



INNOVATIONS FOR DENTAL HEALTH



OPENING REMARKS BY THE MANAGEMENT

A company is only as good as its people. Straightforward, pragmatic and reliable – character traits traditionally associated with those born in the region where our company is based. And they are also features we regard as characteristic of our corporate culture and essential to our success. It's the only way we can explain how VOCO, thanks to the expertise and dedication of our employees, has developed to become a leading international supplier of premium, user-friendly dental materials.

As an owner-managed family company, our focus is not on quick returns but on a steady increase in value. We achieve this by consistently addressing the needs and desires of our customers; in return they continue to place their trust in our high-quality products "Made in Germany". This also means ongoing investment in research and development, intensive training courses for our dental consultants, and a comprehensive range of services for those professionally engaged in dentistry around the globe.

We take our obligations towards our workforce, customers and business partners very seriously. Only by cooperating with them can we continue the VOCO success story and keep producing reliable and practical products for modern dentistry in future. This is our motto both as Dentists – specialists in dental materials – and as second generation company owners.

The VOCO management



Manfred Th. Plaumann

Ines Plaumann-Sauerbier

Olaf Sauerbier



“The answers to our problems can be found by looking to the



future, not to the past.”

Frederic Vester (1925-2003),
German biochemist and
environmental scientist

VOCO – THE DENTALISTS

Modern dentistry requires dental products that offer the highest level of material quality and usability. Practical, efficient solutions are key. Here at VOCO that's exactly what we're about. We see ourselves as Dentists – dental material specialists. This field is therefore our sole focus; we dedicate all our efforts to serving dentistry. As an independent, owner-managed family company we pursue this aim with integrity and efficiency, relying in the process on the expertise and commitment of our entire workforce.



At the service of dentistry – worldwide

VOCO has been supplying dentists around the world with high-quality dental materials since 1981 and is regarded as one of the world's leading manufacturers within the sector. Fielding a comprehensive portfolio of more than 100 products, we supply dental practices and dental laboratories in over 100 countries with medicinal products and medical devices "Made in Germany" for prophylactic, restorative and prosthetic dentistry. With our prophylactic products, restorative, materials in a range of classes, fissure sealants, core build-up, crown and bridge materials, we enjoy a high-profile market position in numerous countries.



Business activities start in Cuxhaven with 22 products, incl. Amalgam Liner (insulating varnish for amalgam restorations)

1981



Traypurol cleaning concentrate

1984



Meron, glass ionomer luting cement

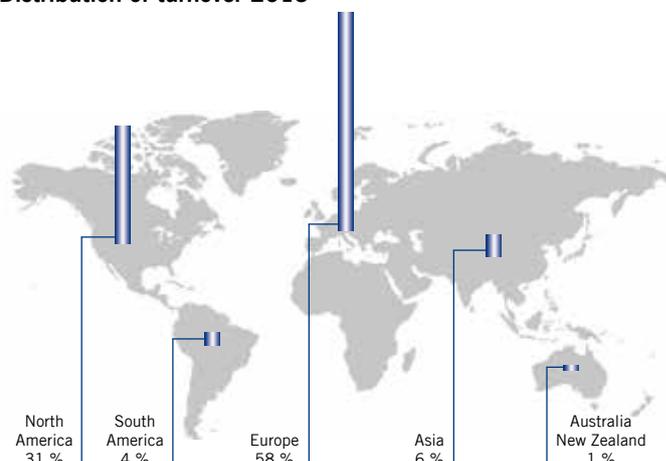
1986

A GLOBAL PLAYER'S ASCENT

VOCO began life as a small family concern supplying a handful of products to dental practices and laboratories. The business evolved quickly – thanks to on-going investment in research and development, not to mention steady expansion of sales. The growth of research and manufacturing activities and a rising number of employees led the move of the company into purpose-built premises in 1992. Construction work to extend the facilities in 1997, 2005, 2013 and 2017 now sees production, administration, as well as research and development areas grow to occupy a total of approximately 39,000 m².

