

For Happier Patients



Information
Booklet for
Dentists



Removable Dental Appliances



TCS, INC.

Thermoplastic Comfort Systems, Inc. (TCS, Inc.) was founded in 2000 and is based in Signal Hill, CA USA. TCS is a certified ISO 13485:2003 and NS-EN ISO 13485:2012 company, specializing in the manufacture and distribution of resins, equipment, accessories, and patient maintenance products related to removable dental appliances. TCS has worldwide distribution and manufactures all of its resins in the USA from the highest quality materials.

TCS, Inc. manufactures 3 thermoplastic resins for the fabrication of full dentures and partial dentures:

Unbreakable™ *nylon thermoplastic for flexible partials*

iFlex™ *polyolefin thermoplastic for flexible partials*

Karadent™ *semi-rigid microcrystalline polymer for full dentures, semi-flexible partials, clear clasps & frameworks, and nightguards*

Insurance Codes

Full Dentures

D5110 Maxillary

D5120 Mandibular

Partial Dentures

D5225 Maxillary

D5526 Mandibular

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Why Choose TCS?

Quality You Can Trust

TCS thermoplastic resins are manufactured in the USA from the highest quality materials and under a strict quality management system that meets ISO 13485:2003 and NS-EN ISO 13485:2012 requirements.

Affordable

An aesthetic solution for missing teeth without the cost associated with crown/bridge or implants. Additionally, TCS flexible partials are very popular as a transitional appliance during the healing period for implants.

FREE Sample Cleaner

A genuine TCS restoration is received with a *1-week supply sample of TCS Dental Appliance Cleaner and TCS patient care instructions. * For cases fabricated in the USA & Canada only.

Promotional Items for Your Waiting Room - No Charge

We offer free TCS patient education brochures full of helpful information as well as posters, and educational videos for your waiting area or to use chairside.

**Millions of successful TCS partials have
been prescribed worldwide.**



TCS Flexible Partials: Unbreakable™ & iFlex™

TCS manufactures two thermoplastic resins for the fabrication of flexible partials: Unbreakable™ and iFlex™. View the benefits of each on pages 6 and 7. Your TCS processing laboratory will help you determine which material is best for your practice.

Indications

- › Economical, aesthetic solution for missing teeth
- › Patients with concerns over metal restorations
- › Gingival veneers to mask exposed root surfaces
- › Patients with allergies to monomer and/or nickel
- › Transitional restoration during the healing period for implants
- › Presence of tori
- › Oral cancer
- › Cleft palate

Don't feel limited to these indications. Throughout relationships with dental technicians and doctors, TCS has learned that sometimes even the most "impossible" case can be successfully fabricated. Doctor-technician communication can go a long way.

In some cases, combination with a metal substructure is recommended:

- › Need for a more rigid appliance due to poor tissue support or few remaining teeth
- › Free-end saddle with teeth missing from the 1st bicuspid
- › Cast rest seats if soft tissue is a concern.

Note: You may want to consider Karadent™ when more stability is required (see pg 12-13)

Contraindications:

- › Full denture
- › Immediate application; due to recession, allow 8 to 10 weeks healing time when prescribing a TCS restoration as a permanent solution.

Insurance Codes:

D5225 Maxillary Partial Denture

D5526 Mandibular Partial Denture



tori



unilateral



metal seats



combination with metal

Benefits: TCS Flexible Partial

Lightweight and Comfortable

TCS resins have properties that allow partials to be fabricated very thin without compromising durability, making them very comfortable for the patient.

Aesthetic

TCS restorations are manufactured to blend naturally with the surrounding tissue and gums. A well designed and fabricated TCS appliance will be unnoticeable in the patient's mouth.

Biocompatible

TCS restorations are biocompatible, and ideal for patients that are allergic to monomers found in acrylic dentures.

Flexible

TCS flexible partials offer the ideal degree of flexibility, and patients find the adjustment period much smoother when compared to conventional partial dentures.

