The Dentaurum Bracket World

Diversity in metal.
High performance for precision.

Made in Germany for more than 130 years.
Dentaurum is one of the oldest owner-managed dental companies in the world and has numerous patents in orthodontics, prosthetics and implantology. Our high-quality materials are produced on site in Ispringen, near Pforzheim, the “City of Gold”, in Baden-Württemberg, Germany.

High performance for precision.
Our high-quality brackets are designed and manufactured using state-of-the-art design and production procedures. A very high level of precision is essential to ensure safe, reliable use in orthodontic treatment and it therefore plays a central role in production. The diversity of Dentaurum metal brackets provides application options for all indications. All metal brackets are manufactured in one piece from highly corrosion-resistant, medical-grade stainless steel alloys. This makes them particularly biocompatible for the patient as no solder is used. The wide-ranging program also includes nickel-free brackets made from a special CoCr alloy and pure titanium brackets that are ideal for patients with allergies.
Professional quality management.

The professional quality management system at Dentaurum fulfills all the requirements of directives for medical device manufacturers and international standards: 93/42 EWG, DIN EN ISO 9001 and DIN EN ISO 13485.

The innovative strength of Dentaurum is reflected in numerous patents. The brackets can be easily identified and placed using the patented laser marking with the FDI notation on the base. The innovative laser-structured base provides reliability during bonding and ensures gentle removal of the bracket from the tooth.

First-class service.

Service is very important at Dentaurum: our Customer Support is always available to provide help with any questions regarding products and applications. Dentaurum also offers a large number of product-related courses and events. Dentaurum has an international presence with eight affiliates and a worldwide network of distributors in more than 130 countries.
The discovery® bracket family comprises the premium bracket line of the Dentaurum metal bracket range. These are manufactured completely as one-piece brackets using the MIM technique – Metal Injection Molding – and special dental alloys in state-of-the-art facilities. The hook on the canine and, if desired, on the first and second premolar brackets, is directly integrated into the mold and is also produced in one piece together with the body of the bracket. The innovative mushroom shape provides retention for more elastics.

Innovative production procedures guarantee maximum success.

The bases of all brackets of the discovery® family are ideally adapted to the tooth contour using 3D CAD (Computer Aided Design), allowing optimal handling for the user when bonding the bracket to the tooth. The anatomical shape facilitates positioning the bracket on the tooth and also ensures it is firmly retained on the tooth.

Optimal bond strength and easy debonding.

The patented laser-structured base with FDI notation guarantees reliable retention during treatment. The ideal distribution of micro and macro retention produces an optimal bond of tooth/adhesive to the bracket. Evenly-spaced retentions support the bonding of the brackets on the tooth surface. A debonding channel ensures very easy debonding of conventionally ligated brackets. The channel allows the bracket face to flex, ensuring safe removal from the tooth.
Characteristics.

Individually combined with easy handling.

All discovery® brackets have been designed so that there is sufficient space for multiple ligatures. In addition, rounded bracket tie wings facilitate ligation and provide intra-oral comfort without sharp edges for the patient.

All discovery® brackets include biocompatible laser marking for easier identification and positioning. The clear system of symbols makes it easier to assign each bracket to a specific tooth.

The laser marking is abrasion resistant and does not contain any harmful coloring agents.

Diverse combination options.

As all brackets of the discovery® range have the same design, there is no limit to the individuality of the treatment. All brackets can be easily combined with one another. A low In/Out of 0.7 mm allows individual combination of the brackets within the family without using any compensation bends.
The sum of experience.

- Hook in mushroom-head design.
- Low profile for more patient comfort.
- 1-piece bracket for high biocompatibility.
- Low friction in the slot.
- Laser-structured base.
- 3D CAD adapted shape.
- Debonding channel ensures safe debonding.
- Rounded edges. Large tie wing undercuts.
The discovery® brackets have been created from the sum of many years of experience in the bracket sector. Their size and handling are proven features and represent the high quality of Dentaurum metal brackets.

Optimal design inspired by nature.
The design of the proven discovery® brackets ensures an optimal fit on the tooth and easy handling during bonding and debonding. The design features large tie wing undercuts that allow a free choice in the use of ligatures with the bracket. Even multiple ligatures can be easily used with discovery® brackets. The fit of the brackets has been continually optimized. It follows the anatomy of the tooth, so that the bracket can be easily positioned on the tooth.

Intra-oral comfort for the patient.
The extra rounded bracket tie wings facilitate ligating for the orthodontist and provide intra-oral comfort without sharp edges for the patient. Great care has been taken with discovery® brackets to ensure that the overall height is kept to a minimum. With an In/Out of 0.7 mm the brackets only require a little space.
Small and brilliant.

1-piece bracket for high biocompatibility.

Low profile for more patient comfort.

Patented laser structure with FDI notation.

Hook in mushroom-head design.

Laser marking.

Excellent sliding properties.

Optimal wing design.

Debonding channel ensures safe debonding.