The prestigious new main building, inaugurated in 2013, features an integrated training centre and exclusive conference suite, not to mention the research and development

Distribution of turnover 2015



department's complex equipped with cuttingedge laboratory technology. With this, VOCO is reflecting the expansion of its business in concrete terms, and is in the best position to meet the growing challenges of the global market and the increasing expectations of an international community of employees and customers alike.

"VOCO products have consistently proved their worth in my day-to-day practice.

They're easy to use and allow me to treat my patients with confidence."

Prof. Dr. Jürgen Manhart, Munich, Germany

Internationally successful

VOCO is a company with a pronounced international focus and is a presence on almost all the world's markets. Exports make up more than seventy five percent of total sales. Every year VOCO attends more than 200 trade fairs and congresses in Germany and abroad. VOCO currently employs approximately 400 people in Germany, with some 390 specialist dental consultants representing VOCO abroad – and this is set to increase. VOCO's rapid growth is an ongoing success story and is the result of a corporate strategy that is both visionary and global in focus. It is the pursuit of this strategy which has enabled us to acquire the level of status now held by the VOCO brand throughout international markets.

From the outset we made the continual expansion of our research and development department a priority. Not a year has gone by in which VOCO has not launched several groundbreaking new products. Along with the consistent development of new and innovative products, the permanent expansion of sales and associated customer proximity have made up the formula for success. A focus on penetrating new markets has boosted sales considerably. In addition to Germany and the rest of Europe, the core markets for VOCO products these days include the USA and Canada. At the same time, our market shares are growing in Asia, Central and South America, as well as in Australia.



Bifluorid 12, the world's first fluoride varnish for the prevention of caries and desensitisation with calcium fluoride and sodium fluoride



Proviscol, the world's first temporary luting cement with calcium hydroxide



Calcicur and Calcimol, calcium hydroxide preparations



Ionoseal, the world's first light-curing glass ionomer composite cement in syringe form

1988



Fluoridin N 5, dental suspension for caries prophylaxis

1991



Ufi Gel P, non-hardening, cold-cured, silicone-based relining material in tubes

1992

QUALITY PRODUCTS FOR DENTISTRY

VOCO supplies a wide range of premium medicinal products and medical devices for prophylactic, restorative and prosthetic dentistry. The bulk of the VOCO portfolio is made up of resin-based restorative materials and glass ionomer cements, core build-up materials, materials for producing temporary crowns and bridges, adhesives, fluoride-containing varnishes for the prevention of caries and desensitisation, as well as fissure sealing products.

Comprehensive product range for dental practices

In the field of prophylactic dentistry, the VOCO range includes fissure sealants, fluoride preparations for caries prophylaxis and products for treating sensitive tooth necks. In terms of restorative dentistry, our focus is on restorative materials. VOCO supplies this area with products in a range of material classes, such as composites, compomers, ORMOCER®e and glass ionomer cements. Combined with modern adhesive systems and other optimally coordinated restorative treatment products, these produce restorations, which guarantee functionality as well as aesthetics, thus ensuring a dental restoration with lasting success. VOCO's prosthetics range includes materials for core build-up, luting restorations and creating temporary restorations, as well as silicones for taking impressions and relining prosthetics.

Optimum material and processing properties

VOCO products are used by dentists in over 100 countries, and have already benefited patients and practitioners alike innumerable times. With their excellent material and processing properties, they have already set multiple standards for the development of innovative dental materials and have been highly rated by prestigious test facilities. Published regularly in specialist media both in Germany and abroad, these test results and applications award VOCO products top marks time and time again. VOCO preparations are essential to a well-equipped dental practice. Take the Bifluorid 12® fluoride varnish, for instance. With its especially effective combination of sodium fluoride and calcium fluoride, it acts as a caries prophylactic and helps treat hypersensitivity. Another firmly established essential is Structur, a crown and bridge material, which was the first product of its kind to be marketed in the practical and application-safe 1:1 cartridge.