Non-invasive

Unlike permanent tooth replacement options, such as crown/bridge and implants, TCS partials are non-invasive, making them ideal for patients with a low threshold for pain and/or the very elderly. The unique characteristics of TCS partials utilize the tissue undercuts and portions of abutment teeth for retention.



Unbreakable™

(AKA TCS)

*Flexible Partial
Unbeatable strength*



LIFETIME WARRANTY AGAINST BREAKAGE

TCS warrants Unbreakable™ against breakage or fracture due to defects in the material. The warranty does not apply to neglect and/or abuse of the restoration. It does not apply to the artificial teeth, nor the bond between the artificial teeth and the Unbreakable™ material. Invoice must specify Unbreakable™ (aka TCS).



MONOMER FREE &
HYPOALLERGENIC

- › Nylon thermoplastic
- › Aesthetic
- › **Guaranteed unbreakable**
- › Lightweight yet durable
- › Ideal degree of flexibility
- › Stain resistant
- › Repairable and rebasable
- › Biocompatible
- › Millions of successful cases prescribed



Light Pink | Standard Pink | Light/Dark Pink | Dark Pink | Natural (clasps)

TIPS

1. For best results use lightweight alginate impression materials.
2. Use TCS Green Points for making small adjustments and TCS Brown Rubber Points to smooth adjusted areas.
3. Soak the partial in very hot clean tap water for about 1 minute before initial insertion. When case cools to a tolerable temperature gently insert it into patient's mouth. (This is only recommended for 1st insertion).
4. Recommend TCS Dental Appliance Cleaner to your patients for optimal maintenance.
5. Use the TCS Animation Video (1.5 min.) & Health Briefs with Terry Bradshaw (5 min.) for patient chairside education. Visit www.tcsdentalinc.com to download videos.

Specify Unbreakable™ (aka TCS) on your Lab Slip

iFlex™

*Flexible Partial
Clinically unbreakable
Easy chairside adjustments*



- › Polyolefin thermoplastic
- › Aesthetic
- › Clinically unbreakable
- › **Easy chairside adjustments**
- › **Stain free**
- › Lightweight yet durable
- › Ideal degree of flexibility
- › High translucency
- › Repairable and rebasable
- › Biocompatible



Light Pink | Standard Pink | Light/Dark Pink | Dark Pink | Natural (clasps)

TIPS

1. For best results use lightweight alginate impression materials.
2. Use carbide burs for making small adjustments and TCS Brown Rubber Points to smooth adjusted areas. Use light pressure to avoid gouging the material.
3. Soak the partial in very hot clean tap water for about 1 minute before initial insertion. When case cools to a tolerable temperature gently insert it into patient's mouth. (This is only recommended for 1st insertion).
4. Recommend TCS Dental Appliance Cleaner to your patients for optimal maintenance.
5. Use the TCS Animation Video (1.5 min.) & Health Briefs with Terry Bradshaw (5 min.) for patient chairside education.
Visit www.tcsdentalinc.com to download videos.

Specify iFlex™ on your Lab Slip



MONOMER FREE &
HYPOALLERGENIC

Insertion Technique for Flexible Partial

1. Examine the partial carefully on and off the master model and check the path of insertion.
2. Submerge the TCS partial denture in very hot tap water for approximately one minute.

The Hot Water Treatment is very important as it allows for a smooth initial insertion and a good adaptation with your patient's natural tissue. (This is only recommended for 1st insertion).

3. When the partial cools to a tolerable temperature, gently insert it into the patients mouth.

You may choose to spray the partial with TCS Cool Mint Spray prior to initial insertion for a minty taste experience.

