

UNI-Smile Distractor

Smile Distraction

“Giving people a nice Smile.”



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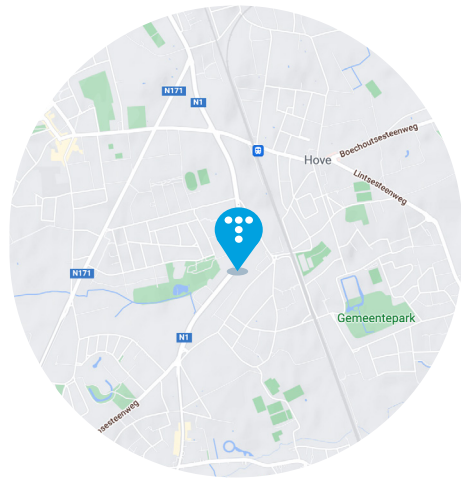


UNI-Smile Distractor

Who are we?

Our Company

Titamed is a market leader in standardized cranio-maxillofacial (CMF) solutions. We have over 35 years of experience in the design, development and manufacturing of superior, innovative, high quality and user-friendly CMF products. This has been accomplished with the cooperation, experience and commitment of outstanding cranio-maxillofacial surgeons from leading clinics.



Locations

We are based in Belgium, the heart of Europe, with an excellent reputation in the field of healthcare, biotech and medical devices.

Our products



SMART FIXATION

Smart Fixation provides internal fixation of cranial and facial bones during cranio- and maxillofacial procedures.



SMILE DISTRACTION

The palatal distractors are designed to widen the upper jaw, allowing surgeons to deliver outstanding improvements to the facial features of their patients.



PERSONALIZED IMPLANTS

For patient-specific implants, Titamed has partnered with Avinent to provide surgeons with a complete CMF solution.

UNI-Smile Distractor

Palatal distraction devices

Indication

Surgically assisted rapid maxillary expansion (SARME) is needed in skeletally matured patients (closed midpalatal suture), to correct a transverse maxillary deficiency or hypoplasia. This is frequently seen in adolescents and adults. Those patients are often seen with a unilateral or bilateral posterior crossbite and anterior dental crowding.

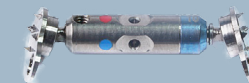
Distraction

Distraction osteogenesis relies on the body's natural ability to heal fractures. It is a process of new bone formation where a transpalatal distractor gradually pulls apart two pieces of bone. The gradual separation is not painful, and new bone grows to fill the gap.

Type and use

UNI-SMILE DISTRACTOR:

The most commonly used type.



SMILE EXTRA DISTRACTOR:

For cases requiring significant expansion.



SMILE 3 DISTRACTOR:

For pathological small upper jaws and clefts.

