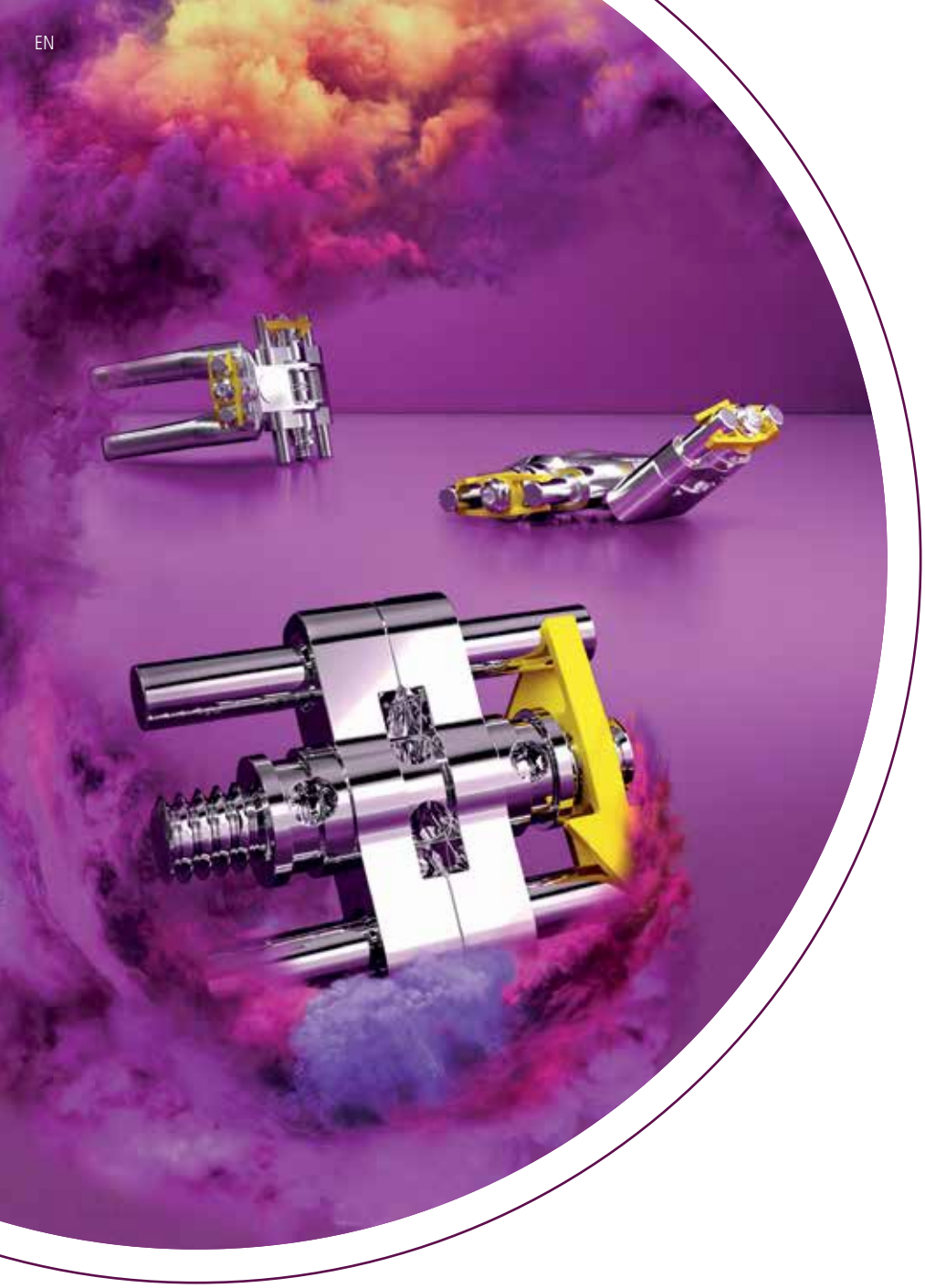
EN



DENTAURUM
EXPANSION SCREWS

STANDARD SPECIAL

The power of diversity. All indications. The success story.

