

1. Usage

THERMEO® milling blanks are used to manufacture occlusal splints with thermomemory effect.

2. Product description

The THERMEO® material is characterized by its thermoplastic flexibility resulting in highly precise adaption to the tooth situation. Moreover, THERMEO® offers stress-free wearing comfort for the patient. Furthermore, the self-adjusting occlusal splint shows high transparency and is also extremely resilient to breakage. The industrial production process of THERMEO® blanks provides an exceptional material homogeneity and thereby an outstanding long-term stability. The usage of THERMEO® milling blanks by CAD/CAM technology ensures a safe production process. The use of THERMEO® milling blanks using CAD/CAM technology also ensures a safe process, since mixing errors (e.g. by hand mixing) are eliminated. In addition the odor occurring during mixing will be avoided. Indications: Material for the production of dental occlusal splints: Reflex splints, Therapeutic splints, Repositioning splints, Stabilization splints.

3. Processing

- THERMEO® milling blanks should be used only for the purpose of CAD/CAM production of dental occlusal splints. They can be used in all common CAD/CAM systems (fig. 1).
- Suitable cross-cut carbide cutters are to be used exclusively for the processing of the THERMEO® material.
- THERMEO® occlusal splints are designed and milled by CAD/CAM technology and qualified staff. After finishing, the thickness in the occlusal region of the splint must not be less than 0,9 mm. For aesthetic reasons, a labial reduction to 0,8 mm is permissible. Any corners and edges should be rounded off.
- THERMEO® splints can be removed from the milling blank by using suitable cross-cut carbide cutters or cutting discs suitable for composites. Carefully cut through the retaining strips without pressure.
- In order to avoid plaque accumulation subsequent polishing of the splints is essential. Please pre-polish with suitable silicone polishers and goat's hair brushes. The high-luster polishing should be done with a corresponding polishing compound (fig. 2). As far as possible, please avoid heat generation during the polishing and finishing of the THERMEO® splint. This guarantees the optimal fitting of the splint.
- Please note:** Upon completion, use an ultrasonic bath with water at a maximum temperature of approx. 35 °C for cleaning. Cleaning solutions are not recommended.
- THERMEO® powder liquid system must be used for repairs or addition of material in order to preserve the thermoplastic properties of the splint. The processing recommendations of the manufacturer must be taken in consideration.

4. Milling parameters THERMEO®

Roughing:

- 2 mm ball radius cutter – single cutter
- Speed: 22,000 rpm
- Radial path distance: 0.6 mm
- Z depth increase: 0.6 mm
- Feed: 1,600 mm/min

Finishing:

- 2 mm ball radius cutter – single cutter
- Speed: 22,000 rpm
- Radial path distance: 0.1 mm
- Z depth increase: 0.1 mm
- Feed: 1,600 mm/min

Rest roughing:

- 1 mm ball radius cutter – single cutter
- Speed: 28,000 rpm
- Radial path distance: 0.1 mm
- Z depth increase: 0.1 mm
- Feed: 1,200 mm/min

The irrigation nozzle on the spindle should be aligned with the tool tip. In this occasion it should be noted that a uniform programming length is respected or the length of the 2 mm tool is estimated. The cooling medium air is sufficient.

5. Notes

- Incorrect use of milling tools, polishing brushes, steam cleaner and water baths can overheat the material exposed and thus the properties are adversely affected. Deviations from the described manufacturing process can lead to different mechanical and optical properties of the material.
- The lot number and the best before date are indicated on each THERMEO® packaging. In case of claims please always indicate the lot number of the product.
- Do not use the product after expiration date.
- The use of the material for the production of conventional splints is contraindicated, as is the production of denture bases. When properly handled and used by the dentist, orthodontist and dental technician, no side effects were observed. Undesirable biological reactions (e.g. allergies to material components) may occur in individual cases. Clarify the use of THERMEO® splints with your dentist or orthodontist in case of a known allergic response to components of THERMEO®.
- Clean THERMEO® splints under cold running water with a toothbrush. Disinfect the splint with non-alcoholic detergents before first use.

Instructions for use · Gebrauchsanweisung  
Mode d'emploi · Instrucciones de uso  
Istruzioni per l'uso

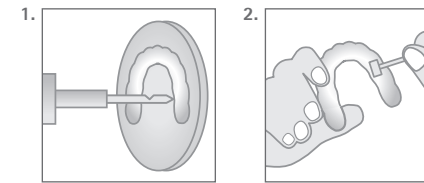
THERMEO® milling blank for the generation of occlusal splints with thermomemory effect

THERMEO® Fräsronden zur Herstellung funktionstherapeutischer Aufbisschienen

Disques à usiner THERMEO® pour la confection de gouttières occlusales d'orthodontie fonctionnelle

Discos de fresado THERMEO® para la confección de férulas dentales oclusales tratamientos funcionales

Dischi di fresatura THERMEO® per la realizzazione di ferule di scarico per la terapia ortodontica funzionale



