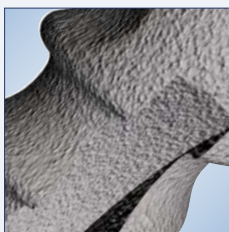
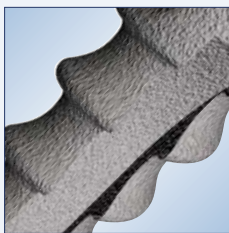
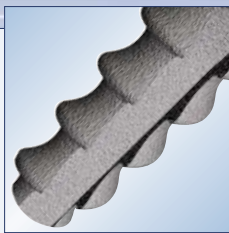
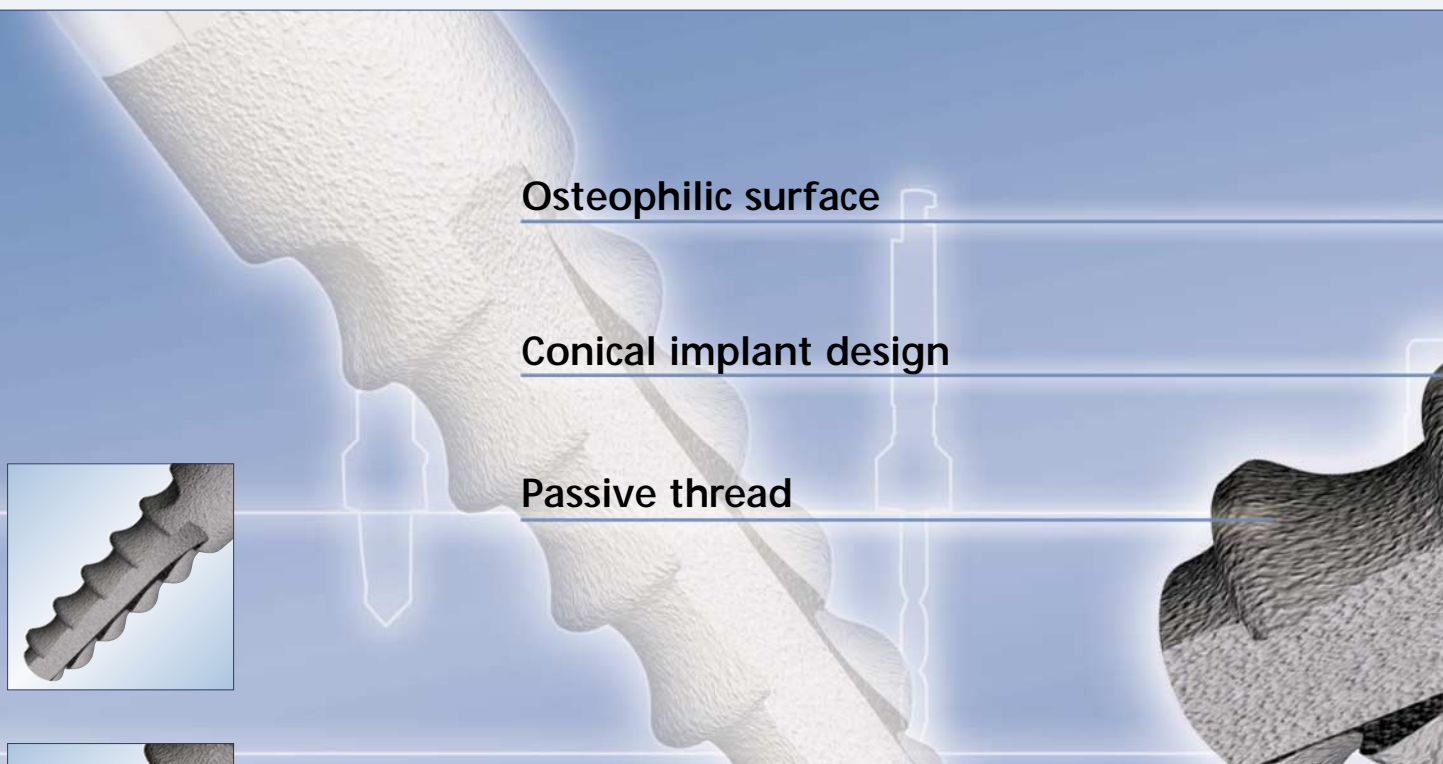


The Tiolox® Implant System

A perfect fusion of function,
reliability and user-friendliness



Modern implants



Osteophilic surface

Conical implant design

Passive thread

Conical implant design

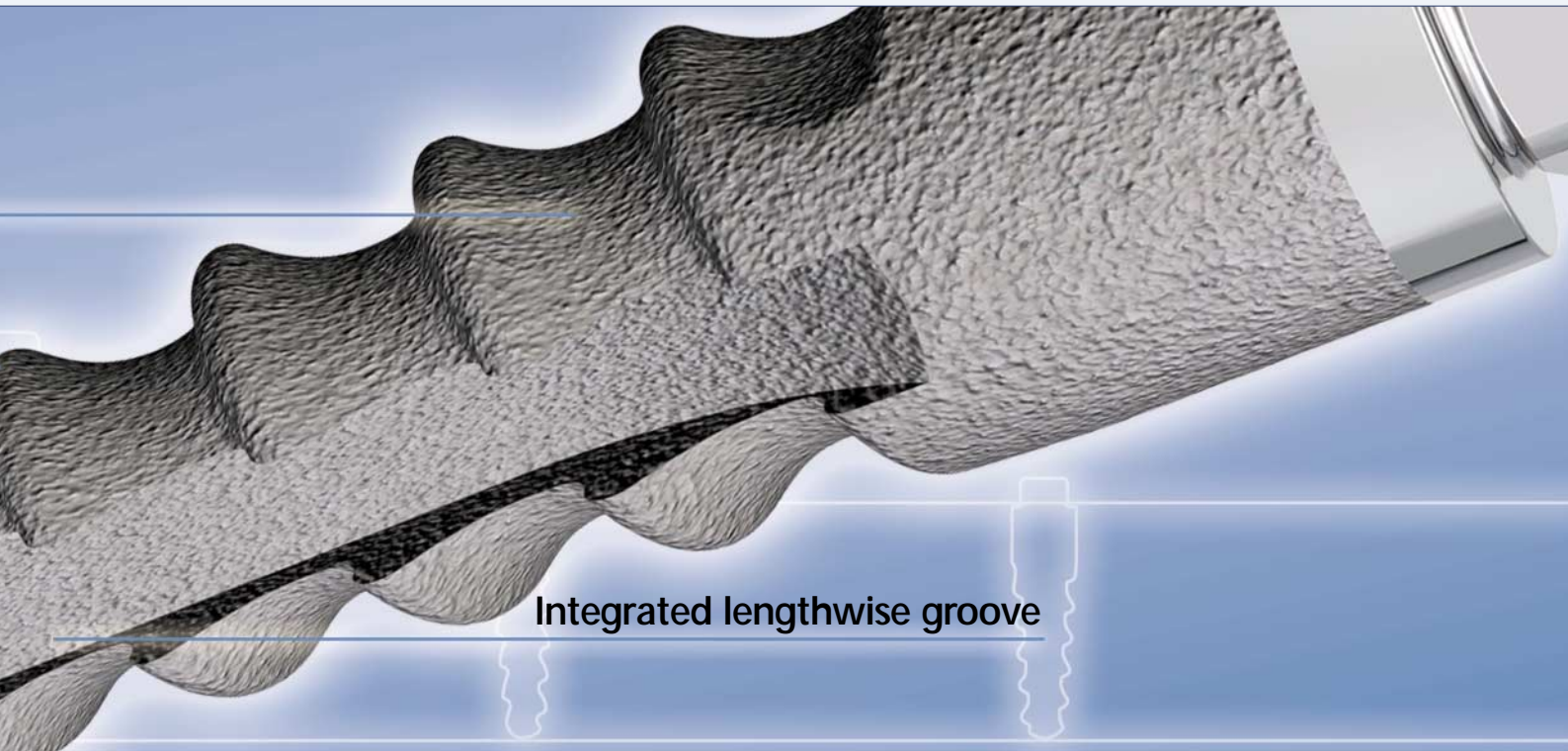
Maximum primary and secondary stability

The root-like shape of the Tiolox® implant ensures an optimally uniform distribution of stress in the alveolar bone. This prevents local stress peaks that can eventually lead to bone resorption and failure of the implant.

Passive thread

Optimum pressure distribution

TIOLOX IMPLANTS made the conscious decision to develop a passive thread design. FEM (finite element method) tests effectively prove that the Tiolox® thread design produces uniform and biomechanically optimum stresses in the bone. The thread design combined with the conical contour also ensures maximum primary stability, even in unfavourable bony sites.



