

STAND OUT WITH TCS AESTHETICS

TCS Flexible Partial
Now available in millable discs

Millable Disc



Unbreakable™ by TCS

High performance nylon thermoplastic

Guaranteed unbreakable

Designed for exceptional memory to hold its form

Stain resistant

A modern fit, lightweight, durable, and undetectable in the mouth.

Shade	98mmx20mm	98mmx25mm
St. Pink	1428996	1429000
Natural	1428999	1429002
Lt./Dk. Pink	1428997	1429001



iFlex™ by TCS

Highly translucent, polyolefin thermoplastic

Virtually unbreakable

Simple to finish and polish

Stain resistant and easy to maintain

A modern fit, lightweight, durable, and undetectable in the mouth.

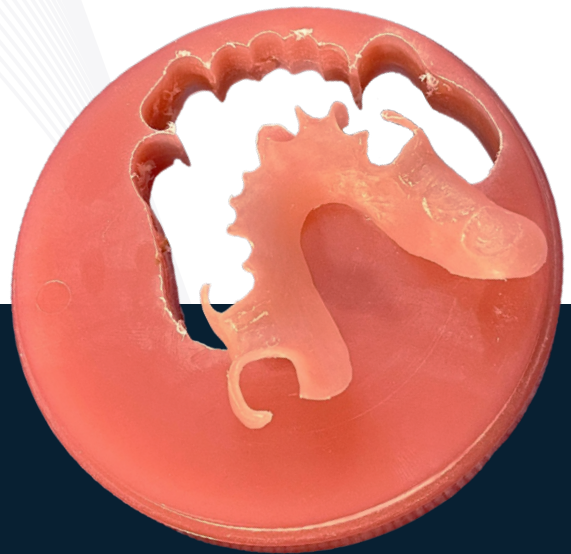
Shade	98mmx20mm	98mmx25mm
St. Pink	1428986	1428989
Natural	1428987	1428990
Lt./Dk. Pink	1428988	1428992



TCS Millable *Disc*

The digital revolution continues to change the future of dentistry with growing numbers of dental laboratories utilizing CAD/CAMs to produce highly accurate removable dental appliances. We are glad to dive into the digital era with our TCS Millable Discs, available in **Unbreakable™ by TCS** and **iFlex™ by TCS**

Shades: St. Pink, Lt.Dk. Pink, Natural

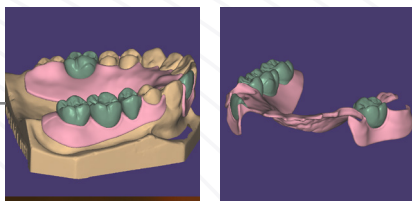


Scan

Scan the master model using any scanner available in the market.

Design

Design the framework of the appliance using the removable's module from a software of your choice. (E.g. 3 Shape Module)



- Connectors:** Strategically design connectors around the framework and clasp area to ensure the appliance is kept in a stable position during the milling process. When using a dry system, if no connectors have been established, the heat of the bur can cause the shape of the clasp to distort.
- Thickness:** In order to achieve accurate results and a stable appliance, the thickness of the framework should not be less than 2.0 - 2.5 mm. Note that cases with free end saddles require an increase in thickness; typically no less than 2.5 mm.
- Notes:** Leave up to 2mm of extra space to allow room for the teeth and bonding agent/acrylic. (View section; "Adding Teeth to Unbreakable™ and iFlex™ Milled Partials").

Milling

- Set up the milling system according to the manufacturer's recommendations for PMMA. In general, **wet milling is the preferred method for milling TCS resins.**

The speed setting and choice of burs may affect the final product.

For wet mill use standard acrylic burs.

For dry mill we recommend using 2 Blade Milling Instrument CVD (Chemical Vapor Deposition) Diamond Coated Instruments or 3 Blade Milling Instrument NON COATED Premium Tungsten Carbide.

Note: When using a dry mill the heat produced by the milling can cause the material to build up around the bur. If this happens, stop the system, clean the bur, and resume. Check for bur build up regularly.

Adding Teeth to Unbreakable™ and iFlex™ Milled Partials

- Adding milled or 3D printed teeth is recommended in order to achieve a higher precision and more accurate fit to the partial.

- The base design of the partial must include a socket with a "post". When designing the socket area, ensure the socket has 2mm of space around in order to allow room for the acrylic and at least 1mm to overlap the tooth with TCS material to create more retention and avoid any lateral movement.
- The inside of the tooth must be hollowed out to allow it to perfectly sit over the post and have space for acrylic.
- To achieve the highest retention possible, sandblast the area(s) of the partial and the teeth that will be in contact the added acrylic, and drill mechanical retentive holes to the post and the areas where retention is needed.

Additional Steps for Unbreakable™ Only:

- Add a thin layer of TCS Fusing Liquid bonding agent to the socket area and let sit for 2 min. This process should be done twice.
- Before the bonding agent evaporates proceed to the following step (adding acrylic).
- Add acrylic to the socket and position the tooth over the post. The consistency of the acrylic must be fluid enough to allow the flow into the mechanical retention created. Remove excess, and polish the surface if necessary.

TIPS:

- The use of tooth color acrylic is recommended to achieve a more natural transition in between materials and a superior aesthetic partial.
- The excess acrylic will cover the gap between the tooth and the TCS material, If a better seal is needed, you can use a bonding agent to seal the neckline of the tooth.
- Add a thin layer of TCS Putty around the teeth to keep them in place prior to curing the acrylic.

Unbreakable™ by TCS

iFlex™ by TCS

Unbreakable™ and iFlex™ by TCS