Arabesk, light-curing micro-hybrid composite with multi-filler system



Structur 2, the world's first material in a 1:1 cartridge for the production of temporary crowns and bridges



Caps launched as a new form of application

MILESTONES IN PRODUCT DEVELOPMENT

VOCO has produced several pioneering product innovations, setting new benchmarks for the dental industry. In 2003, VOCO launched Grandio®, the world's first ever nano-hybrid composite. Thanks to its excellent material and processing properties, Grandio® has quickly become one of the most successful universal restorative materials on the international market. With Grandio®SO, launched in 2010, VOCO once more provided proof of its innovative flair. Grandio®SO is a universal nano-hybrid composite, which – in the sum of its physical properties – offers perfect similarity to natural teeth. And with *SingleDose* Futurabond® U, launched in 2013, VOCO became the first manufacturer to offer a dual-curing universal adhesive in a disposable applicator. This adhesive is a winner: it offers an outstanding range of application options when it comes to indications and to selecting the etching technique and curing mode. In 2015 *Admira*® Fusion, the worldwide first purely ceramic-based universal restorative material, marks a further milestone in VOCO's development of innovative dental materials. The combination of the nano-hybrid technology with that of the ORMOCER®s has created a restorative material based on silicon oxide for the fillers as well as the resin matrix. This results in several advantages, such as low levels of polymerisation shrinkage and shrinkage stress, as well as excellent biocompatibility.

Setting standards in the development of innovative dental products

VOCO has also taken a consistently ground-breaking approach to packaging concepts and application technology. Various patented special designs allow preparations to be applied in an extremely easy, efficient and hygienic way. These include the practical *SingleDose* blister, used for VOCO bonding systems and fluoridation preparations, or the AC application capsules for glass ionomer-based products. The latest generation of AC application capsules makes for easy and quick application without the need for a separate activator. We designed the NDT® syringe especially for flowable materials on the basis of innovative non-dripping technology. It allows non-run and non-drip application, thus ensuring the relevant VOCO products can be used safely and cost-effectively.

“VOCO supplies products for practically every dental indication, including several coordinated product systems. Time after time they provide me with the ideal solution to treatment problems.”

Dr. Ron Kaminer, Hewlett/NY, USA



SingleDose blister



AC application capsule



NDT® syringe

“Thanks to their excellent handling and performance, VOCO products occupy pole position in the development of dental materials.

They make it possible to provide functional and aesthetic treatment in line with the latest dentistry techniques.”

Dr. Karim Nasr, University of Toulouse, France



Rebilda SC, self-curing core build-up system



Admira and Admira Bond, the world's first ORMOCER®-based restoration system



VOCO Ionofil Molar AC, a glass ionomer restorative material in application capsules

CERTIFIED QUALITY “MADE IN GERMANY”



All VOCO preparations are developed, manufactured, and assembled solely at state-of-the-art laboratories and production facilities at our company headquarters in Cuxhaven. This not only allows for interdepartmental cooperation that is both flexible and effective, it also guarantees that product quality is subject to thorough monitoring. With intensive testing and a certified quality management system, we ensure the ongoing and conscientious adherence to the highest quality standards for our brand products “Made in Germany”.

Back in 1994, VOCO was one of the first German dental equipment manufacturers to establish a certified quality management system. All stages of our development and manufacturing process are subject to strict monitoring. As a result, VOCO ensures safety and quality standards relating to product development and manufacture remain consistently high. VOCO is certified according to EN ISO 13485 and MDD 93/42 EEC – Annex II and also complies with Germany’s Medicines Act and US FDA legislation.