DENTAURUM 1886

SMALLEST PRODUCTS OF THE HIGHEST QUALITY FROM DENTAURUM

Expansion screws from Dentaurum are a key element in the Dentaurum product portfolio. For many decades, they have combined sophisticated mechanics with user-friendliness and exceptional manufacturing precision **"Made in Germany"**.

The extensive portfolio offers a wide variety of options, ensuring that dental professionals can find the right solution for every clinical situation – from simple expansion plates to complex functional orthodontic appliances or rapid palatal expanders. Discover the world of Dentaurum expansion screws and convince yourself of the high quality of the products!



With our first-class **Dentaurum Standard expansion screws** in numerous sizes, designs, and expansion lengths, you can quickly and easily find the perfectly matching screw for virtually any application in removable orthodontics.



The portfolio of screws for the removable appliance technique also includes high-quality **Dentaurum special screws** for functional orthodontic appliances and demanding indications such as the correction of a Class II/2 (Neo-bite jumping appliance according to F.M. Sander) – jointly developed with renowned orthodontic experts and clinically proven in numerous cases.

Here you can find our
expansion screws


ENGINEERED BY DENTAURUM
SINCE 1886
MADE IN GERMANY



TUTORIAL

From the expansion screw to the finished appliance: Check out our tutorial.

You can find our **application video** here

STANDARD

PROVEN TECHNOLOGY
IN ORTHODONTICS

Dentaurum **Standard expansion screws** are a key element in the laboratory for the production of individual expansion plates, such as the Schwarz plate, which has been used millions of times. The screws are available in numerous sizes and variants and, depending on the indication, allow for controlled, reliable expansion.



TRADITION & CLINICAL EXPERIENCE

Developed on the basis of many years of orthodontic expertise and clinically tested worldwide.



PROVEN SOLUTIONS FOR THE REMOVABLE APPLIANCE TECHNIQUE

The portfolio features a wide range of screws in different sizes and expansion capacities, and covers virtually all treatment requirements.



HIGH FUNCTIONAL RELIABILITY

The screw design and the ingenious construction of the Dentaurum expansion screws ensure predictable and reliable treatment results. Proven features ensure a high level of user safety.



EASY PROCESSING

The screws are easy to place in the model and integrate into the acrylic. This saves time in the laboratory and supports efficient workflows.



DENTAURUM PREMIUM QUALITY

High-quality stainless steel is used in the production process. The materials and sturdy construction ensure maximum durability and reliable functionality during use.

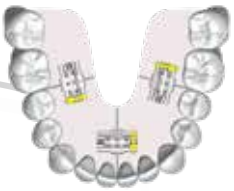


Here you can find our
Standard expansion screws



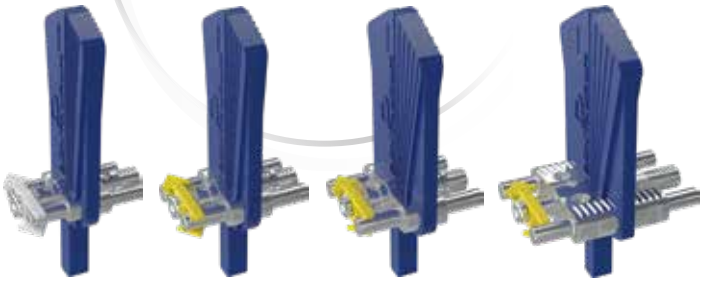
STANDARD

Scan here for
more information

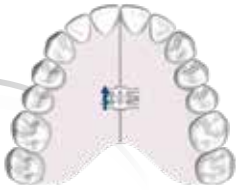


STANDARD – EXPANSION SCREW

- Cone-shaped holder
- For transverse expansion and distalization in the maxilla and mandible