The **TCS Cool Mint Spray** is also available for patients to use as an on-the-go freshener. Also used by dentists for try-ins and initial insertion for a minty fresh taste experience. (1 fl oz. yields ~200 misty sprays)

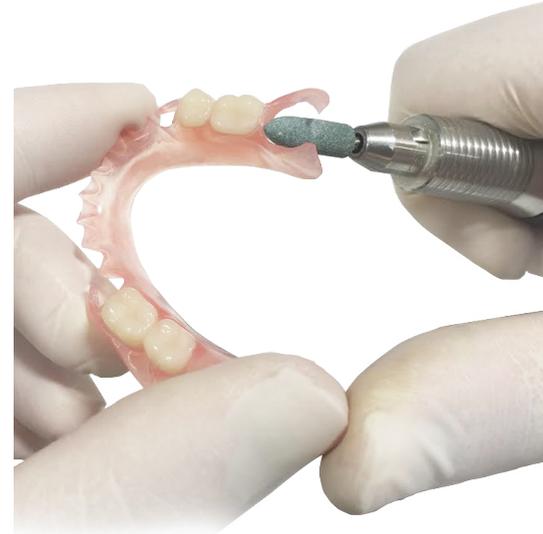


Adjustment Techniques for Flexible Partial

- If the patient feels pain when biting down.
Most of the time one of the following adjustments will take care of the pain:
 - Open bite: check the occlusion and reduce the occlusion accordingly.
 - Overextended flange: reduce the flange accordingly.
- If the patient senses discomfort due to tightness of the clasp, the clasp may be loosened slightly by submerging the section in hot water for approximately 30 seconds, removing it and gently bending the clasp outward while holding it underneath running cold tap water. Following the same procedure but bending the clasp inward can also tighten the clasp.

TIPS

- Green mounted stones can be used for most adjustments. Use the TCS carbide bur when significant reduction is necessary. Many times no further steps are needed, however, if smoothing is necessary, use rubber points to smoothen area followed by the mini fuzz buff to remove imperfections. Finally re-polish with the mini rag buff and blue high shine polish. If there are threads remaining, these can be removed with a sharp blade, we recommend the TCS carving knife.
- **Unbreakable™**: Do not use tools that are normally used for acrylics as they may not be effective on Unbreakable™.
- **iFlex™**: Most carbide burs used for acrylics can be used for making small adjustments, however we recommend our products for optimal results. Note: iFlex™ is softer than Unbreakable™, be sure to use light pressure to avoid gouging the material.



Green Mounted
Stones 4501-01



Carbide Burs
50C79-01



Rubber Points
(A) Small: 4511-01S
(B) Large: 4510-01L



Carving Knife
4201-01
Replacement Blades
4202-01 (12 pk)



Mini Fuzz Buff
4222-01



Mini Rag Buff
4221-01
Blue Hi-Shine
4215-01

General Techniques for TCS Flexible Partial

Preparation for Adding Teeth:

The laboratory will utilize either a welding technique or an injection technique.

- Be sure the partial is free of any pastes or adhesives before taking the impression.
- An alginate impression is taken with the partial in the mouth.
- Remove the impression from the mouth with the partial in the impression.
- Be sure the partial is fully seated in the impression material.
- Immediately pour the model with regular yellow stone.
- Forward to the laboratory with instructions.

Preparation for Rebase:

The laboratory will register the position of the teeth with a plaster matrix and remove the base. A new base will be waxed up and reprocessed using the existing teeth.

In most cases where an overall rebase is needed, the case is jumped into a new base.

- A rubber base impression is taken under the TCS partial in a closed-mouth condition.
- The patient closes his/her mouth gently to ensure correct occlusion as the rubber base is setting.
- Once the rubber base material has set, an alginate impression is taken and the impression is removed from the mouth with the partial and the rubber base in place.
- Carefully examine the partial to assure that it is positioned correctly in the alginate material.
- Immediately pour the model with regular yellow stone.
- DO NOT separate the partial from the stone model.
- Forward to the laboratory with instructions.

Note: Use the hot water treatment for re-insertion.