3D CAD adapted bracket base.
Compact size combined with brilliant characteristics. This describes the premium metal bracket discovery® smart. It complements the bracket range with its compact dimensions and an innovative curved slot.

High degree of intra-oral comfort and perfect aesthetics.

The significant reduction in size by approximately 20% compared with discovery® greatly increases the intra-oral comfort for the patient, without impairing control of torque and angulation. A further highlight is the mesial-distal curved slot contour that follows the ideal curvature of the dental arch. This has a positive influence on the sliding mechanisms of the archwire.

Biocompatibility and easy handling guaranteed.

discovery® smart possesses the same high level of biocompatibility as usual. As with all Dentaurum brackets, it is a genuine one-piece bracket without solder. It is manufactured using the MIM technique and includes the patented laser-structured base with FDI notation which ensures that every bracket can be assigned to a specific tooth.
1-piece bracket for high biocompatibility.

Optimal wing design.

Low profile for largest possible space for the tongue.

Laser-structured base for optimal retention.
discovery® delight dramatically reduces the number of components required for treatment while ensuring a free selection of all lingual treatment options, from 2D to 3D treatment.

A lingual system that addresses patient needs and offers all the advantages of the well-proven discovery® bracket family:

- highest quality
- virtually invisible
- short treatment time
- high patient comfort
- perfect design

The main components of discovery® delight are four bracket types that can be used both for the upper and lower jaw and ensure easy and time-saving handling.

The brilliant combination of a vertical slot in the anterior region with a horizontal slot in the posterior region (open/closed) enables optimal force transfer.

Carefully selected archwires and instruments round off the product portfolio of discovery® delight.
The nickel-free* alternative.

- Hook in mushroom-head design.
- 1-piece bracket for high biocompatibility.
- Nickel-free.*
- Laser marking.
- Low profile for more patient comfort.
- Laser-structured base.
- Debonding channel ensures safe debonding.
- Rounded edges. Large tie wing undercuts.
topic is a bracket from Dentaurum that is nickel-free* and thereby suitable for persons suffering from allergies. The brackets are manufactured from a cobalt chrome alloy that was specially developed for use in dentistry. This alloy has been used successfully for many years in prosthetic dentistry.

Nickel-free* bracket using modern MIM technology.

The design and manufacture of topic brackets correspond to those of the discovery® range. Rounded edges ensure intra-oral comfort and large tie wing undercuts also allow multiple ligatures.

Reliable bond during treatment.

topic has a laser-structured base that ensures optimized bond strength. The uniform structure of micro and macro retention support bracket retention on the tooth surface. The bracket fits perfectly to the shape of the tooth thanks to the anatomical contour of the base that was adapted using 3D CAD. This greatly facilitates placement and positioning of the bracket.

* see materials list
One of the smallest sl-brackets in the world.

- **3D CAD adapted shape.**
- **Low profile for more patient comfort.**
- **Super smooth lid and closed surface design.**
- **Twin tie wing design.**
- **Hook in mushroom-head design.**
- **Cross marking.**
- **Patented laser structure with FDI notation.**
- **Rhomboid base and debonding channel.**

Available in Roth 18/22.
Outstanding features of the discovery® sl system are excellent treatment efficiency, impressively simple and reliable handling and a very high degree of patient comfort. As a member of the discovery® bracket family, it allows for easy and seamless combination with other products from the same family.

Optimal treatment results – perfect aesthetics.

discovery® sl brackets combine maximum function and minimal size to ensure efficient, aesthetic treatment. The minimal size, super smooth surfaces and closed design of the discovery® sl brackets provide the patient with excellent intra-oral comfort and optimal hygiene.

Simple closure mechanism.
The core of discovery® sl is a hinge-type closure mechanism that is easily opened and closed using a special sl instrument. An integrated lid brake prevents the lid from closing automatically during archwire changes.
Proven design for your success.

1-piece bracket for high biocompatibility.

Opening mechanism in the direction of force.

Low profile for more patient comfort.

Basal flange and cross marking.

Twin tie wing design.

Available in MBT* 22.

Patented laser structure with FDI notation.

Super smooth surface / rounded edges.

* The Dentaurum version of this prescription is not claimed to be a duplication of any other, nor does Dentaurum imply that it is endorsed in any way by Drs. McLaughlin, Bennett and Trevisi.
Developed on the platform of the proven discovery® brackets, discovery® sl 2.0 combines the sum of many years of experience with modern demands of orthodontic treatment.

Revised and realigned.
The function of the discovery® sl brackets has been completely revised and the bracket realigned. Significant improvements to the function of the lid and opening mechanism were implemented with version 2.0.