Integrated lengthwise groove

Osteophilic surface

Immediate bone apposition

CBS (ceramic blasted surface) technology increases the surface area four-fold and, combined with optimum roughness, creates ideal conditions for rapid, permanent direct apposition of bony tissue to ensure osseointegration.

Integrated lengthwise groove

No pressure necrosis

The design of the lengthwise groove prevents postoperative pressure necrosis.

Intelligent product system



Comprehensive range of implants

Optimum range of applications

With implants available in two diameters (3.5 and 4.5 mm) and each supplied in four lengths (10, 12, 14, and 16 mm), the Tiolox® system provides a very clearly structured system with a wide range of applications. It forms the ideal basic implant system in any practice, as it can be successfully used in virtually all cases.

Compact system

Cost-effective investment

During routine work in an implantological practice a well-structured system ensures that decisions can be made quickly and that the operator is familiar with all the components. When using the Tiolox® system, the entire practice team operates effectively and safely, promoting cost-effectiveness.



Optimally coordinated individual components

Maximum flexibility

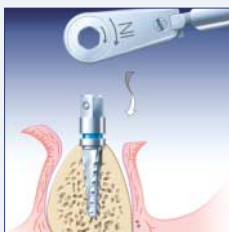
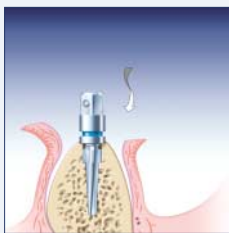
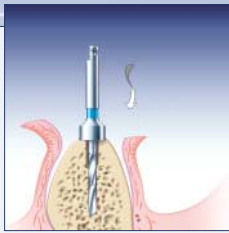
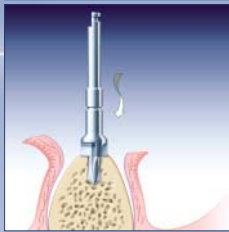
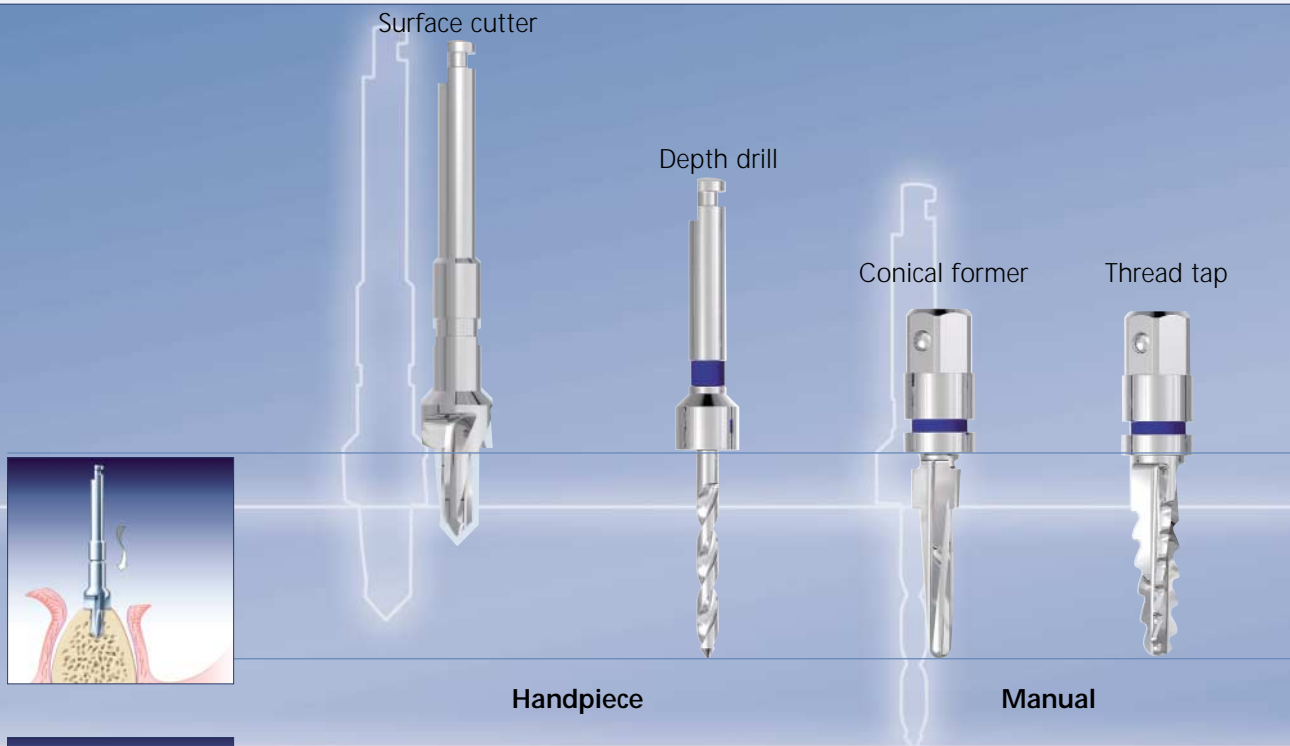
Apart from providing an intelligent, comprehensive range of products and accessories, it is important that components are optimally coordinated to ensure efficiency and flexibility.

Practice-orientated accessories

Efficient, quick preparation

As a result of close contact with users over many years, we have been able to provide a range of accessories optimally tailored to meet the practical requirements of routine work. This ensures effectiveness and efficiency. Updating the Tiolox® product range on the basis of user feedback will continue to ensure that implantologists can always rely on a state-of-the-art product range.

Easy, safe application



Four steps in preparing the implant site

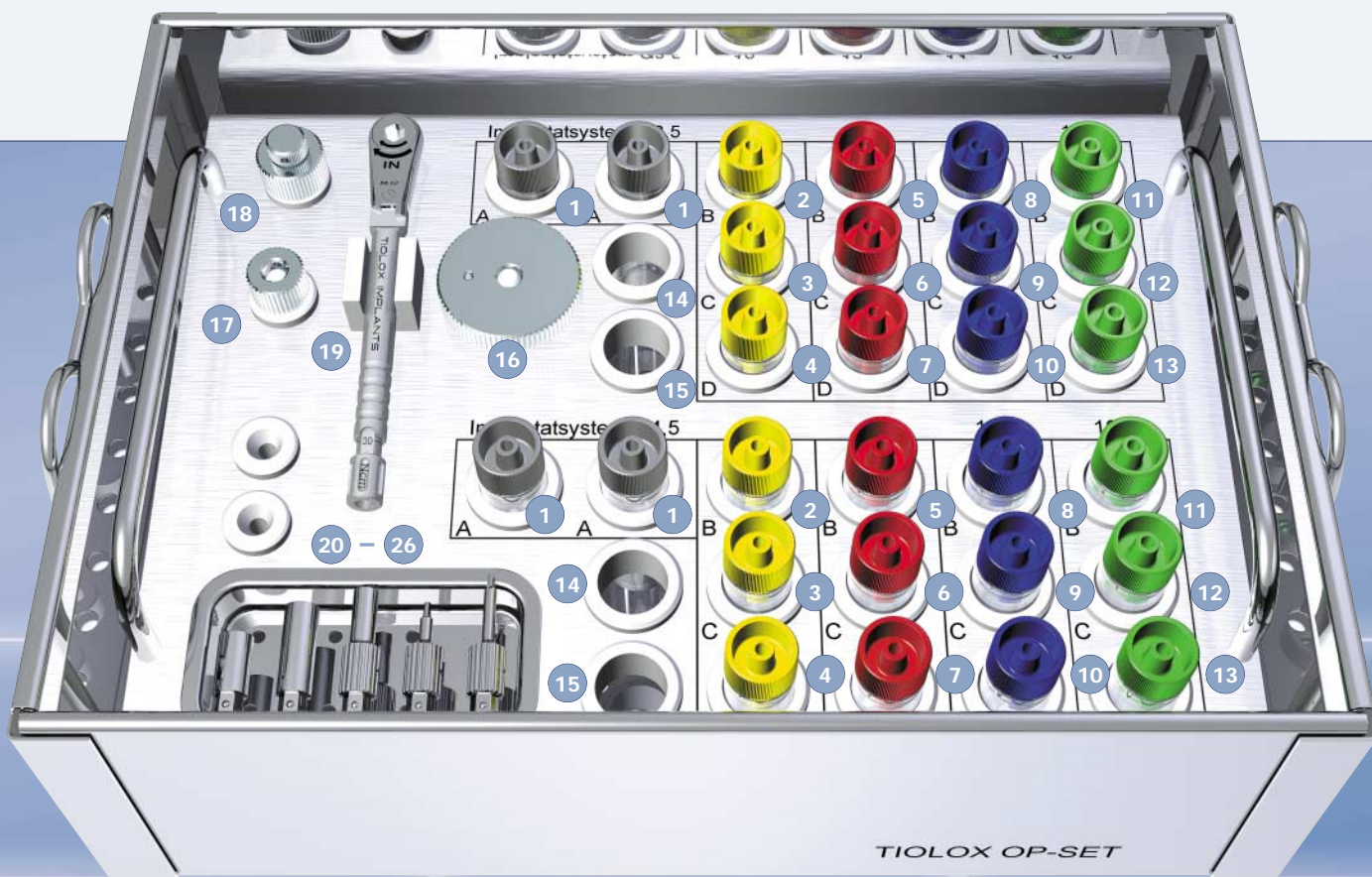
Minimally invasive, quick preparation

The implant site can be prepared in just four steps. Surface cutting – depth drilling – conical forming – thread tapping. This is followed by implant placement.