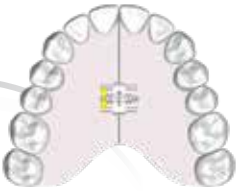
Mini Medium Maxi Magnum



REMATITAN® – EXPANSION SCREW

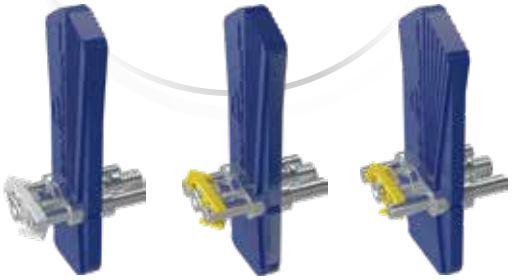
- Medium screw made of titanium
- Cone-shaped holder (pink)
- Blue directional arrow
- For transverse expansion and distalization in the maxilla and mandible





STANDARD – EXPANSION SCREW

- Wide holder
- For transverse expansion and distalization in the maxilla and mandible



Mini Medium Maxi

INCLUDING

EXPANSION SCREW KEY, STANDARD (STRAIGHT, SMALL)





Orthocryl®

Orthocryl® LC

The perfect complement to Dentaurum expansion screws, available in different colors.

Here you can find our
Orthocryl® assortment



NEO-BITE JUMPING APPLIANCE ACC. TO F.M. SANDER*

Read the scientific article by Prof. F.M. Sander and gain valuable insights into the application, design, and clinical benefits of the screw.

Download free publication

SPECIAL

ADVANCED SOLUTIONS
FOR FUNCTIONAL ORTHODONTICS

Dentaurum offers a comprehensive assortment of **special screws** for state-of-the-art functional orthodontics. When integrated into removable orthodontic appliances, the sophisticated screw systems enable targeted dental and skeletal movements in all three spatial planes, thereby supporting a wide range of therapeutic concepts. Whether transversal extensions, sagittal corrections, or complex functional appliances – Dentaurum stands for precision technology, reliable function, and many years of experience.



EXPANDED THERAPEUTIC OPPORTUNITIES

The special screws are designed for specific treatment applications in removable appliance techniques, particularly in functional orthodontics. They enable solutions where standard screws reach their limits.



INDICATION-SPECIFIC DESIGN

Each special screw was designed for a specific treatment task. Here, the wealth of experience of the Dentaurum experts is directly incorporated into the development. This also enables demanding treatment goals, such as the correction of an Angle Class II/2.



PRECISE TRANSFER OF FORCES

The mechanics of the special screws are all designed to accommodate specific directions of movement and force requirements. This allows multiple sectors to be moved simultaneously. The screws are an important tool, especially in functional orthopedics.



OPTIMIZED APPARATUS INTEGRATION

Special holders and templates facilitate installation into the appliance.
A variety of designs are available for different appliance concepts.
Here, the know-how of the experts is directly incorporated into the construction.



TRADITION & CLINICAL EXPERIENCE

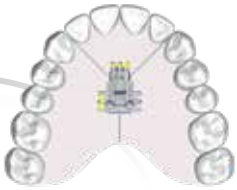
The roots of Dentaurum range from gold crowns and gold fillings to orthodontic dental prosthetics with removable appliance techniques. Over decades, the products have been continuously developed further and adapted to state-of-the-art procedures. To this day, Dentaurum expansion screws are a key product in the portfolio: Made in Germany.

Here you can find our
Special expansion screws



SPECIAL

BITE JUMPING APPLIANCE SCREWS

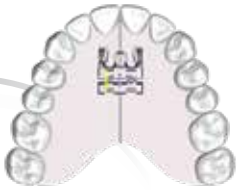


*NEO-BITE JUMPING APPLIANCE ACC. TO F.M. SANDER**

- Patented three-dimensional Bertoni expansion screw with guide ridges on the bite jumping appliance acc. to F.M. Sander*
- For the treatment of Angle Class II/1 and Angle Class II/2







FLEXIBLE BITE JUMPING APPLIANCE ACC. TO SCHANENG

- With cone-shaped expansion screw holder and flexible, intermaxillary guide element
- For the treatment of Angle Class II/1