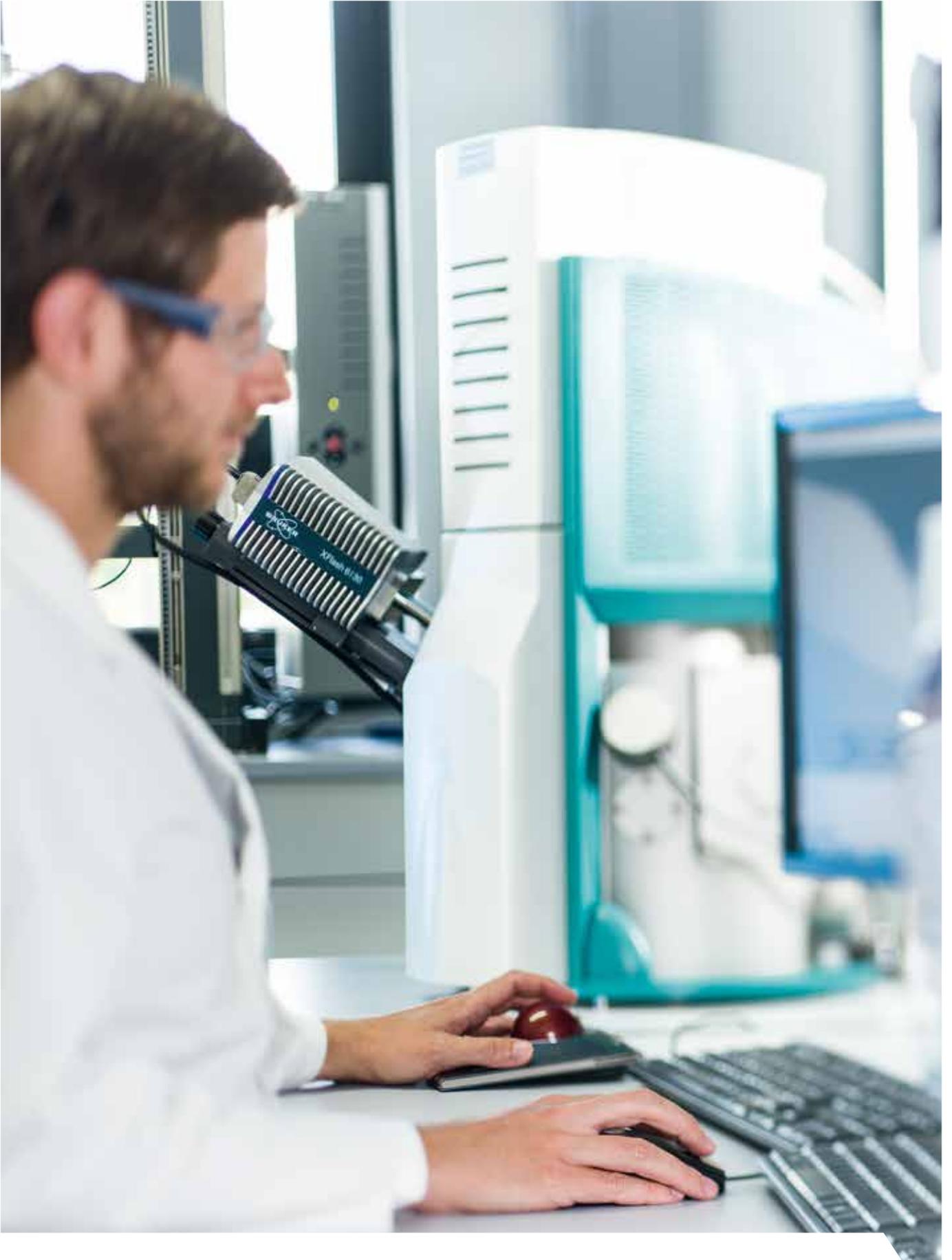
Futurabond, one of the world’s first self-etching adhesive systems



SingleDose registered for patent as a highly practical and hygienic form of application for a range of products



Ufi Gel hard C, the world’s first direct hard relining material in cartridge form



Twinky Star, the world's first coloured light-curing compomer restorative material with glitter effect

2001



Grandio, the world's first nano-hybrid composite

2003



Grandio Flow, the world's first flowable nano-hybrid composite

RESEARCH FOR DENTAL PRACTICE

Research and development work has always been a top priority at VOCO. In addition to intensive activities on site, VOCO researchers foster close ties with over 150 universities and other prestigious research institutes worldwide. With the aim of assessing their safety and performance, the latter subject VOCO products to in-vitro and controlled clinical studies and tests. The results of these independent tests, not to mention discussions with colleagues from leading university dental research units and institutes about new treatment concepts and the associated material systems, provide us with crucial findings concerning the research, development and production of innovative dental products.