Autologous bone harvesting

Optimum augmentation material

Any bone chips produced during conical forming and thread tapping are collected. These can be used as autologous augmentation material.



Well-structured stainless steel surgical tray

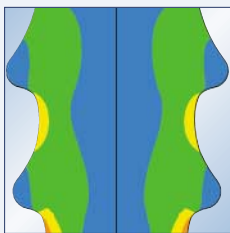
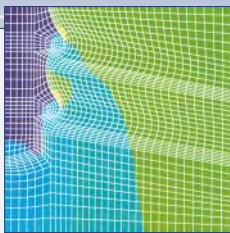
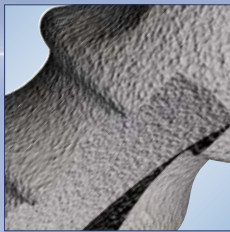
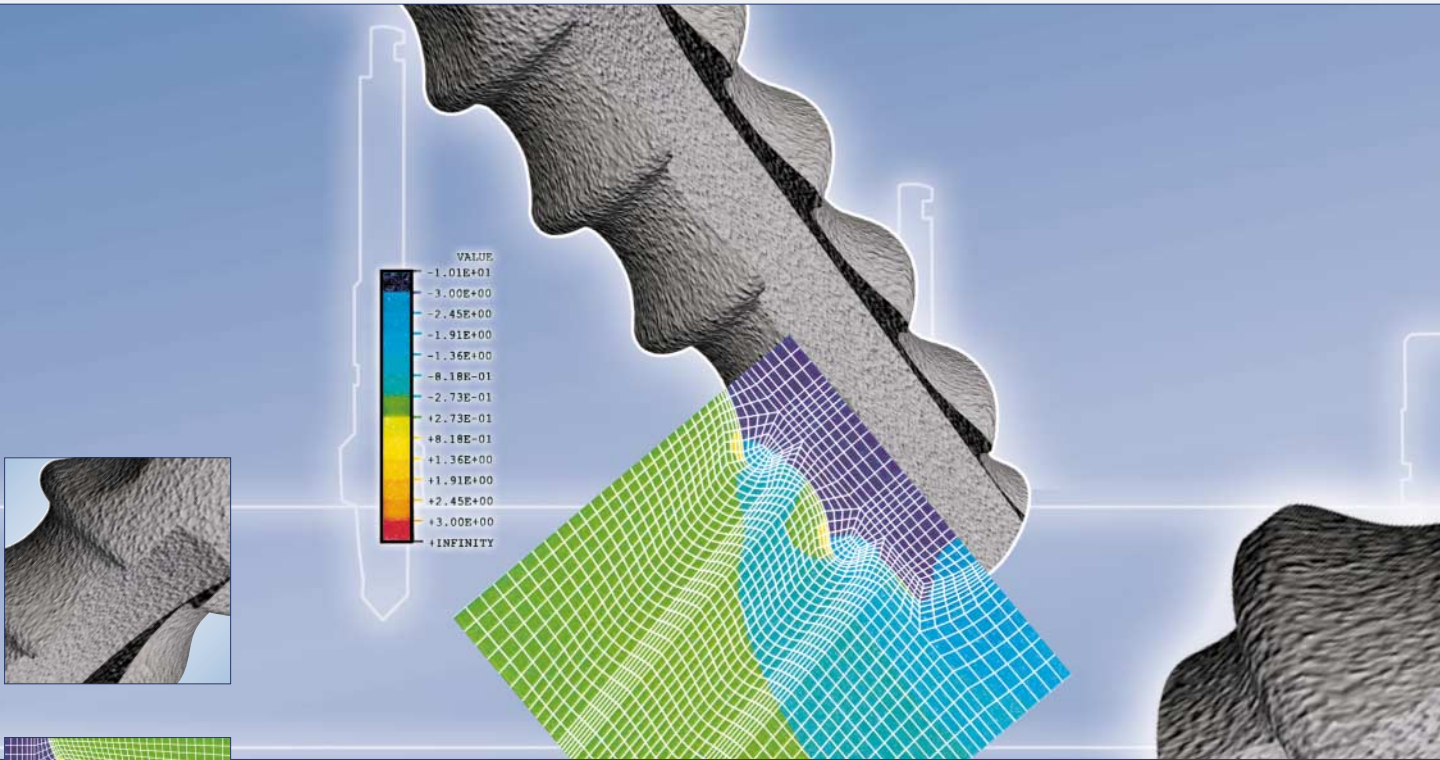
Professional preparation

All the surgical instruments and accessories in the Tiolox® surgical tray are coordinated. The tray has been especially designed to reflect the operating sequence and ensure a safe, systematic surgical procedure.

No. Description

- | | |
|------------------------------------|-------------------------------------|
| 1 Surface cutter | 14 Healing cap, titanium, L 2,4 mm |
| 2 Depth drill, yellow (L 10 mm) | 15 Healing cap, plastic, L 2,1 mm |
| 3 Conical former, yellow (L 10 mm) | 16 Sure-grip wheel, ø 25 mm |
| 4 Thread tap, yellow (L 10 mm) | 17 Sure-grip wheel, ø 10 mm |
| 5 Depth drill, red (L 12 mm) | 18 Implant insertion aid |
| 6 Conical former, red (L 12 mm) | 19 Torque ratchet |
| 7 Thread tap, red (L 12 mm) | 20 Extension adapter |
| 8 Depth drill, blue (L 14 mm) | 21 Extension, L 10 mm |
| 9 Conical former, blue (L 14 mm) | 22 Extension, L 15 mm |
| 10 Thread tap, blue (L 14 mm) | 23 Hex key, L 20 mm |
| 11 Depth drill, green (L 16 mm) | 24 Hex key, L 25 mm |
| 12 Conical former, green (L 16 mm) | 25 Hex key for ball anchor, L 22 mm |
| 13 Thread tap, green (L 16 mm) | 26 Hex key for contra-angle |