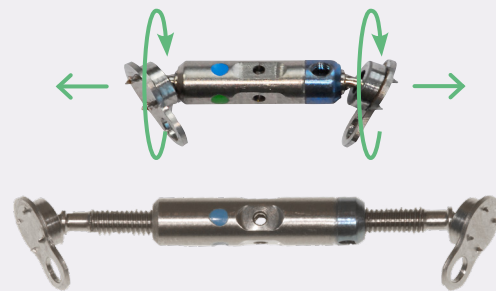


UNI-Smile Distractor

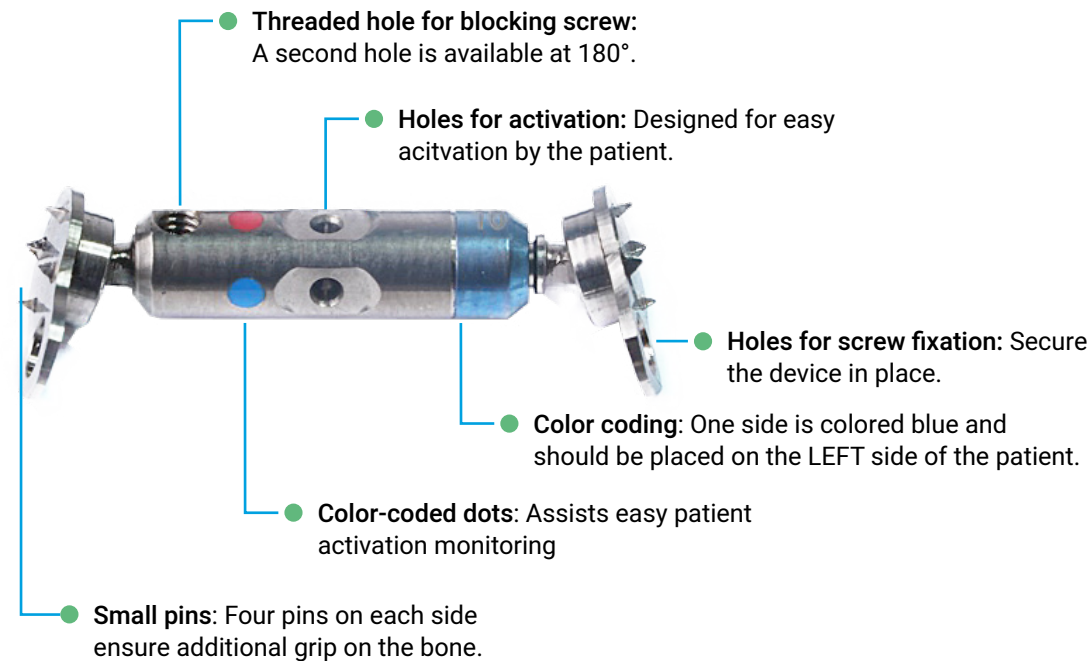
Features

Mechanism

The presence of wings with counter-oriented threads facilitates controlled expansion.



Module



UNI-Smile Distractor

Features

Features

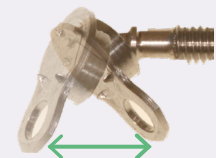
✓ **Unmatched Comfort & Hygiene:** The smallest module on the market, designed to minimize discomfort while ensuring optimal oral hygiene.



✓ **Effortless Patient Activation:** User-friendly design, enabling patients to expand their distractor intuitive and effortless.



✓ **Anatomical Fit:** Self-adjusting plates conform naturally to the bone structure, enhancing stability and reducing surgical complexity.



✓ **Reliable & Durable:** Proven track record for over 20 years. High-quality materials and precision engineering ensure longevity and stability throughout the treatment period.

2018 - Journal of Cranio-Maxillo-Facial Surgery; Bone changes on lateral cephalograms and CBCT during treatment of maxillary narrowing using palatal osteodistraction with bone-anchored appliances.

2017 - Journal of Cranio-Maxillofacial Surgery; The effects of surgically assisted rapid maxillary expansion (SARME) on the dental show and chin projection.

2017 - Journal of Oral and Maxillofacial Surgery; Following Surgically Assisted Rapid Palatal Expansion, Do Tooth-Borne or Bone- Borne Appliances Provide More Skeletal Expansion and Dental Expansion?

[Link to complete list of publications.](#)



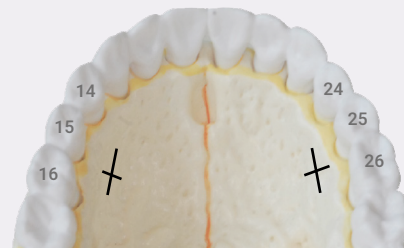
UNI-Smile Distractor

Surgical procedure

Sequence of the surgery

1. **Corticotomies:** Lateral, midline, and (if necessary) posterior disjunction.
2. **Placement of the UNI-Smile Distractor:** Fixed with self-drilling screws between teeth (14)–15–16 and (24)–25–26.

SP-022 Rev. D

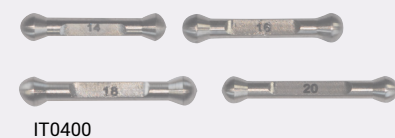


INCISION

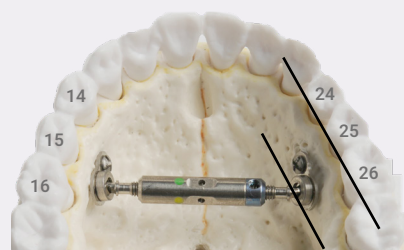
A **cross-palatal incision** or **L-incision** is recommended, placed between the premolar and molar or between the premolars. The incision should be made **1 cm downward**, as illustrated.

The correct distractor module size can be measured bone to bone with the **fitting models IT0400**.

To maximize potential expansion space, it is advised to **use the largest possible module size**.



Blue mark ALWAYS to the left!

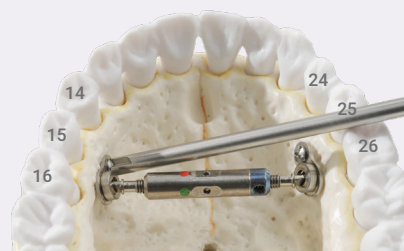


PLACEMENT

The abutment plates must be placed horizontally, with the **blue side always on the left**.