6. Safety advice

- Restorations are custom-made devices in accordance with the Directive 93/42/EEC. Record the BATCH no. for every procedure requiring identification of the material.
- Storage: No special measures are required.
- Disposal: Dental objects made of THERMEO® are not water soluble, are inert, and do not present a hazard for ground water. As such, they can be disposed of as domestic waste without any special precautions if not stated otherwise in your local disposal guidelines.
- Warranty: Our recommendations concerning the application technique, regardless of whether they are communicated in writing, orally, or by means of practical instructions, are based on our own experiences and tests. As such, they are intended as guidelines only. We are continually striving to improve our products. Consequently, we reserve the right to make changes to their design and composition.
- Hazard Information:** Processing of THERMEO® blanks produces dusts which can irritate the eyes, skin, and airways. As such, it is essential to ensure the protective gear at your workplace is in perfect working order.
- pro3dure is not liable for any damages caused by improper application of the material. To be used by trained specialist personnel for the purpose indicated only.

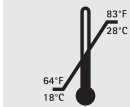
Physical properties\*/  
Physikalische Eigenschaften\*/  
Propriétés physiques\*/  
Propiedades físicas\*/  
Proprietà fisiche\*:

THERMEO®

- Colours/  
Farben/  
Couleurs/  
Colores/  
Colori:  
clear-transparent/  
klar-transparent/  
incoloro-transparent/  
incoloro-transparente/  
incoloro-trasparente
- Density/  
Dichte/  
Densité/  
Densidad/  
Densità:  
ca. 1.1 g/ml

- Flexural strength/  
Biegefestigkeit/  
Résistance à la flexion/  
Resistencia a la flexión/  
Resistenza alla flessione:  
23 °C (MPa) > 20\*\*
- Flexural strength/  
Biegefestigkeit/  
Résistance à la flexion/  
Resistencia a la flexión/  
Resistenza alla flessione:  
37 °C (MPa) < 20\*\*

- Ideal storage and working temperature/  
Ideale Lagerungs- und Verarbeitungstemperatur/  
Température idéale de stockage et de mise en œuvre/  
Temperatura de almacenamiento y procesamiento ideal/  
Temperatura di conservazione e lavorazione ideale:



Ordering information/  
Bestellinformationen/  
Informations de commande/  
Información sobre pedidos/  
Informazioni sull'ordine:

THERMEO®  
Milling blank/  
Fräsronden/  
Disques à usiner /  
Discos de fresado/  
Dischi di fresatura

Height/  
Höhe/  
Hauteur/  
Altura/  
Altezza:  
d = 16 mm  
Ø = 98,5 mm

REF: D1022002

THERMEO®  
Milling blank/  
Fräsronden/  
Disques à usiner /  
Discos de fresado/  
Dischi di fresatura

Height/  
Höhe/  
Hauteur/  
Altura/  
Altezza:  
d = 20 mm  
Ø = 98,5 mm

REF: D1022003

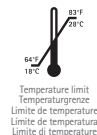
THERMEO®  
Milling blank/  
Fräsronden/  
Disques à usiner /  
Discos de fresado/  
Dischi di fresatura

Height/  
Höhe/  
Hauteur/  
Altura/  
Altezza:  
d = 25 mm  
Ø = 98,5 mm

REF: D1022006

\* These data come from measurements of a representative sample that was determined as part of our quality assurance. / \* Diese Daten stammen aus Messungen einer repräsentativen Probe, die im Rahmen unserer Qualitätssicherung ermittelt wurden. / \* Ces données proviennent des mesures d'un représentant échantillon qui a été déterminé dans le cadre de notre assurance qualité. / \* Estos datos provienen de mediciones de una representante muestra que se determinó como parte de nuestra garantía de calidad. / \* Questi dati provengono dalle misurazioni di un rappresentante campione che è stato determinato nell'ambito della nostra garanzia di qualità.

\*\* According to internal design and requirements specifications / \*\* Gemäß internen Design- und Anforderungsspezifikationen / \*\* Selon la conception interne et les spécifications des exigences / \*\* Según especificaciones de diseño requisitos internos / \*\* Secondo la progettazione interna e le specifiche dei requisiti



Do not use if package is damaged.  
Nicht verwenden, wenn das Paket beschädigt ist.  
Ne pas utiliser si l'emballage est endommagé.  
No lo use si el paquete está dañado.  
Non usare se il pacchetto è danneggiato.



Consult instructions for use.  
Gebrauchsanweisung beachten.  
Consulter le mode d'emploi.  
Consultar instrucciones de uso.  
Consultare le istruzioni per l'uso.



Keep away from sunlight.  
Von Sonnenlicht fernhalten.  
Éloigner du soleil.  
Mantener alejado de la luz solar.  
Tenere lontano dalla luce del sole.



Medical Device  
Medizinprodukt  
Dispositif médical  
Producto sanitario  
Dispositivo medico

Rx only  
QTY: 1EA



Use by date  
Haltbarkeitsdatum  
Utiliser par date  
Utilizar por fecha  
Usare entro la data



Catalogue number  
Katalognummer  
Número de catalogue  
Número de catálogo  
Numero di catalogo



Lot number  
Chargennummer  
Número de lote  
Número di lotto



Date of manufacture  
Herstellungsdatum  
Date de fabrication  
Fecha de manufactura  
Data di produzione



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