Documented and proven



Shorter healing period due to the CBS surface

Dr. Werner Hotz
„Dentale Implantologie“ 3/1999

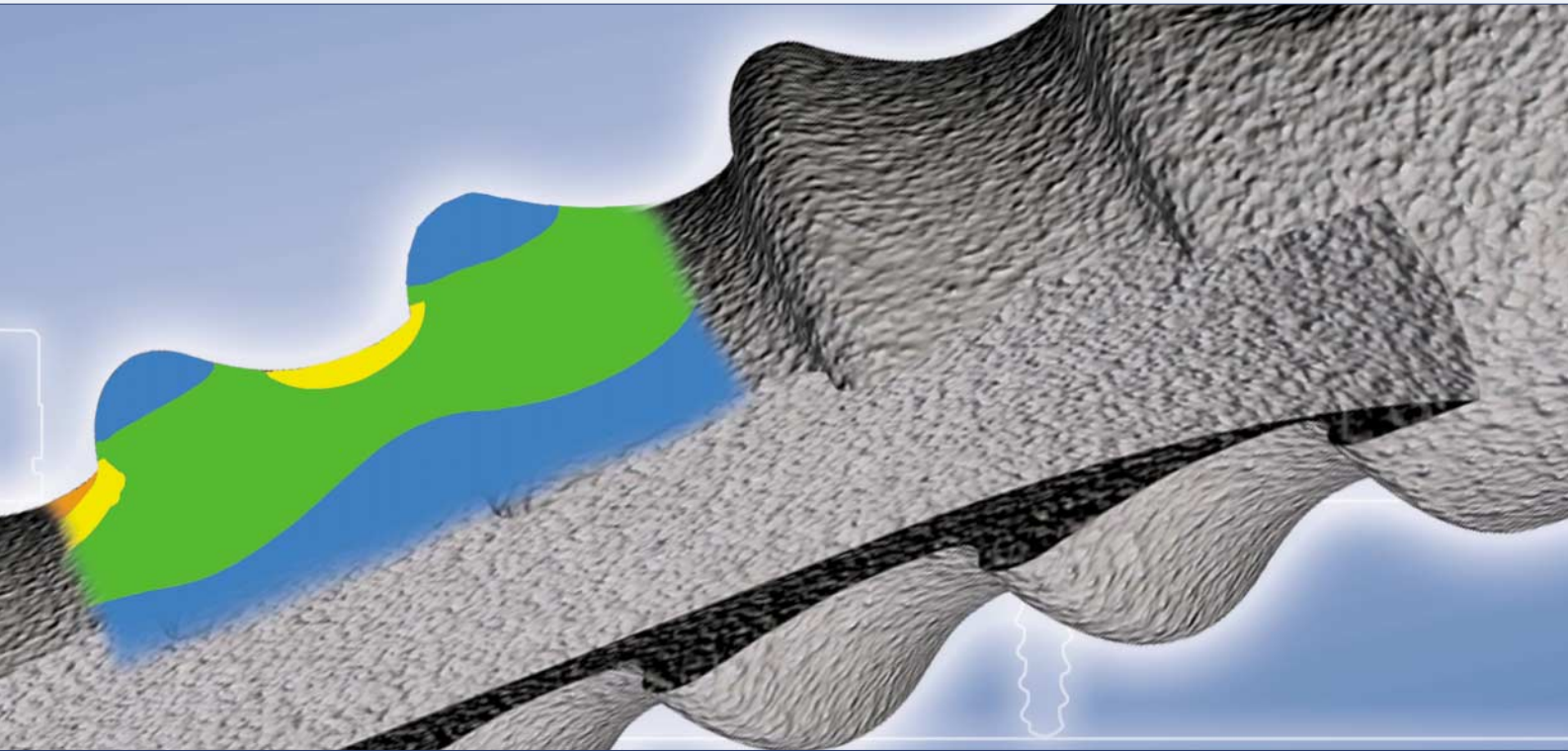
„After more than 9 years' clinical application and focused development based on the latest scientific knowledge, Tiolox® implants now have a ceramic blasted surface (CBS), which allows a prosthetic restoration to be fitted after a minimum healing period of 4 – 8 weeks, even in a spongiosal bony site.“

Implant treatment of an atrophied mandible

Dr. Dr. Stephan Wolf
„Implantologie Journal“ 2/2000

„The Tiolox® implant produces extremely high primary stability in virtually any bone structure or bone quality due to its conical thread design and rough thread surface.“

„The prefabricated titanium abutments make it possible to fabricate an accurate, cost-effective, single-metal restoration.“



Time is money

Dr. Manfred Sontheimer, ZTM Dirk Bachmann
„ZWL Zahntechnik Wirtschaft Labor“ 1/2004

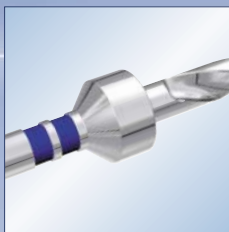
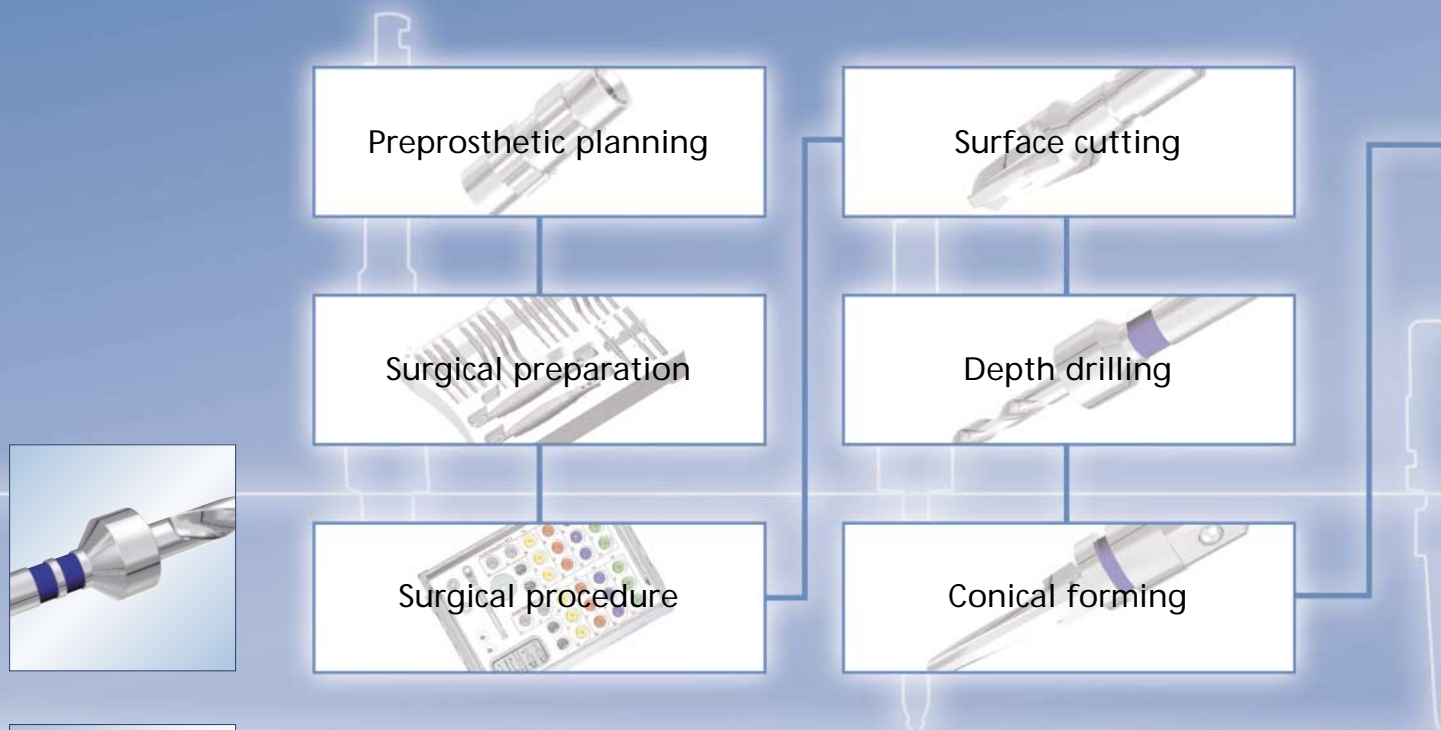
„In the mandibular a 35% saving in cost for the patient was achieved simply by using less costly raw materials and also prefabricated prosthetic components.“

Stabilisation of bone augmentation materials in oral implantology

Dr. Friedhelm Heinemann, Dr. Joachim Hoffmann
„Implantologie Journal“ 4/2003

„TIOMESH has excellent stability that protects the augmented area against mechanical loading, ensuring optimum insulation and positional stability.“

Surgical features



Colour-coding of the implants

Quick identification

Tiolox® implants are colour-coded according to length to ensure quick, reliable identification at a glance.