Global research cooperation with universities and institutes

The expertise of VOCO scientists is appreciated at the highest level. VOCO has, for instance, already played a leading role in several research projects conducted by the Bundesministerium für Bildung und Forschung (BMBF – Federal Ministry of Education and Research). Other partners involved in these projects included the Fraunhofer Institute for Silicate Research ISC (Würzburg), the Institut für Biomedizinische Technik at Rostock University and the Medizinische Hochschule in Hanover. New material systems and innovative products were the result – thanks to VOCO's own research expertise and its close cooperation with high-powered partners. With these partners, VOCO has already set several new standards for the development of modern dental preparations.

“In cooperation with our partners from the industry, we work on the development of future-oriented substance classes or a whole range of applications, especially in the field of materials designed to maintain health.

VOCO has proved an extremely innovative dentistry partner for years.”

Dr. Herbert Wolter, Fraunhofer Institute for Silicate Research (ISC), Würzburg, Germany

At the same time, VOCO supports dental faculties with specialist talks and hands-on courses on a variety of topics. Furthermore, VOCO is dedicated to supporting young scientists who show particular promise. Its annual research contest, the “VOCO Dental Challenge”, is now a well-established feature for dental professionals. Participants in the contests have the chance to present their research results in the form of a brief presentation, which is adjudicated by a panel of three independent post-doctoral scientists. The lucky winners are awarded attractive cash prizes and publication sponsorship for their research. The research contest, which aims at encouraging and motivating young dentists and dental scientists, is intended to affirm these young academics in their work. In this, VOCO also makes a contribution to supporting the research environment in Germany.



Rebilda DC, dual-curing core build-up and post luting system



x-tra fil, light-curing posterior restorative material for layers up to 4 mm



Structur Premium QM, highly aesthetic composite material in the QuickMix syringe for producing temporary crowns and bridges

PARTNER TO THE DENTISTS

VOCO sees itself as the dentists' partner. Our intention is to supply products that offer optimum material and processing properties, thus enabling dentists to save time and money. At the same time, we are always available with ready expert advice. Our Scientific Service and Knowledge Communication departments foster close links with dentists – for an exchange of ideas among equals. They answer questions about our products and their possible applications, and offer their expertise by supporting us in holding symposia and training events.

Seminars and practical courses which attract dentists and dental assistants from all over the world are regularly held in the company's own training centre. Within the "International Fellowship Symposium" series of events, for instance, we discuss current issues and the latest methods in dentistry with

dentists from Germany and further afield. As a result, we are constantly extending our network of contacts while getting new ideas from the world of practical dentistry all the time. Practical dental training courses are regularly held within the scope of the continuing education programme initiated by VOCO – "VOCO Dental Education". VOCO also supports the dentists' quality circle, organising talks and hands-on courses at congresses and trade fairs in Germany and abroad.



Amaris, highly aesthetic light-curing restorative material with a revolutionary shade system



Futurabond DC *SingleDose*, the world's first self-etching adhesive in disposable blisters for all light-, self- and dual-curing composites



Traypurol tabs, the world's first cleaning material in tab form for impression trays and instruments

Service and advanced training for dentists

Our excellent dental consultants, who receive regular training, play a unique role in fostering links with dental practices. Armed with considerable expertise, they provide information about the material and processing properties of VOCO products in over forty different countries. At the same time, in their capacity as trusted customer contacts, they note the needs and comments of those working in dental practices. This means we are constantly receiving new impulses for the development of modern, practical dental products, as well as the expansion of our service portfolio. Multi-language scientific product and user information, illustrated instructions, product catalogues in over 20 languages, product-related patient information, not to mention a regularly updated multi-language website are all part of VOCO's comprehensive range of services.

dental education

Education
for the future

international fellowship

symposium

*"Modern dental materials have to
withstand a whole range of stresses.*

*Comprehensive material analyses
on our premises have produced
excellent results for VOCO products."*

Prof. Dr.-Ing. Detlef Behrend,
University of Rostock, Germany



Rebuilda Post System,
complete set
for postendodontic
treatment



Launch of the world's first non-run,
non-drip application syringe
based on our innovative Non-Dripping
Technology (NDT®)

PARTNER TO THE DENTAL TRADE

Working together with distribution partners to ensure a reliable supply

VOCO products are available in Germany and abroad from professional dental retailers only. The high quality of our products, an extensive product portfolio and express supply readiness make VOCO an attractive and reliable partner for the dental retail trade.