General Techniques for TCS Flexible Partial

Impression Techniques:

One of the many benefits of TCS restorations is that little-to-no tooth preparation is needed. The laboratory only needs a good alginate impression (poured promptly), a counter model and the bite registration.

TCS recommends a lightweight alginate material for impression taking, however, irreversible hydrocolloid, polyvinyl siloxane and polyether impressions are also suitable.

- An accurate impression is the first step and is key to the success of a TCS partial. If an alginate impression is taken, promptly pour it up using lab stone. Then take a counter-impression and a bite registration.
- Examine the impression. The impression should have all the anatomical details for a successful TCS partial. Also check for voids and air bubbles.

Proper care:

TCS appliances are very easy to care for. In order to keep them looking and feeling like new, please have your patients follow these simple recommendations:

- Continue to brush natural teeth and gums as directed.
- Clean the appliance daily. Rinse under warm running water for approximately 10-30 seconds to remove any food particles.
- Brush appliance with a soft denture brush using water only. Rinse again.
- Place appliance in a denture cleaner for at least 15 minutes daily. We recommend TCS Concentrated Dental Appliance Cleaner.
- When possible, keep appliance in water or a denture solution when not wearing it.

DO NOT use bleach, toothpaste, or similar cleaning products, these may scratch or discolor the surface of the appliance.



Please provide the patient with the Patient Care Instructions along with the 1-week supply sample of TCS Concentrated Dental Appliance Cleaner. (US & Canada only)

Karadent™ by tcs®

Karadent™ by tcs™ is a monomer free, semi-rigid microcrystalline resin formulated for complete dentures, semi-flexible partials, clear clasps, clear frameworks and nightguards. Karadent™ combines the durable strength of nylons with the simplicity of acrylics to create a comfortable, aesthetic and reliable appliance.

Indications

- › Full dentures, partial dentures, clear clasps, frameworks & nightguards
- › Economical, aesthetic solution for missing teeth
- › Patients with concerns over metal restorations
- › Patients with allergies to monomer and/or nickel
- › Transitional restoration during the healing period for implants
- › Flexible partials when more stability is needed due to poor tissue support or few remaining teeth.
- › Flexible partials when more stability is needed for free-end saddles with teeth missing from the 1st bicuspid.

Benefits

- › Highly aesthetic
- › Maximum strength and durability
- › No volume shrinkage- exceptional fit
- › Minimal water absorption
- › Quick and easy chairside adjustments
- › Easy to repair, rebase, and relin with acrylic (laboratory procedure)

Insurance Codes:

D5110 Maxillary Complete Denture

D5120 Mandibular Complete Denture

Shades:



Standard Pink | Clear (clasps & framework)



Karadent™

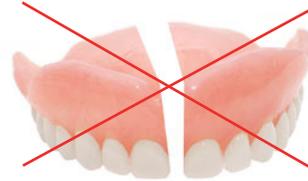
Semi-rigid microcrystalline polymer for full dentures, semi flexible partial dentures, clear clasps, frameworks & nightguards



*Karadent™
clear framework partial*



NO MORE BROKEN APPLIANCES



Prescribe Karadent™ for a comfortable, aesthetic, break resistant, and durable appliance.

TIPS

1. For best results use lightweight alginate impression materials.
2. Adjusting Karadent™ is quick and easy. You can adjust using the same techniques as acrylic dentures.
3. Use a carbide bur for making small adjustments and Green Mounted Stones to smoothen area.
4. For a touch-up polish, Blue Hi-Shine polishing paste (item #4215-01) is recommended.
5. Recommend TCS Dental Appliance Cleaner to your patients for optimal maintenance.

Specify Karadent™ on your Lab Slip



A clean, bacteria-free appliance is vital to your patients' health and to the appearance and longevity of the appliance. TCS offers a variety of products designed to keep appliances looking and feeling like new.

Ideal for:

- Partial Dentures
- Full Dentures
- Retainers
- Aligners
- Mouthguards
- And more



TCS Dental Appliance Cleaner

Deep cleans, removes stains, and kills bacteria and odors. Used daily, it will keep appliances looking and feeling like new.