INCLUDING

EXPANSION SCREW KEY, STANDARD (STRAIGHT, SMALL)



* Patent owner FEMAdent GmbH & Co. KG

EARLY CLASS II/2 CORRECTION WITH THE NEO-BITE JUMPING APPLIANCE SCREW: EFFICIENT GROWTH GUIDANCE AND SUSTAINABLE OCCLUSION IMPROVEMENT

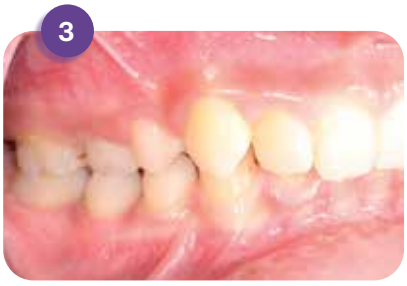
Successful treatment of an Angle Class II/2 malocclusion with increased overjet and anterior crowding. By combining growth modification and Class II/2 correction with the aid of a removable appliance with Neo-bite jumping appliance according to F.M. Sander, and followed by multibracket therapy, a functionally and aesthetically stable Class I occlusion with harmonious anterior tooth relationship was achieved.

INITIAL SITUATION

Patient in the early mixed dentition stage with a pronounced Angle Class I/2 dysgnathia.







COURSE OF TREATMENT

Functional orthodontic appliance with Neo-bite jumping appliance according to F.M. Sander, followed by multibracket treatment.







FINAL RESULT

Correction of Class II/2, harmonious alignment of the teeth, and extensive Class I occlusion.







Images courtesy of Prof. F.M. Sander, Frankfurt



SECTIONAL SCREWS

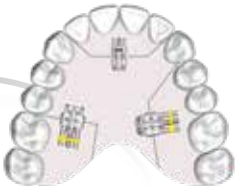


SECTIONAL SCREW MINI

- With wide holder
- Guide pins U-shaped, angulated
- For single tooth movements



Straight Angulated



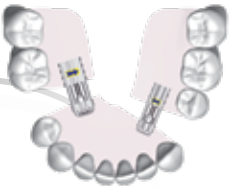
SECTIONAL SCREW MEDIUM

- With cone-shaped holder
- Guide pins straight and U-shaped, angulated
- For distalization and segmentation of appliances, Y-plates



Straight Angulated

RETRACTION SCREWS



RETRACTION SCREW

- With cone-shaped expansion screw holder
- Screw housing closed
- Guide pin: U-shaped, straight
- For gap closure and movement of a single tooth



Extra Mini Mini Medium

PREMIUMLINE

The Premium Line pliers are specially designed for use in orthodontics – regardless if for use in the dental practice at the patient's chair or for bending and cutting tasks in the laboratory.

You can find our **Premium Line pliers** here



THREE-DIMENSIONAL SCREWS



NEO-BERTONI THREE-DIMENSIONAL SCREW – THREE MOVEMENTS (TYPE A)

- Anatomically angulated three-dimensional screw
- With three independently controlled movements
- For combined transverse and protrusion movements with Y-plates



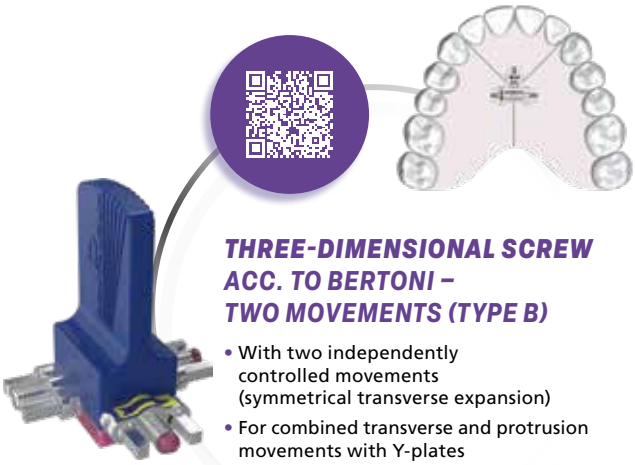
NEO-BERTONI THREE-DIMENSIONAL SCREW – TWO MOVEMENTS (TYPE B)