Quick opening and closing.
The simple, robust closure mechanism of the discovery® sl 2.0 brackets enables easy and quick opening and closing with minimal force application. The elastic lid brake between the tie wings of the bracket reliably keeps the lid open and prevents it from closing during archwire changes. The lid of the discovery® sl 2.0 is opened using a special instrument and, after making a slight rotary movement, it opens very easily in the direction of force.
Self-ligating metal bracket

- Water-soluble color marking.
- Hook in mushroom-head design.
- Clip in premium cobalt chrome alloy.
- Low profile and optimal wing design.
- Anatomically adapted bracket base.
- From passive to active.
- Large tie wing undercuts.
- Micro-etched mesh base.
- Mid-line marking.
- Guide slot with closing clip.
The aesthetic design of the self-ligating bracket dinamique® m is convincing. The bracket is pleasant to wear thanks to its low profile height and optimal wing design.

Thanks to the bracket clip, which is rhodium-plated and made with a premium cobalt chrome alloy, fewer check-ups and less time in the chair are needed. The bracket can be easily allocated to the correct tooth by means of a water-soluble color marking.

A mid-line marking and the anatomical design of the base facilitate the positioning of the bracket. The micro-etched mesh base enables optimal bonding and easy debonding.

dinamique® m can be used from passive to active, allowing ideal control in all treatment phases.
The equilibrium® family.

The equilibrium® series is Dentaurum’s classic bracket series. Reliable results in patient treatment over many years have proven that the attractive and functional design is successful.

The brackets from the equilibrium® family are formed and milled from rod material and undergo many fully-automated processing steps. Like many other Dentaurum brackets, they are genuine 1-piece brackets. equilibrium® 2 and equilibrium® mini brackets are produced in one piece – body and base – from high-strength, stainless steel*. equilibrium® ti brackets are made from titanium** and are nickel-free. Brackets from the equilibrium® family are particularly biocompatible as no solders are used.

* Material number acc. to DIN 1.4404
** Material number acc. to DIN 3.7035
Easy handling and reliable treatment.

All equilibrium® brackets include biocompatible laser marking for easier identification and positioning. FDI notation is also laser marked on the base. This system of symbols aids in assigning each bracket to a specific tooth.

The laser marking is abrasion resistant and does not contain any harmful coloring agents.

Design recognized worldwide.

The design of equilibrium® brackets provides excellent bracket tie wing undercuts, which also allow the use of multiple ligatures at any time. The design of the rhomboiroid base with an additional central marking facilitates placement on the clinical crown. The low In/Out values enable an ideal application of force.
The mini bracket.

- Low profile for more patient comfort.
- 1-piece bracket for high biocompatibility.
- Low friction in the slot.
- Patented laser structure with FDI notation.
- Anatomically adapted shape.
- Rounded edges. Large tie wing undercuts.
Small bracket – maximum performance.

Thanks to highly modern computer-aided construction and processing methods, Dentaurum succeeded in developing one of the smallest brackets in the world – equilibrium® mini. The bracket epitomizes unsurpassed aesthetics combined with maximum functionality. Its compact size opens up completely new perspectives for the orthodontist in terms of perfect aesthetics combined with high-quality treatment. Despite its compact size, equilibrium® mini does not sacrifice full control of torque and angulation.

Comparison in size equilibrium® 2/equilibrium® mini
equilibrium® 2 Harmony in function and comfort.

- Low profile for more patient comfort.
- 1-piece bracket for high biocompatibility.
- Low friction in the slot.
- Patented laser structure with FDI notation.
- Rounded edges.
- Large tie wing undercuts.
- Anatomically adapted shape.
Patented laser-structured base with FDI notation ensures an ideal bond.

The base is not retained via an additional, soldered mesh pad, but instead incorporates a biocompatible laser structure that is patented by Dentaurum. This laser structure has a uniform distribution of micro and macro retention that produces an ideal bond between bracket, adhesive and tooth. There are no other alloys or solders used during the production of Dentaurum brackets.

Outstanding bracket design guarantees easy handling.

The design of equilibrium® 2 features excellent large tie wing undercuts on the bracket that allow the use of multiple ligatures. Clear laser marking and FDI notation on the base aid in assigning the correct bracket to each tooth.
equilibrium® ti  Outstanding biocompatibility.

Rounded edges. Large tie wing undercuts.

Nickel-free titanium.

Low friction in the slot.

1-piece bracket for high biocompatibility.

Low profile for more patient comfort.

Patented laser structure with FDI notation.

Anatomically adapted shape.
The equilibrium® ti bracket is based on Dentaurum’s many years of experience in the high-performance application of titanium in prosthetic dentistry and implantology. Titanium is biocompatible, able to withstand high mechanical loading and odorless, which also makes it ideal for use in orthodontics. equilibrium® ti brackets are completely nickel-free.

Optimal friction values.

The special surface conditioning of the slots of equilibrium® ti guarantees efficient treatment with minimum friction. The friction values are comparable to those of stainless steel brackets. The properties and the design of the titanium brackets are the same as for the equilibrium® 2 design.
Dentaurum Group

Germany I Benelux I España I France I Italia I Switzerland I Australia I Canada I USA
and in more than 130 countries worldwide.