VOCO's global network keeps it closely tied to its dental trade partners and allows it to nurture intensive business relationships on an equal footing, including some which already go back decades. VOCO also sets great store by solidity and flexibility in this respect, with the aim of establishing a reliable basis for taking on the ever-evolving challenges on the market and always achieving the best possible results together with its partners. The success that VOCO and its partners enjoy by following this strategy is underlined by a sales trend, which has remained positive for many years now. Effective networking with the depots and state-of-the-art sales and distribution software mean that orders are processed just as carefully as they are quickly, in order to ensure that customers from across the globe receive their VOCO products as quickly as possible and in the familiar high quality.

The cooperation between VOCO and its dental trade partners can take a number of forms. For instance, VOCO dental consultants share their expertise with specialist retailers and support them in their sales activities in the individual markets. The specialist trade consultants are also regularly invited to product-specific webinars and training sessions at VOCO's headquarters in Cuxhaven, Germany, to learn about the latest innovations and their advantages in detail. In addition, VOCO also participates in a wide range of events and campaigns hosted by its sales partners, supporting them with information, hands-on courses and samples. VOCO aims to continue to intensify its cooperation with all its distribution partners and expand its tailored range of services.

PARTNER TO DENTAL AID PROJECTS



VOCO supports various dental aid projects with the "VOCO Dental Aid" initiative. Volunteer helpers get

involved across the globe, spending several weeks at a time providing healthcare support to those people who rarely, if ever, have access to such services. Frequently these communities are in remote regions devoid of roads, making it extremely difficult for helpers to reach them. Such projects which take place under difficult conditions are particularly reliant on high-quality dental materials that are easy to use. VOCO is keen to recognise the humanitarian commitment of the dental volunteers, providing them with tried-and-tested products from its range free of charge. Even in such remote areas, we are making a valuable contribution to basic dental care and caries prophylaxis.

VOCO publishes regular reports on the dental relief work supported by its "VOCO Dental Aid" initiative. The VOCO website and the VOCO newsletter provide an impressive account of the hardships and frequently adverse conditions surrounding such work, but also the huge successes that can be achieved with altruistic willingness to help and simple means, and the heartfelt gratitude of those who received aid in the different countries. These reports may well encourage some readers to follow the example of their colleagues and engage in voluntary work. They can rest assured that VOCO will be there offering support.



C. Weber, www.kinderhimal.de



GrandioSO, universal nano-hybrid restorative material for even the most demanding applications



GrandioSO Heavy Flow, highly viscous, flowable nano-hybrid restorative material



x-tra base, flowable light-curing base composite



A. Schoof-Hosemann, www.dentists-and-friends.de



A. Schoof-Hosemann, www.dentists-and-friends.de



C. Lulan, www.enfantsdudessert.org



A. Schnell/H. Monien, www.dental-volunteers.com



Structur 3, highly aesthetic composite material for producing temporary crowns and bridges

2012



Futurabond U, the world's first dual-curing universal adhesive in *SingleDose* form

2013

AN EMPLOYER WITH APPEAL

Public awareness relating to healthy and simultaneously attractive teeth has grown hugely in recent years. The demand by dentists for modern products promising a high degree of quality is commensurately large. As a result, the dental industry is a stable and forward-looking sector, offering a range of employment possibilities and long-term prospects.

Employees at VOCO have the opportunity to take on interesting challenges in a whole range of areas. Whether in research and development, marketing and sales, or production and assembly: every position comes with its own responsibilities and diverse opportunities for development. Employees benefit from individual development in the form of general or specialised further training courses. School-leavers can expect professional structured and systematic training in various divisions, providing a broad base for their future careers. We offer laboratory technician, chemical production specialist, industrial clerk and warehouse specialist apprenticeships. Moreover, we also offer school-leavers the opportunity to study Business Administration in a B.A. sandwich course, enabling them to dovetail their work and studies effectively.