- Anatomically angulated three-dimensional screw
- With two independently controlled movements
- For combined transverse and protrusion movements with Y-plates



THREE-DIMENSIONAL SCREW ACC. TO BERTONI – THREE MOVEMENTS (TYPE A)

- With three independently controlled movements
- For combined transverse and protrusion movements with Y-plates



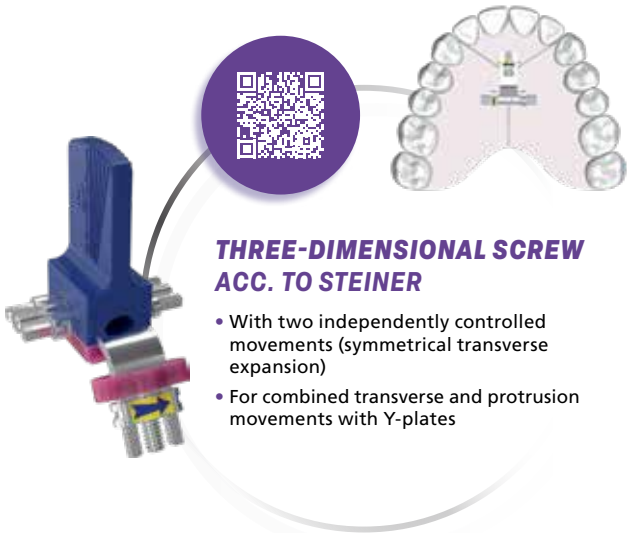
THREE-DIMENSIONAL SCREW ACC. TO BERTONI – TWO MOVEMENTS (TYPE B)

- With two independently controlled movements (symmetrical transverse expansion)
- For combined transverse and protrusion movements with Y-plates

WIRES

The basis of successful removable treatments: From retaining clasps to spring elements, wires provide precise and reliable solutions for individual therapeutic requirements.

Here you can find our wires



THREE-DIMENSIONAL SCREW ACC. TO STEINER

- With two independently controlled movements (symmetrical transverse expansion)
- For combined transverse and protrusion movements with Y-plates





SEMINARS

Learn all the essentials about the use of expansion screws in practical seminars. Check out the dates now and gain valuable insights.

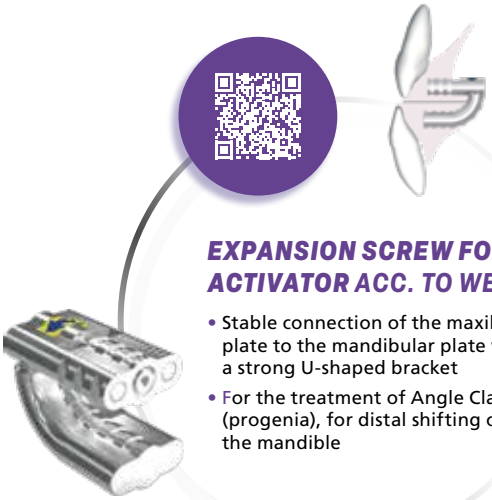
Here you can find our **seminars**

OTHER SCREWS



EXPANSION SCREW FOR SPLIT ACTIVATOR

- With cone-shaped expansion screw holder
- Reinforced guides
- For separate expansion of maxilla and mandible