- 4505-01** **Box of 10** (4 week supply packets)
** Ideal for patient purchase. 10-month supply.*
- 4505FR-01** **Box of 70** (4 week supply packets)
** Ideal to give as samples*
- 4505FR-SMP** **Box of 75** (1 week supply packets)
** Ideal to give as samples*



TCS Sonic Cleaner

Patients can obtain professional cleaning results at home with the aid of sonic vibrations. Must be used in combination with dental appliance cleaner. Also, ideal to use as a storage container. (2AA batteries included)

4013-01



TCS Cool Mint Spray

Mint flavored spray used to refresh dental appliances on-the-go. Yields approx. 200 misty sprays.

4504/PY-01



TCS Dental Appliance Brush

Soft bristle brush to thoroughly clean dental appliances without scratching the surface.

4506FR-01

ORDER OPTIONS:

Doctors:

866-426-2970 | www.tcsdentalinc.com
**Discounted prices apply*

Patients:

866-426-2970 | www.tcsfresh.com
**Also available in Amazon Store: TCS, Inc*
Ship to USA only



Dr. Adjustment Kit

1 green mounted stone, 1 lg brown rubber point, 1 sm brown rubber point, 1 carbide bur, 1 carving knife, sample piece of blue hi-shine paste, 5 mini rag buffs, 5 mini fuzz buffs.
4014-02



Sample Models

Unbreakable™ partial **4011-01 ea.**
iFlex™ partial **4009-01 ea.**
Karadent™ full denture **4016-01 ea.**



Green Mounted Stones

Ideal for chairside adjustments.
4501-01 box of 100



Carbide Bur

Specifically designed to cut through thermoplastic materials. These burs are long lasting with high cutting efficiency.
50C79-01 ea.



Brown Rubber Points

Ideal for chairside adjustments. Use after green mounted stone to smoothen area when adjusting TCS appliances.
Small **4511-01S ea.** | Large **4510-01L ea.**



Carving Knife & Replacement Blades

Ideal for removing fibers that sometimes appear on thermoplastic restorations during adjustments. Replacement blades are specific to this knife.
Knife **4201-01 ea.** | Blades **4202-01 pack of 12**



Mini Fuzz Buff

Recommended to smoothen TCS appliances after adjustments.
4222-01 ea.



Mini Rag Buff

Recommended for touch-up polishing of TCS appliances after using the mini fuzz buff. Use with blue hi-shine.
4221-01 ea.



Blue Hi-Shine

Recommended for touch-up polishing of TCS appliances. Use with the mini rag buff.
4215-01 (6.7 oz) ea.

ORDER OPTIONS

866-426-2970 | www.tcsdentalinc.com

For Your Practice

Promotional Material at NO CHARGE

Order informational patient education brochures and/or posters to display in your waiting room.

Free shipping in the US

Videos to Use Chairside

Embed on your website and/or showcase these videos in your waiting room to familiarize patients about removable partial dentures.



View videos on TCS
youtube channel:
[tcsdentalinc](https://www.youtube.com/channel/UCsDentalInc)

TCS Animation Video: This 1.5 minute animation video demonstrates how a typical TCS partial denture compares to a conventional metal and acrylic partial.

TCS is featured in "Improving Lives through Effective Dental Solutions", a 5 minute Health Brief hosted by NFL star, Terry Bradshaw.

TCS Certified Laboratories



We take pride in providing products of the highest quality. Our goal is to get that same high quality to the final product so that the patient can reap the benefits of a properly constructed appliance. Laboratories must apply for and meet our quality standards on a yearly basis to be listed as a TCS Certified Laboratory. It is our due diligence to ensure that we are referring laboratories that have the experience and training to offer a high quality product.

TCS certified labs have demonstrated excellence in the fabrication of TCS restorations.

