an individual sport. It depends on the personality of the dentist and his relationship with his patients. Nothing can replace the experience that is gained during the course of a career. Dental technologies, such as digital systems, are an important pillar of dental treatments. Technical development will continue to progress in areas where it makes sense. However, technology will never replace dentists as competent practitioners.

Be honest: are you afraid of going to the dentist?
— For me this is not a problem because my uncle works at the practice and we have the comfortable Sirona chairs (laughs). But seriously: I was very lucky that my father was also a dentist. So I learnt from a young age not to be afraid of the dentist.

What is your life motto?
— Always be modest.

Whether sitting on his gelding Marius or in the dentist’s chair, Hinrich Romeike always remains calm, confident and natural. Just as he was after winning two gold medals in event riding at the 2008 Olympic Games in Beijing. Five questions for a famous dentist.

What is the connection between sports and dentistry?
— Dentistry is like an individual sport. It depends on the personality of the dentist and his relationship with his patients. Nothing can replace the experience that is gained during the course of a career. Dental technologies, such as digital systems, are an important pillar of dental treatments. Technical development will continue to progress in areas where it makes sense. However, technology will never replace dentists as competent practitioners.

Hinrich Peter Romeike has been working as a dentist and oral surgeon at a practice in Rendsburg since 1994; he operates the practice with two partners. He also works as an oral surgeon and attending physician at Rendsburg Hospital. Romeike studied dentistry in Kiel. Between 1990 and 1993 he continued his training to become an oral surgeon. In 2001, he acquired the Curriculum Implantology certification from the DGI. Romeike spends a good deal of his free time as an event rider: at the Olympic Games in Beijing he won a gold medal in both the individual and team events and was thus the most successful German athlete of the 2008 games.
COMPUTATION
Competition, preview, legal notice

MISCELLANEOUS

SERVICE

Five questions for … Hinrich Romeike

INDUSTRY

Patient service, expertise, fun facts

DENTAL APPS

GOOD TO KNOW

Interaction of lab and practice

DAILY PRACTICE

Implants are becoming even more safe

CASE STUDY

Perfect anterior esthetics with full ceramics

FULL CERAMICS

Perfect anterior esthetics with full ceramics

REALITY TV

Dentistry on Turkish TV – Dr. Çağdaş Kışlaoğlu

PRODUCT INNOVATIONS

Systems, units, materials

SUDOKU PUZZLE

The 9x9 grid has to be filled with the letters A, E, I, L, M, Q, T, U and Y so that each column, each row and each of the nine 3x3 sub-grids contains each letter only once. The letters in the yellow squares add up to the solution. Have fun!

Please send your solution by email to vision@sirona.com or by regular mail to Sirona Dental GmbH, Sirona Straße 1, 5071 Wals/ Salzburg, Austria. The submission deadline is October 31, 2014.

GOOD LUCK!

All Sirona and ergo Kommunikation staff, as well as all persons involved in the organization of the competition, are excluded from participation. The name of the winner will be published in the next edition of Vision Magazine. Legal recourse is excluded.

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