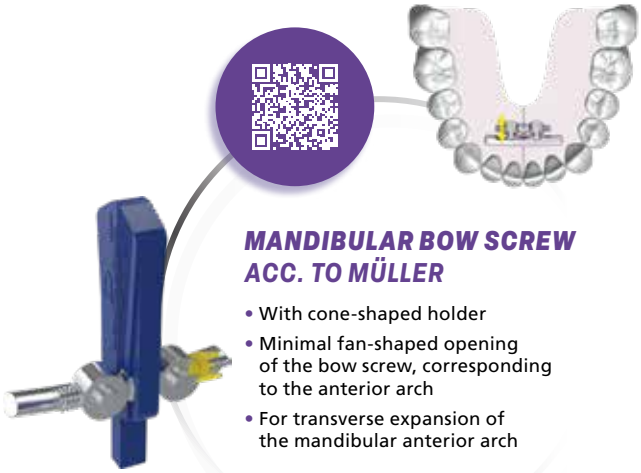
EXPANSION SCREW FOR PROGENIA ACTIVATOR ACC. TO WEISE

- Stable connection of the maxillary plate to the mandibular plate via a strong U-shaped bracket
- For the treatment of Angle Class III (progenia), for distal shifting of the mandible



FAN-TYPE EXPANSION SCREW

- With wide holder
- Fan-shaped opening of the plate sections
- For maxillary anterior or posterior expansion



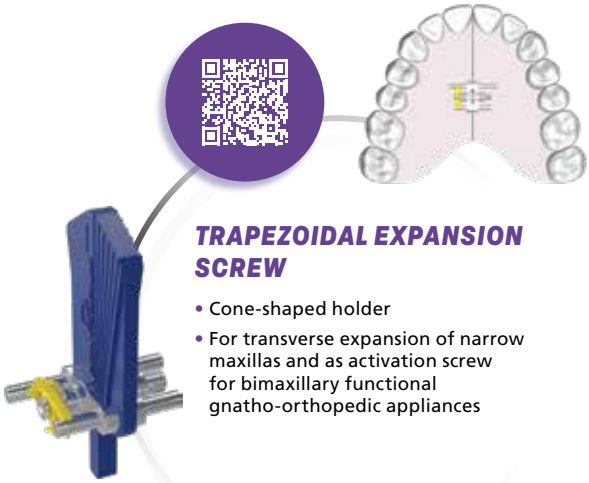
MANDIBULAR BOW SCREW ACC. TO MÜLLER

- With cone-shaped holder
- Minimal fan-shaped opening of the bow screw, corresponding to the anterior arch
- For transverse expansion of the mandibular anterior arch



PISTON SPRING SCREW

- Delicate design
- Constant, elastic, and finely controllable pressure on the tooth to be moved
- For the movement of a single tooth



TRAPEZOIDAL EXPANSION SCREW

- Cone-shaped holder
- For transverse expansion of narrow maxillas and as activation screw for bimaxillary functional gnatho-orthopedic appliances

PRECISION,
THAT CREATES MOVEMENT

HIGH-QUALITY MATERIAL

All Dentaurum expansion screws are made of high-quality stainless steel. This material assures durability, safe operation, and hygiene.



RECEPTACLE FOR THE ACTIVATION KEY

The generous and highly visible activation hole allows for quick, safe, and comfortable activation of the expansion screw. At the same time, the open design supports easy cleaning and improves oral hygiene in the mouth.





STABLE CONSTRUCTION

The well-thought-out design of the screw ensures that both sides open evenly when activated. At the same time, the screws always maintain their stability, no matter how far they are opened.



DRILL HOLE FOR FRICTION CONTROL

The brake hole integrated into the design increases the friction (braking effect) of the screw within the thread system. This prevents self-reversing and thus enables safe and controlled activation during treatment.



STANDARD

SPECIAL



EXPANSION SCREW HOLDER

The expansion screw holder helps to securely position the screw on the model. It facilitates precise alignment and fixation during production and supports efficient laboratory workflows.
It can be removed safely and easily at the end using pliers.



SKELETAL DESIGN

Due to the skeletal design, the acrylic can surround the screw well, thus providing a secure hold within the acrylic. At the same time, smallest possible dimensions can be achieved, which significantly contributes to wearing comfort in the mouth.





EXPANSION STOP

The individual parts of the screw are secured against falling apart at the end of the expansion path. By limiting the expansion path, the screw cannot be overtightened. It stops at the end of the expansion path.



DIRECTIONAL ARROW

Directional arrow inserted. This enables safe and error-free activation, and reduces the risk of application errors by clinicians, patients, or parents.