VOCO is a medium-sized family-run company, in which values are both practised and recognised as a vital element of corporate philosophy. A cooperative management style, flat hierarchies, short and swift decision-making channels and interdepartmental, international teamwork all characterise the working atmosphere at VOCO. It's not only the combination of interesting work and a pleasant corporate environment which creates such optimum conditions, but also our family-friendly business structure. We use a versatile flexitime system that enables employees to create their very own work-life balance. In addition, internal corporate childcare provision helps in the coordination of family and professional demands: trained professionals look after employees' children in our "Milchzahn Bande" (Milktooth Group). This means young parents neither have to give up their jobs, nor their proximity to their children, and they don't have to worry about kindergarten opening times – they simply bring their children with them. The VOCO Food Lounge, which offers a wide range of dishes in a sophisticated dining atmosphere, rounds off the employee-friendly work environment.

Living and working in a holiday destination

Cuxhaven on the North Sea coast is one of Germany's largest seaside resorts and a popular holiday destination. With its maritime flair, numerous attractions and leisure facilities, the area is the ideal setting for many activities. Nature lovers will find Cuxhaven particularly appealing: the Wattenmeer, declared a World Heritage Site by UNESCO, is one of Germany's most beautiful nature reserves. And the water quality at the local beaches is certified clean. Unspoilt landscapes around the Elbe and Weser estuaries and the islands of Neuwerk and Helgoland attract day-trippers. Proximity to the seaside town of Bremerhaven and the Hanseatic city of Bremen with its international airport are additional plus points. One of Cuxhaven's major strengths is its family-friendliness. From a whole range of sporting activities, such as sailing or kite-surfing to the wide expanses of its exceptional landscape, Cuxhaven has something to suit every taste and every age.



Futurabond M+, universal single-component adhesive in a bottle

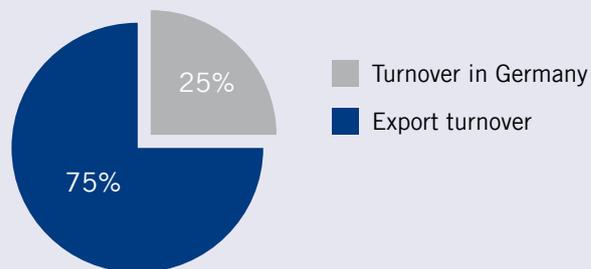


LonoStar Molar, glass ionomer restorative material in an innovative application capsule

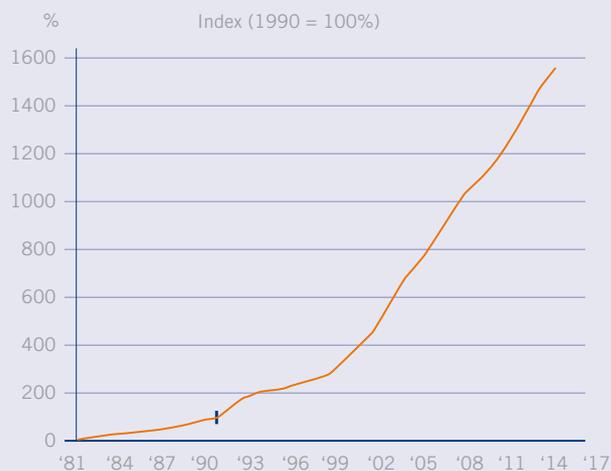


Bifix Temp, dual-curing temporary luting material for temporary restorations

Distribution of turnover 2015



Growth in turnover since formation of the company in 1981



Number of dental consultants world-wide



Admira Fusion/Admira Fusion x-tra/
Admira Fusion Flow, the world's
first nano-hybrid ORMOCER®
restorative material

2015



Grandio blocs, CAD / CAM
composite blocks based on nano-hybrid
technology

2017



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