Dual colour-coding of the instruments

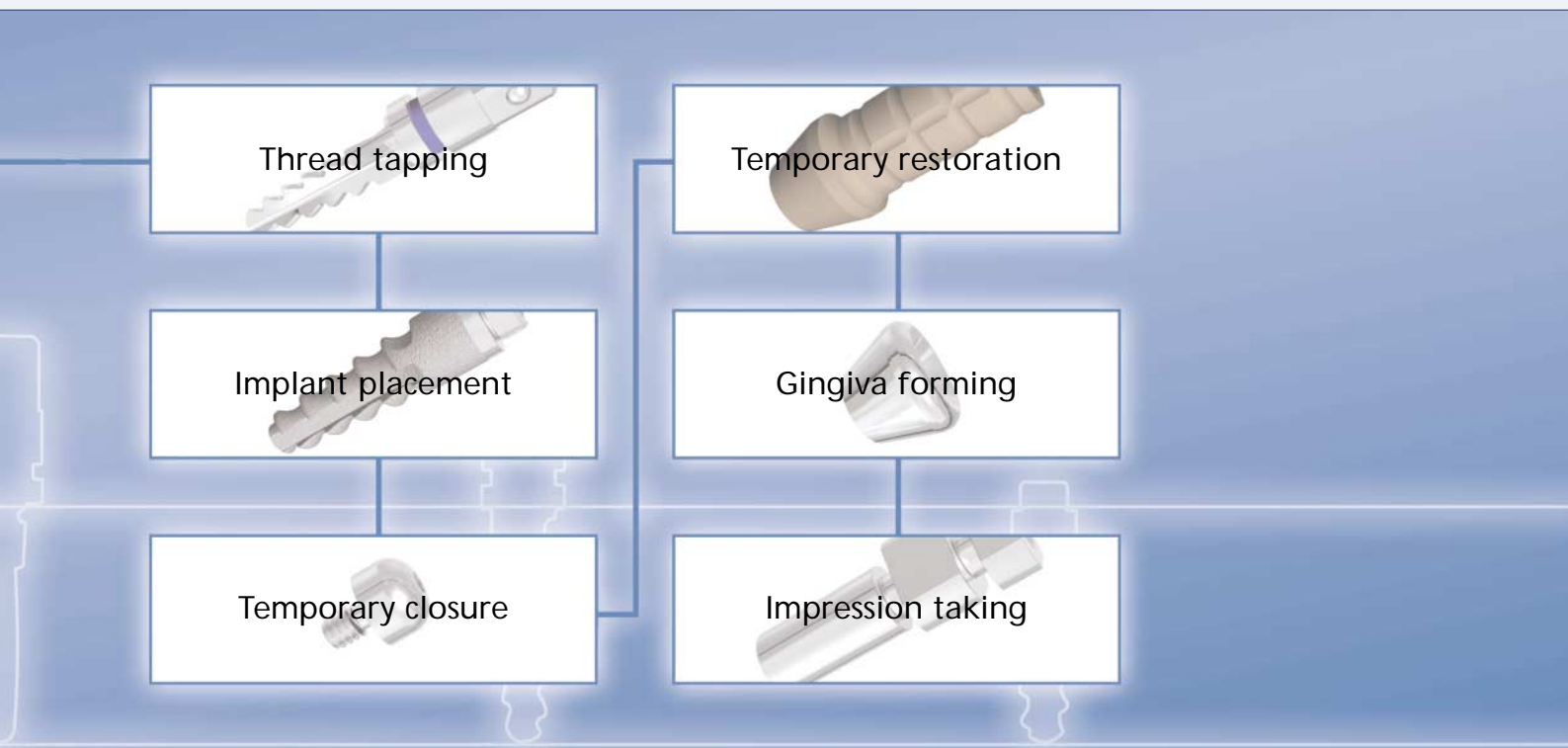
Clear classification according to the implant

The instruments required for preparing the implant site are also colour-coded according to length. The number of coloured rings (1 or 2) clearly indicates the diameter.

Integrated depth stop

Safe, accurate limiting of the specified depth

Markings on instruments have the disadvantage that the specified depth of the implant site cannot be accurately maintained with a poor view of the implant site. This is only possible with an integrated depth stop, which makes preparation both safe and easy.



Manual preparation

Minimally invasive preparation

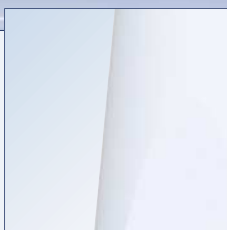
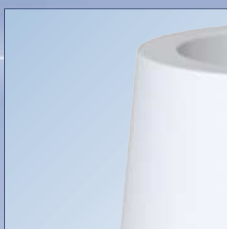
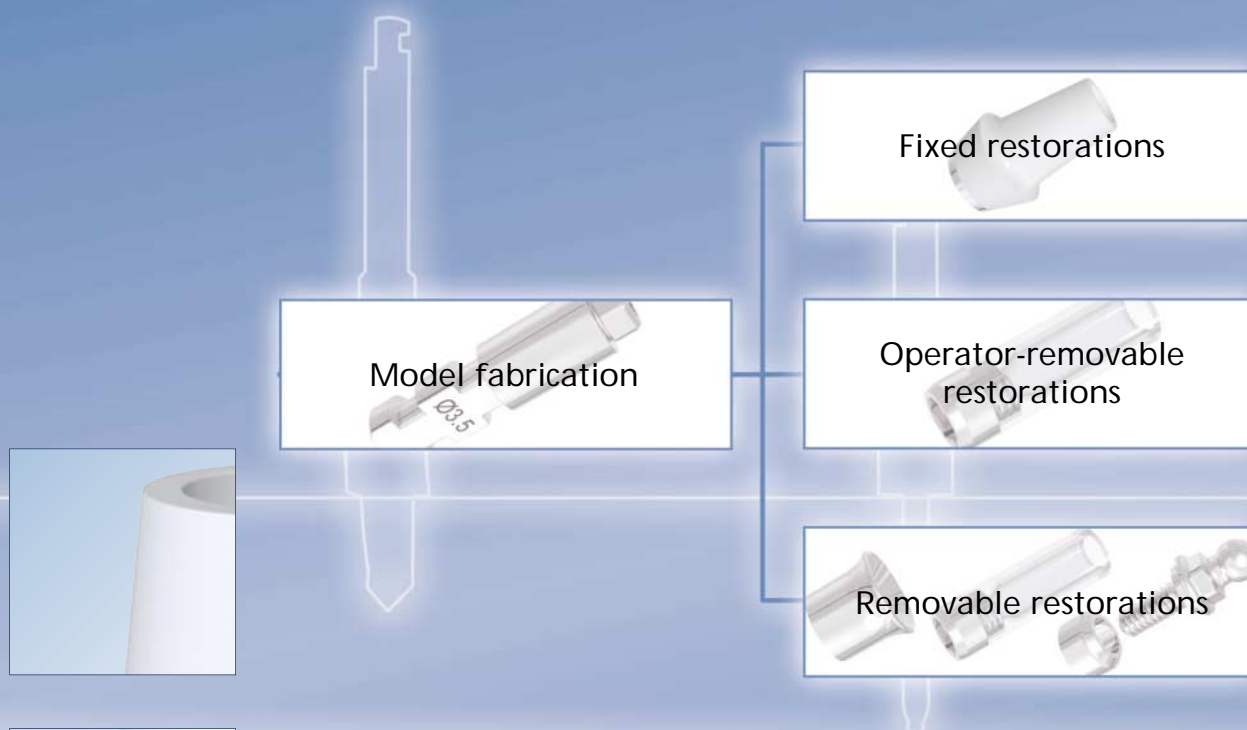
Final preparation of the implant site is completed manually. This ensures a symmetrical, atraumatic procedure. Manual preparation allows the actual bone quality to be determined. It also prevents overheating of the alveolar bone caused by the excessively high rpm during preparation with a handpiece.

Torque ratchet

Tightening torque

The torque ratchet is an important component for ensuring a safe treatment procedure. It has an adjustable torque to secure prosthetic restorations in position using a defined retentive force.

Prosthetic features



Prefabricated abutments

Maximum flexibility

The wide range of prefabricated abutments included in the Tiolox® implant system meets the aesthetic requirements of implantologists and dental technicians.