DENTAURUM.
EXPERIENCE. QUALITY. INNOVATION.

For 140 years, Dentaurum stands for maximum precision, technical excellence, and reliable quality in the dental industry. As a family-run company based in Ispringen in the Northern Black Forest, we combine many years of experience with state-of-the-art technology and a clear commitment to quality: **Engineered and Made in Germany**.

At our location, we develop and manufacture more than 8,500 branded products for orthodontics, dental prosthetics, implantology, and ceramics. As one of the few full-service providers in the industry, we are represented in over 130 countries today and enjoy the trust of practices, laboratories, and universities worldwide. The quality of our products is driven by people with experience, passion, and technical know-how. Many of our employees have been a part of Dentaurum for many years and devote their knowledge and experience every day to development, manufacturing, and quality control. This expertise, which has accumulated over decades, combined with state-of-the-art production processes, forms the basis for the precision, reliability, and durability of our products.



Leo – operates the CNC machines in the automatic turning shop.



Sadka – works in the expansion screw assembly.

THINKING DIGITALLY, UNDERSTANDING ANALOGOUSLY, AND COMBINING THE TWO PERFECTLY – **FOR YOUR SUCCESS.**

Our close collaboration with universities, research institutions, and end users ensures that new scientific findings and practical experience are directly incorporated into our developments. This results in innovative, practice-oriented solutions that sustainably support workflows in the dental practice and laboratory.

Our comprehensive portfolio covers the entire spectrum of state-of-the-art orthodontics and includes both removable and fixed appliances as well as brackets, bands, archwires, expansion screws, pins, pliers, retainers, and many other products. At the same time, we are well aware that every dental practice has its individual requirements. That is why we offer solutions for fully digital, hybrid, and traditional treatment concepts.

HISTORY

Expansion screws have been used in orthodontics for around 175 years. The development ranges from simple 19th-century spindle designs to today's high-precision stainless steel mechanisms, as can be found in the Dentaurum expansion screw portfolio.