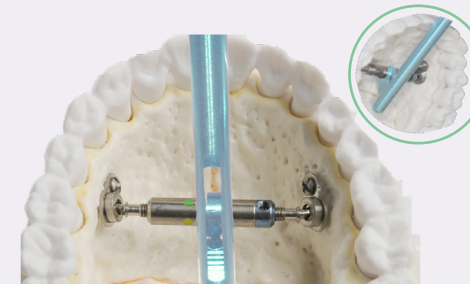
Ensure the wings of the distractor are completely and evenly screwed in to avoid losing expansion space.

The Smile Distractor is secured with self-drilling screws **DSSA06** or **DSSA07** using screwdriver **IT0315**.



UNI-Smile Distractor

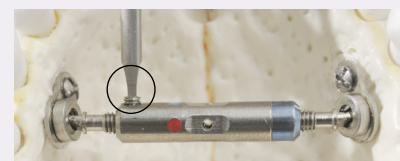
Surgical procedure



ACTIVATION

The surgeon activates the Smile Distractor until an **opening of ~1 mm** appears between the front teeth.

Use key instrument **IT0314** to turn the distractor from front to back.



BLOCKING SCREW

The blocking screw **D002** is inserted into one of the two threaded holes using screwdriver **IT0128**.

The blocking wherscrew must be **firmly fixed** using wrist force.



KEEP IN MIND

1. The wings of the distractor can be turned completely loose of the distractor module. There is no automatic stop.
2. A minimum palatal distance of 21,5 mm is necessary to place the smallest UNI-Smile Distractor.

Sequence of the distraction

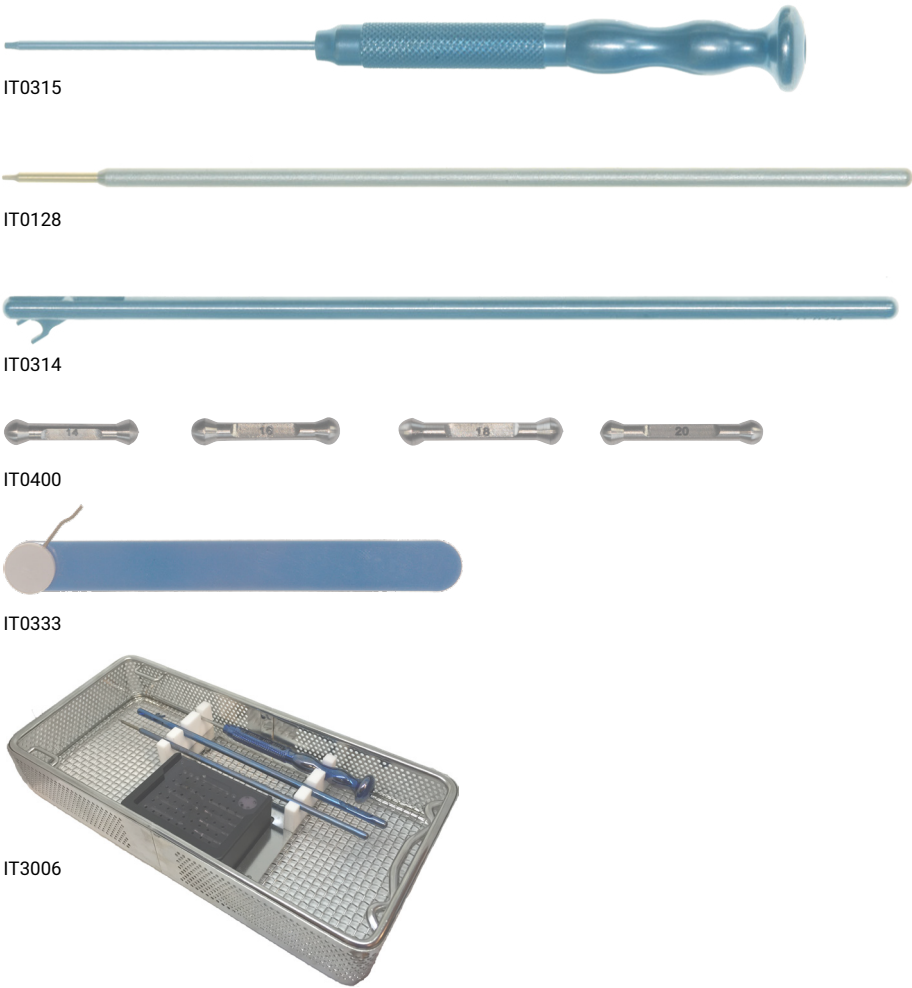
1. **Surgery:** (as outlined above)
2. **Activation period:** Begins **one week post-surgery**. Remove the blocking screw and expand until resistance is felt, then turn once or twice more.
 - During activation (1–2 weeks), patients should turn the device **twice daily, 1/4 turn per time (~0.5 mm/day)**.
 - With each turn, a new color appears.
3. **Consolidation period:** Once the desired expansion is achieved, reinsert the **blocking screw firmly**. The distractor must remain in place for **3 to 6 months**.