Premium porcelain abutments

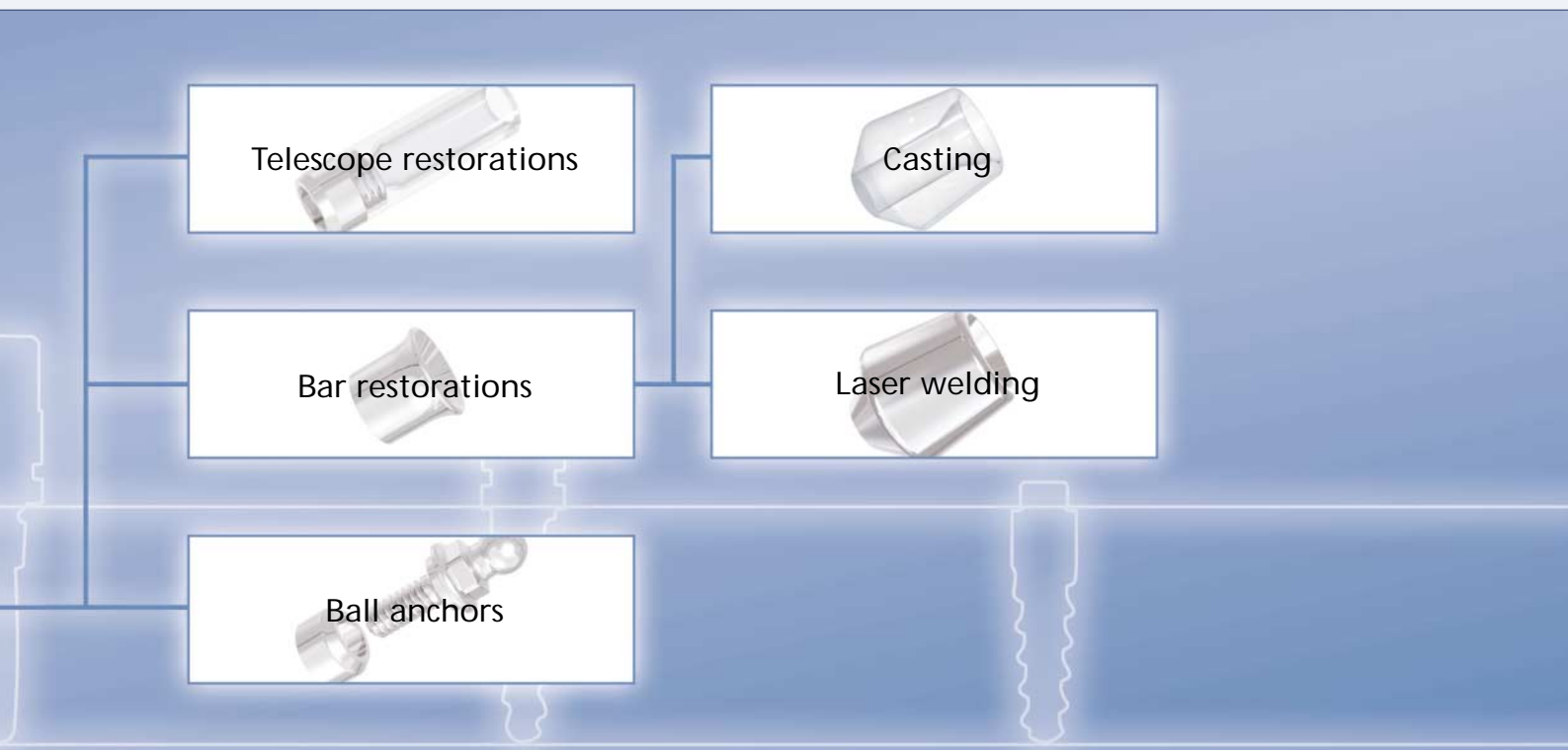
High-quality aesthetics

Tiolox® porcelain abutments ensure optimum aesthetic results. The ZrO₂ material is extremely strong and guarantees a high load-bearing capacity. The anatomical shape and natural gingival emergence profile make these abutments ideal for fixed restorations.

Premium titanium abutments

Excellent biocompatibility

Tiolox® titanium abutments are available in straight and angled versions. Their anatomic design copies the gingival emergence profile of natural teeth and facilitates customisation. They are mainly used for fixed restorations. Special titanium abutments are available for removable restorations in casting and laser work.



HFA abutments

Maximum customisation options

Tiolox® HFA abutments can be used for different restorations, e.g. fixed, operator-removable or removable restorations. The cast-on gold cylinders can be used for single tooth and telescope restorations.

Plastic abutments

For professional long-term temporary restorations

Tiolox® plastic abutments are ideal for fabricating cast (long-term) temporary restorations. These abutments, which are used for fabricating fixed and operator-removable temporary restorations, do not restrict in any way the choice of material for the prosthetic restoration..

Premium quality (PQ)

Reliability for the operator and patient

All Tiolox® abutments are manufactured in a highly controlled production process. Computer-aided, state-of-the-art production equipment combined with many years of experience and the highly specialised expertise of our personnel guarantee the high quality of our Made in Germany products.

Prosthetic features



AnatomicTwist

Red aluminium handle, stainless steel instrument socket, instrument holder \varnothing 2.35 mm, span of Allen key for locking screw 0.9 mm, maintenance-free rotary bearing

91 x \varnothing max. 24 mm – \varnothing min. 11 mm

For secure retention and controlled rotation of rotary instruments with a \varnothing 2.35 mm standard shank, for Tiolox® instrument inserts (all rotationally secure): countersink (inner hexagon), countersink (screw fit), diamond-coated milling cutter D 30 (course), diamond-coated milling cutter D 25 (medium), diamond-coated milling cutter D 20 (fine), reamer (screw channel) – **milling, drilling, cutting.**

Awarded the iF Design Award 2005
AnatomicHold / AnatomicTwist





AnatomicHold

Solid stainless steel, instrument socket \varnothing 2.35 mm, span of Allen key for locking screw 0.9 mm

115 x \varnothing max. 20 mm – \varnothing min. 8,1 mm

For secure retention of instruments with a \varnothing 2.35 mm standard shank, for Tiolox® instrument inserts (all rotationally secure): polishing aid \varnothing 3.5 mm, polishing aid \varnothing 4.5 mm, holder for porcelain abutments \varnothing 3.5 mm, holder for porcelain abutments \varnothing 4.5 mm – **secure retention of prosthetic components during preparing and polishing.**

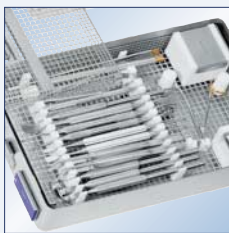
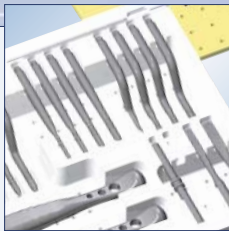
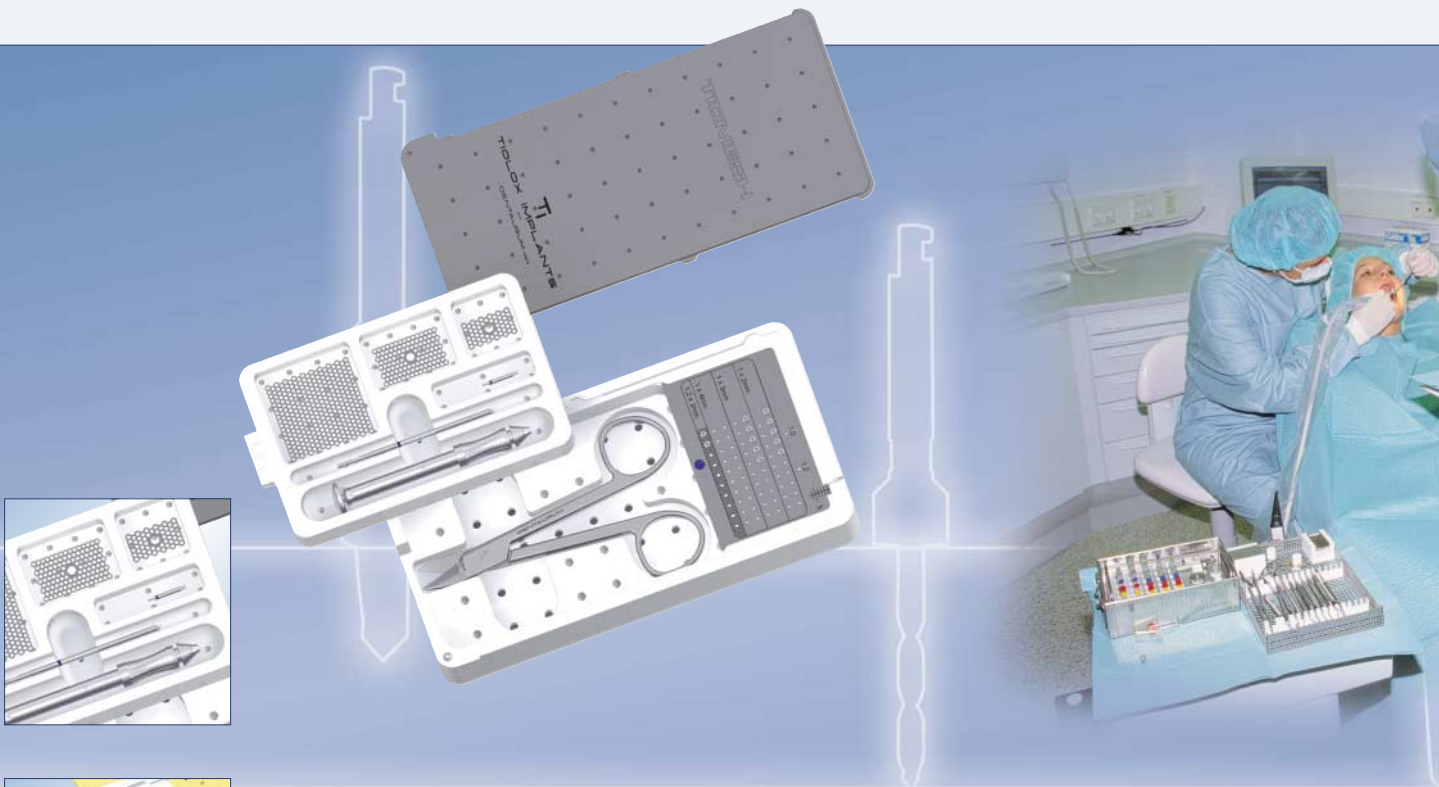
AnatomicSet

Aluminium embossed edges, aluminium laminated panels, rigid polythene foam lining

Overall dimensions 330 x 240 x 40 mm

Practical system organiser for safe storage and transport of instruments and components