Here you can find the **history**

EVERYTHING FOR THE **REMOVABLE APPLIANCE TECHNIQUE** FROM A SINGLE SOURCE

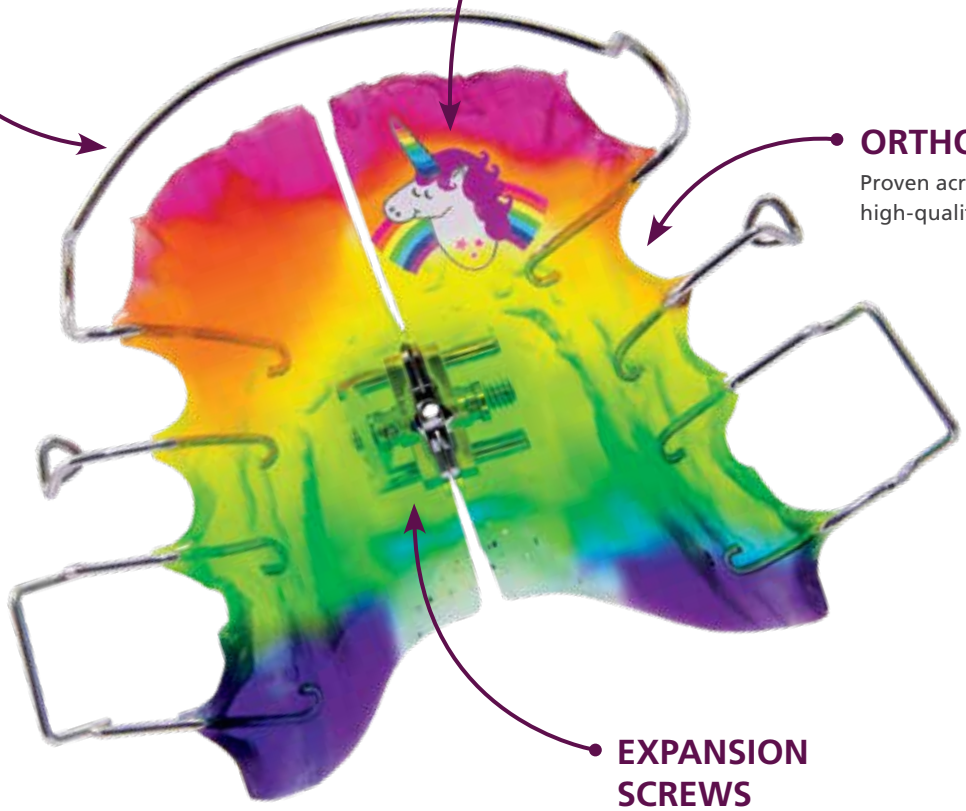


ORTHODONTIC DECALS

With individual decals, all braces turn into personal favorites

WIRES & WIRE ELEMENTS

Suitable components for every construction



ORTHOCRYL®

Proven acrylic for high-quality appliances

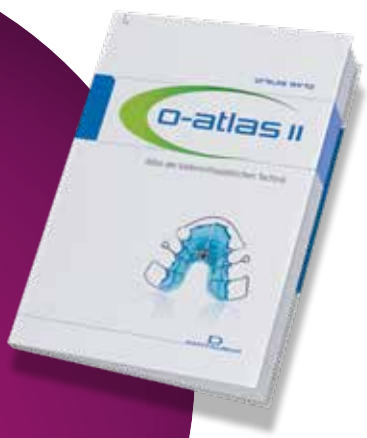
60 years orthocryl®

EXPANSION SCREWS

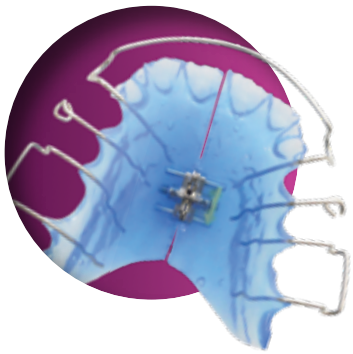
Precise solutions for various indications

O-ATLAS II

In a fully revised, extended edition with new images, Ursula Wirtz presents all of the important removable orthodontic appliances.



Here you can find our **o-atlas II**

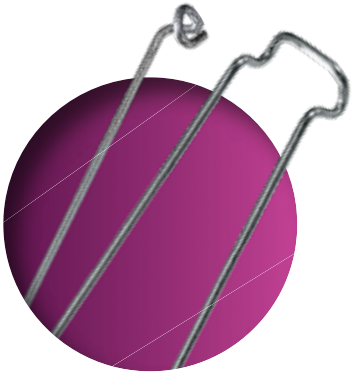


THE CLASSIC FOR THE PLATE TECHNIQUE

Orthocryl® has stood for quality in orthodontics for decades. Owing to its excellent processing properties, the material is ideally suited for the production of high-quality removable appliances.

Your advantages:

- High stability
- Large choice of colors
- Proven laboratory quality



THE BASIS OF EACH INDIVIDUAL APPLIANCE

From high-quality rods or coiled wires to prefabricated components such as labial bows, retention clasps, or active spring elements: The extensive product assortment offers the ideal solution for virtually any application in the removable appliance technique.

Suitable for:

- Active plates
- Individual custom-made devices
- Retention appliances
- Functional orthodontic appliances



PRECISION IN EVERY DETAIL

From simple wire processing through to complex bending tasks: Premium-Line pliers support precise and ergonomic processing in the laboratory and dental practice. High-quality materials and first-class workmanship ensure reliable results in daily use.

Your advantages:

- Precise bending and forming
- Ergonomic working
- Long service life
- Extensive assortment for a wide variety of applications

Successful removable appliances are the result of the combination of high-quality materials, precise components, and profound expertise. From planning and construction through to completion, Dentaurum offers a comprehensive product system for daily laboratory practice.



ORTHODONTICS IMPLANTOLOGY PROSTHETICS CERAMICS DIGITAL SEMINARS

CHAT

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