

## 9. Availability

Designation	straight legs	Quantity
Titan palex® Maxi – 12, straight (expansion 12 mm) with safety key	REF 602-810-11	1 piece
	REF 602-810-31	10 pieces
	REF 602-810-55	50 pieces
rematitan® wire, round ø 0.4 mm / 16	REF 528-039-50	1 roll 2 m long
rematitan® wire, round ø 1.0 mm / 39	REF 528-041-00	10 rods, each 100 mm
rematitan® wire, round ø 1.2 mm / 47	REF 528-042-00	10 rods, each 100 mm
Safety key	REF 611-120-00	10 pieces
Universal bending key	REF 611-122-00	1 piece

Pack (1 piece / 50 pieces) with 1 safety key

Packs (10 pieces) with 10 safety keys

## Information for the doctor/patient

Before the Titan palex® appliance is cemented into position, open the spindle (screw) by making 2-3 quarter turns in the direction of the arrow to test the mobility. Then turn back to the original position.

Turn the Titan palex® screw only in the direction of the arrow. Opening and closing the screw several times during treatment can cause it to loosen and no longer function properly.

The finished Titan palex® appliance is cemented into position with splints in the usual manner. Follow the instructions from the cement manufacturer.

Following this, the screw is turned four times 90° using the key (REF 611-120-00, Fig. 8) supplied for this purpose. One full 360° turn of the spindle = 0.80 mm expansion.

The patient should turn the screw two times 90° both in the morning and evening (according to your instructions) until the desired turn is achieved.

## 10. Quality

Dentaurum ensures faultless quality of its products. These recommendations are based upon Dentaurum's own experiences. The user is solely responsible for the processing of the products. Responsibility for failures cannot be taken, as Dentaurum has no influence on the processing on site.

## 11. Explanation of symbols used on the label



Please refer to the label. Additional information can be found at [www.dentaurum.com](http://www.dentaurum.com) (Explanation of symbols REF 989-313-00).

**Note:** Always use the blue safety key (Fig. 8) supplied to avoid accidental swallowing.

Regular visits are recommended to monitor progress.

The Titan palex® appliance is secured against unwanted reversing, after the desired degree of expansion is achieved, by fitting a ligature or blocking with acrylic. The appliance should remain in the mouth for approximately 2 - 3 months for stabilization purposes.

A retainer should be worn following removal of the appliance.



The product should not be used if there is a known allergic reaction to one or more of the material components.

Should the user and/or the patient become aware of serious problems arising from the use of the product, it is important that the manufacturer and the competent authority in the country in which the user and/or the patient is resident is informed accordingly.

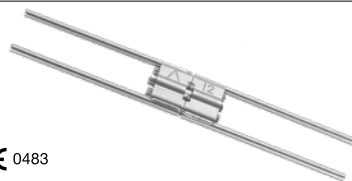
US

Instructions for use

➔ For more information on our products, please visit [www.dentaurum.com](http://www.dentaurum.com)

Date of information: 2022-1

Subject to modifications



CE 0483

Titan palex®

Maxi - 12

Screw

989-384-20 Printed by Dentaurum Germany 01/22/CR1-2

**D**  
DENTAURUM  
USA

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**D**  
DENTAURUM  
USA

**Dear customer,**

Thank you for choosing a quality product from Dentaaurum.

It is essential to read these instructions carefully and adhere to them to ensure safe, efficient use and ensure that you and your patients gain full benefit.

Instructions for use cannot describe every eventuality and possible application. In case of questions or ideas, please contact your local representative.

As our products are regularly upgraded, we recommend that you always carefully read the current Instructions for use supplied with the product and stored in the internet at [www.dentaaurum.com](http://www.dentaaurum.com), even though you may frequently use the same product.

**1. Manufacturer**

Dentaaurum GmbH & Co. KG  
Turnstr. 31 | 75228 Ispringen | Germany

**2. General product description**

The Titan palex® screw (Palatal Expansion Screw) is a special expansion screw for rapid palatal expansion. The retention legs of this titanium expansion screw are welded onto titanium cap splints (Fig. 1). Alternatively they can also be polymerized into Orthocryl® acrylic splints (Fig. 2). The appliance with the titanium or acrylic splints is cemented in the conventional manner.

**3. Area of application**

Used for rapid palatal expansion with a fixed appliance.

**4. Fabrication of the Titan palex® appliance**

The retention legs can be lasered onto individually cast titanium cap splints or polymerized into Orthocryl® acrylic splints.

The Titan palex® screw should be "suspended" 1–2 mm above the palatal vault of the gingiva (Fig. 3) and its dorsal side should be in line with the mesio-palatal cusps of the first molars. In order to avoid leverage,

it must be situated parallel to the occlusal plane. The Titan palex® screw is positioned so that it may be turned in a dorsal direction (Fig. 1-3) in order to make the task of inserting the safety key and activating the screw easier.

**5. Tips for working with Titan palex® screws**

In order to bend the retention legs of the Titan palex® screw gently and easily, we recommend using the universal bending key (REF 611-122-00, Fig. 6) without the aid of pliers (lever principle). If this is not available, the retention legs must be stabilized by holding the expansion screw body with a pair of sturdy pliers, e.g. wire bending pliers Maxi (REF 013-522-00), in order to prevent the retention legs from fracturing (Fig. 5). For the connection to be durable, the retention legs of the Titan palex® screw must be welded to the cap splint, (Fig. 1 and 3), for example using the welding unit desktop Compact (REF 090-578-50). As an average value for titanium, the initial laser setting on the unit is as follows: 230 volt, 2.0 – 2.3 ms, 0.8 mm. The use of a shielding gas is indispensable during the welding process. When using or adding new material to reinforce the welding area, we recommend rematitan® wire, ø 0.40 mm (REF 528-039-50, Fig. 7).

**6. Composition**

The composition is included in the materials list; please refer to the catalog or [www.dentaaurum.com](http://www.dentaaurum.com).

**7. Safety information**

Always use the blue safety key supplied to prevent swallowing.

The product should not be used if there is a known allergic reaction to one or more of the material components.

**8. Information for single use products**

The product is intended for single use only. Reconditioning of a product that has already been used (recycling) and its reuse on a patient is not permitted.

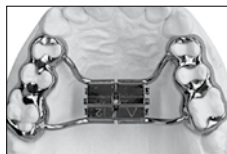


Fig. 1



Fig. 2



Fig. 3

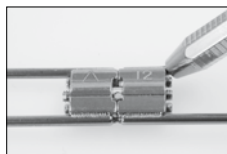


Fig. 4

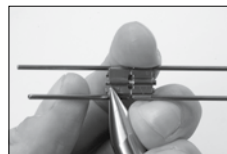
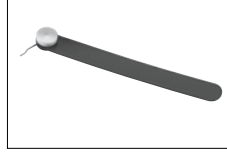


Fig. 5

Fig. 6  
Universal bending tool  
REF 611-122-00Fig. 7  
rematitan® wire, ø 0,40 mm  
REF 528-039-50Fig. 8  
Safety key  
REF 611-120-00