Additional system products



TIOMESH

Mesh system for the regeneration of oral bone defects

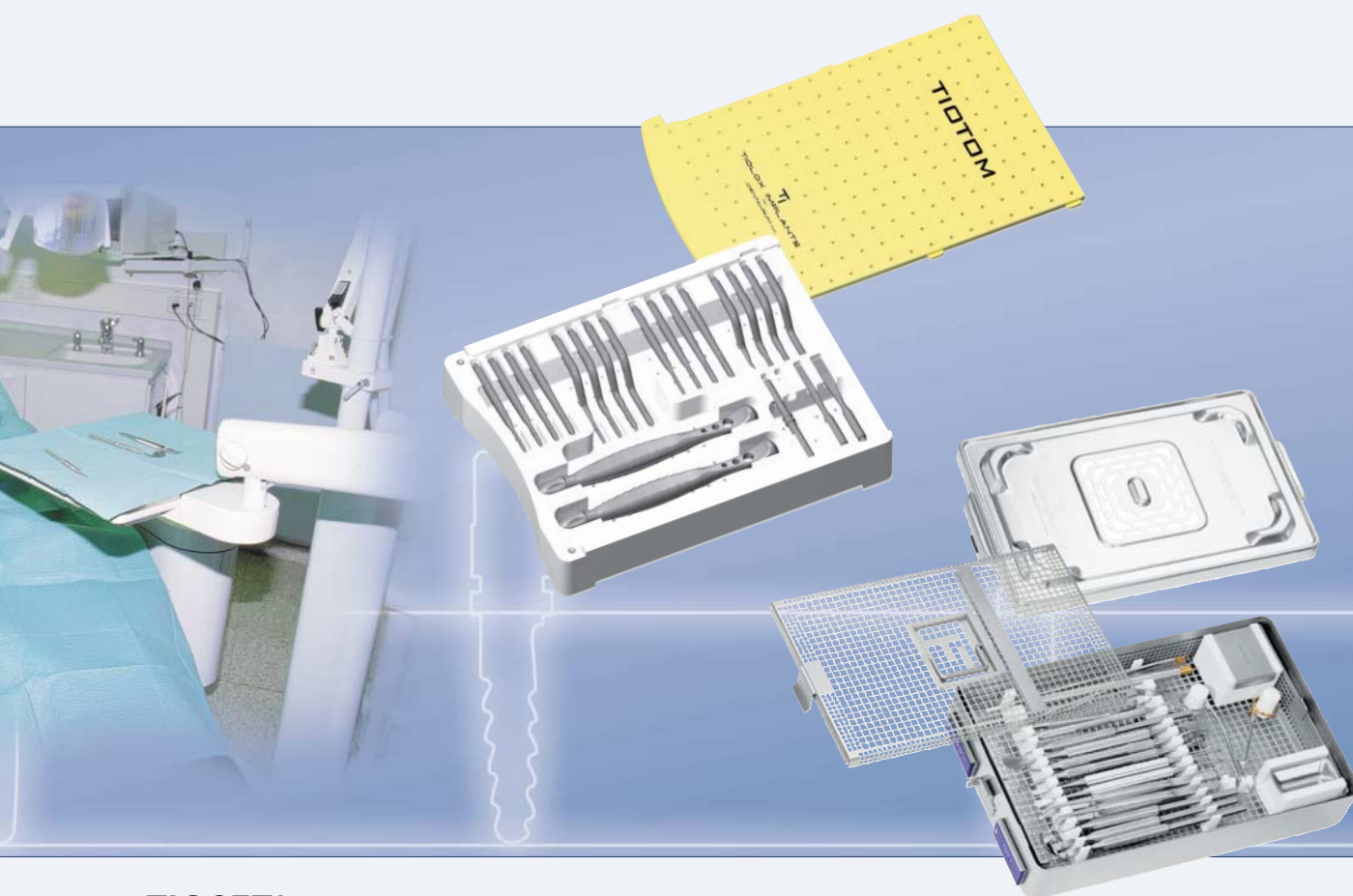
(designed by Dr. M. Sontheimer)

TIOMESH is a mesh system for the regeneration of oral bone defects. The TIOMESH and screws are manufactured from pure medical titanium. In addition to its biocompatibility, the titanium mesh is highly stable and can be shaped as required. This stabilises and insulates the augmented area to allow bony regeneration. The titanium mesh is also designed for use in simultaneous augmentation and implant placement and for stabilising the implant. All the necessary components for shaping and securing the titanium mesh in position are contained in a high-quality plastic tray.

TIOTOM

Osteotomes for optimising the implant site

The TIOTOM is a complete osteotome set developed for use with Tiolox® implants. It has been designed for bone condensation, partial sinus floor elevation and horizontal bone expansion. The osteotome inserts are straight and angled. They are arranged in a high-quality plastic tray in systematic order in accordance with each stage of the procedure.



TIOSET®

Instrument set for dental surgery and implantology

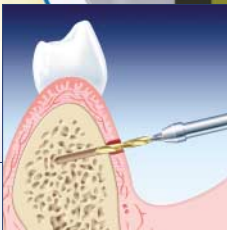
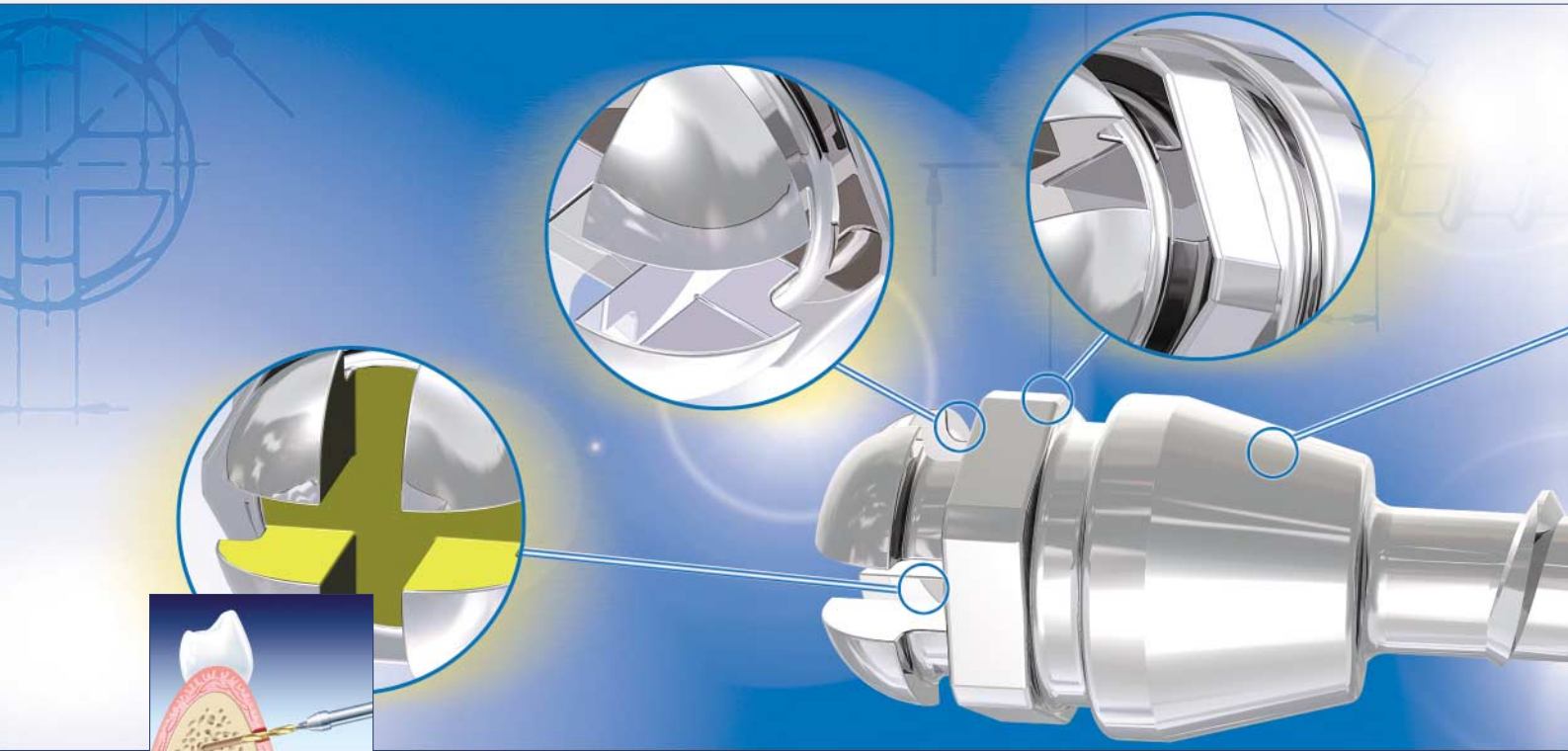
(designed by Dr. M. Sontheimer)

The TIOSET® is a complete set of instruments for dental surgery and implantology. Instruments such as the needle holder and tissue forceps facilitate surgery without damaging the tissue. The design of the tray ensures the instruments are easily accessible and conveniently arranged for the operator. The instruments are sterile and ready to use at all times. Use of the TIOSET® facilitates the required documentation of the surgical procedure. Hygienic preparation and sterilisation of the TIOSET® has been simplified by the Wash Tray, which fits exactly into a Standard Tray and holds the instruments securely in position.