Tip: Our patient information can be found on our website www.titamed.com.

UNI-Smile Distractor

Product information

Instruments



Cat. No.	Description
IT0315	Hexagon Screwdriver
IT0128	Square Screwdriver PHI, long
IT0314	Key for UNI-Smile and Smile 3
IT0400	Fitting models, UNI-Smile
IT0333	Patient Key UNI-Smile and Smile 3
IT3006	Container UNI-Smile, 24 x 12cm

UNI-Smile Distractor

Product information

Distractors



Cat. No.	Description	Distractor closed	Distractor open
DSA014	UNI-Smile Distractor, 14mm	21.5 mm	31.5 mm
DSA016	UNI-Smile Distractor, 16mm	23.5 mm	35.5 mm
DSA018	UNI-Smile Distractor, 18mm	25.5 mm	39.5 mm
DSA020	UNI-Smile Distractor, 20mm	27.5 mm	43.5 mm

* optional DSA022 and DSA024

Screws



Cat. No.	Description	Ø
DSSA06	Bone screw, self-drilling, L=6mm	2.3 mm
DSSA07	Bone screw, self-drilling, L=7mm	2.3 mm

* used with screwdriver IT0315, hexagon

Blockingscrew



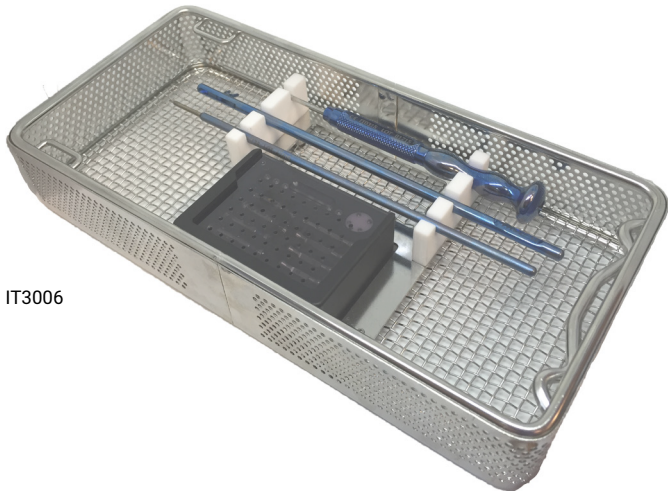
Cat. No.	Description	Ø
D002	Blocking screw distractor	2.0 mm
D002-4	Blocking screw distractor, set of 4 pc.	2.0 mm

* used with screwdriver IT0128, square

UNI-Smile Distractor

Product information

Box content



IT3006

IT3006	Cat. No.	Description	Max. quantity
↗	IT0128	Square Screwdriver PHI, long	1
↗	IT0314	Key for UNI-Smile and Smile 3	1
↗	IT0315	Hexagon Screwdriver	1
↗	IT0400	Fitting models, UNI-Smile	1
↗	DSA014	UNI-Smile Distractor, 14mm	1
↗	DSA016	UNI-Smile Distractor, 16mm	1
↗	DSA018	UNI-Smile Distractor, 18mm	1
↗	DSA020	UNI-Smile Distractor, 20mm	1
↗	DSSA06	Bone screw, self-drilling, L=6mm	4
↗	DSSA07	Bone screw, self-drilling, L=7mm	4
↗	D002-4	Blocking Screw Distractor, set of 4 pc.	1

UNI-Smile Distractor

Patient information

Your doctor has provided you with a Smile Distractor to widen your upper jaw.

Treatment phases:

- Placement + rest (1 week)
- Activation period (1 - 3 weeks)
- Retention period (3 - 6 months)

The exact duration of each phase is determined by your doctor.



Before the widening



Smile distractor in use



6 months afterwidening

For detailed patient information, visit www.titamed.com.



Headquarters:

Titamed
Mechelsesteenweg 297 F
2550 Kontich
Belgium

tel: +32 (0)3 289 51 56
email: info@titamed.com
website: www.titamed.com
version: SP-608 rev B