TIODRAPE

Sterile disposable drapes and surgical gowns for dental surgery

The sterile TIODRAPE set contains essential individual disposable components for covering the patient and surgery equipment. The surgical gown is available in universal size L. The set not only saves time and storage costs but individual components can also be ordered from the one supplier.

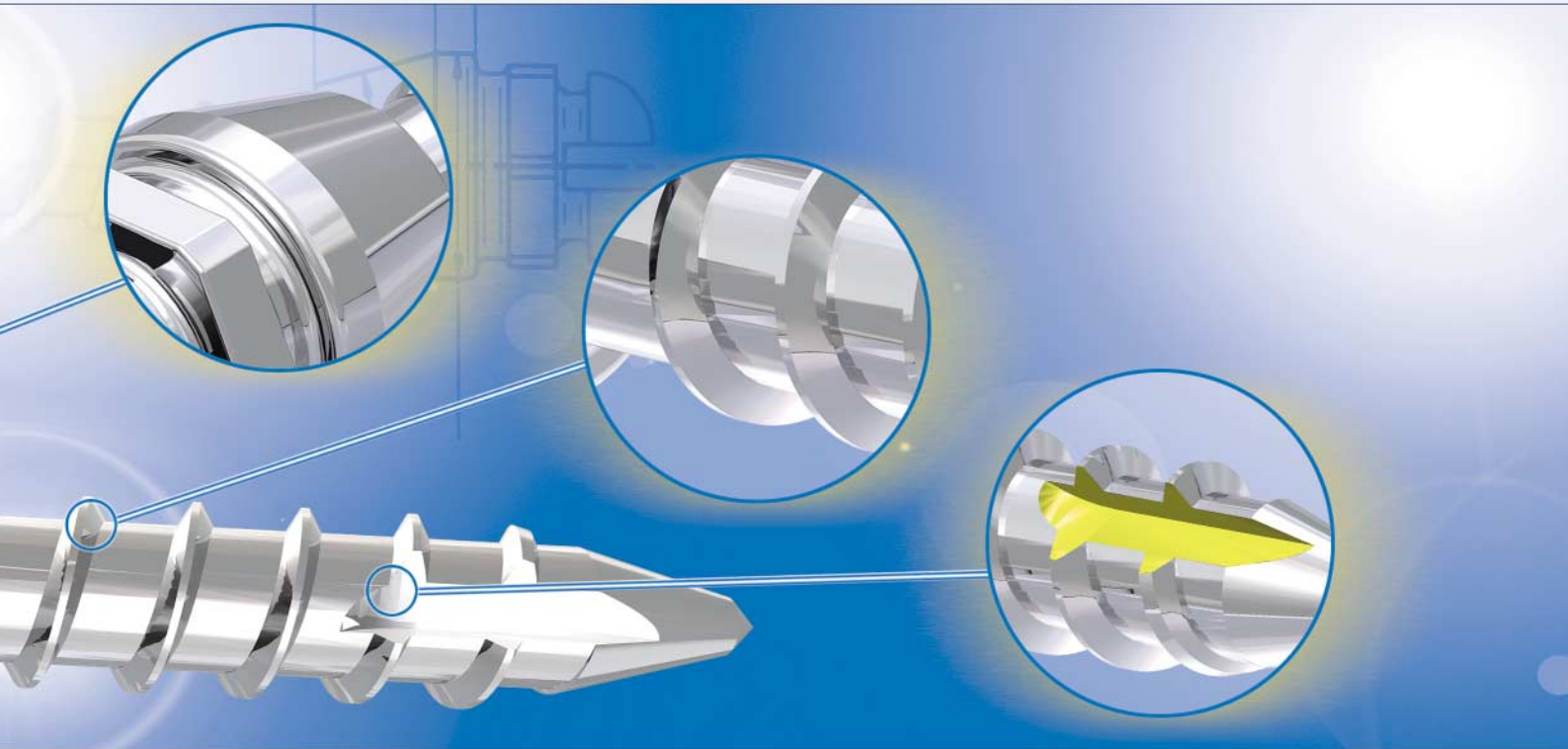


Developed by a practitioner for the practitioner

Easy, practical, complete

tomas® (temporary orthodontic micro anchorage system) is a new concept which, due to its multiple treatment options, can fulfill the individual requirements of orthodontists and dentists. This concept and the scientifically proven, bio-mechanical construction of the **tomas®**-pin make it a favorable counterpart, and in some cases even a replacement for current orthodontic treatment techniques!

This practical system avoids the disadvantages created by conventional pins such as labor intensive and unusual handling, poor hygiene and the possible consequences (eg. gingivitis). The **tomas®**-concept allows for an easy introduction into innovative orthodontic treatment options with pins.



Optimal patient comfort

Comfortable, safe, economical

After the quick and easy application of the **tomas**[®]-pin, the head, with a 0.22 cross slot, works as a temporary anchor (approx. six to twelve months) enabling various orthodontic tooth movements. The easy application of the **tomas**[®]-concept often allows for less banding chairtime as well as total treatment time can be greatly reduced. These factors and the resulting comfort are often the motivating factor for adults to start treatment.

Considering the shorter treatment time and usage of less material, reduced treatment costs, making the **tomas**[®]-concept attractive for both clinician and patient.

Service – a top priority



Comprehensive, expert advice

Focused cooperation

In dentistry, implantology is the discipline in which the advice available to dentists, dental technicians and patients is particularly important. This is why TIOLOX IMPLANTS regards it as essential not only to supply excellent products but also to provide a high-quality advisory service.

This includes providing professional, expert advice in the laboratory, an easily accessible hotline for any questions relating to product application and administrative procedures or individual advice on specific problems offered to colleagues by experienced Tiolox® users.

- Expert medical product advisors
- Easily accessible hotline for expert advice (see back page)
- Experienced technical advisors



Diverse range of courses and events

Reliable product application and professional services

Apart from expert advice in the laboratory and by telephone, it is important to provide a wide range of information for those new to implantology and an interesting programme of training courses for more experienced operators. Tiolox® offers a comprehensive range of courses and events that have been presented very successfully by experienced, expert lecturers for a number of years. Meetings involving German and international users provide an important opportunity for operators to exchange information.

Attractive patient information material

Effective patient advice

For most patients implantology treatment is a considerable investment. Patients therefore require detailed, sound advice that clearly outlines not only the advantages of an implant-borne restoration but also the costs and possible risks involved so that they are able to make an informed decision. We offer effective support by providing you with materials such as patient brochures and posters for the practice.

Core: Competence



Dental technology

Extensive range

Our family company has acquired an excellent reputation worldwide by providing an outstanding range of dental products and services. Together with our subsidiaries, Dentaurem Data Service and TIOLOX IMPLANTS, a unique range has been created from root to crown, including innovative implants, high-quality casting metals, dental porcelains and brackets made from advanced materials. Virtually no other company in the world offers such an extensive range of products.

Synergy and networking

Dental titanium technology is a particularly good example of effective networking within the Dentaurem Group. All synergetic potential is optimally exploited in terms of research, production and sales. The results are impressive: perfect casting technology, a titanium porcelain with aesthetics to equal any standard porcelain, the world's first titanium speed investment, the first pure titanium expansion screw in the world. This is why we are the market leader in the dental technology sector.



From the root up to the crown

Core competence

Innovative products, reliable quality and comprehensive service, which are our core competences, also offer important advantages for dentists, orthodontists and dental technicians, who can use these advantages to provide a modern service for the benefit of their patients.

Tested and documented

The Dentauro Group is one of the first companies in the dental sector to be certified according to the requirements of the Medical Products Directive (CE Mark) or the EU Environment Audit. The Center of Dental Communication is also the first certified dental training centre in Germany.

The introduction of a quality management system, which is continually updated, ensures that our products have the consistent „Dentauro quality“ that our customers have come to expect. The commitment of every single Dentauro employee in the manufacture of products or provision of services contributes to this quality.

If you require further information about the Tiolox® implant system, contact the Dentaaurum Group hotline. The Dentaaurum Group also provides special courses on the Tiolox® implant system. To obtain further information, contact:

Telephone / Fax

Courses / events hotline + 49 72 31 / 803-322
Surgery hotline + 49 72 31 / 803-322
Prosthetics hotline + 49 72 31 / 803-410

Fax + 49 72 31 / 803-375

Ordering by telephone + 49 72 31 / 803-322

Internet www.tiolox.com