Before and Afters



Tiffany's Story

Tiffany lost most of her teeth in an automobile accident at the age of 12. After many years of wearing an uncomfortable metal and acrylic partial denture that would constantly break, Tiffany was finally prescribed an Unbreakable™ by tcs®. Tiffany is excited about finally wearing something she can count on, look great, and feel even better.



Samantha's Story

Samantha had several mouth tumors and suffers from Ehlers Danlos Syndrome, a genetic mutation that affects the entire body. A combo TCS Partial was prescribed. She is now happier than ever with her new smile.



Warren's Story

54 year old Warren was a world champion of offshore & hydroplane boats when he lost a tooth from a boating accident. He has had a TCS unilateral for approx. 15 years. He loves to use the TCS Fresh products to keep his appliance and mouth clean and fresh.

For more before and after stories visit www.tcsdentalinc.com

FAQ's

Can I prescribe a full denture made out of Unbreakable™ or iFlex™?

No, Unbreakable™ and iFlex™ are specifically formulated for flexible partial dentures. Prescribe Karadent™ for full dentures. *View page 12-13, "Karadent™ by tcs®"*

Are TCS thermoplastic resins FDA cleared and CE marked?

Yes.

Are TCS partials recommended for immediate cases?

Due to recession, it is recommended to allow 8 to 10 weeks healing time when prescribing a TCS appliance as a permanent solution. This is not necessary if the appliance is being used as a temporary.

How long will a TCS appliance last?

TCS appliances are designed to last a lifetime. Should modifications be needed as time goes by due to natural changes in the patient's mouth, TCS appliances can usually be modified rather than replaced.

Do abutment teeth need preparation?

No tooth preparation is necessary when prescribing TCS partials. The unique characteristics of these materials utilize tissue undercuts and portions of abutment teeth for retention. However, tooth preparation may be necessary for rest seats and combination cases.

What about adding teeth and/or clasps to flexible partials?

Teeth and/or clasps can be added to TCS resins. This is a laboratory procedure. *View page 10 "Preparation for Adding Teeth"*

Can TCS partials be relined? If so, can it be done chairside?

Relining TCS resins is a laboratory procedure. In most cases where an overall reline is needed, the case is jumped into a new base.

Do I need special tools to adjust TCS restorations?

Unbreakable™ - TCS Carbide Burs, Green Mounted Stones and Brown Rubber Points.

iFlex™ - Carbide burs normally used for acrylic, and Brown Rubber Points.

View page 9, "Adjustment Techniques for Flexible Partial's"

Karadent™ - Carbide burs normally used for acrylic, and Green Mounted Stones. Karadent™ can be adjusted using traditional acrylic techniques.

Are there any special instructions I should give my patient for proper care of TCS restorations?

View page 11, "Proper Care" for optimal patient maintenance. We offer free patient educational brochures full of helpful information for your patients. Additionally, you should receive a free sample of *TCS Concentrated Dental Appliance Cleaner (1-week sample) with every TCS appliance received from your lab. *Fabricated in the USA and Canada.

How do I know that I received a genuine TCS restoration?

There are many imitation products that are not FDA cleared, nor have the unique characteristics of TCS. The laboratory that you choose should be trustworthy. Ask your laboratory if they use the TCS brands and be sure to ask for Unbreakable™ (aka TCS), iFlex™, or Karadent™ by name on the prescription. Additionally, to ensure that you are receiving a genuine TCS product, be sure the appliance is received in a TCS branded plastic bag along

with a TCS patient care pamphlet, *TCS Concentrated Dental Appliance Cleaner sample, and that the brand is indicated on the bill. *Fabricated in the USA and Canada.

Why didn't I receive the appliance with a sample of TCS Concentrated Dental Appliance Cleaner and/or patient care instructions?

Confirm that the laboratory actually used the TCS brand and that the brand is indicated on the bill. Ask the laboratory for the complimentary sample of TCS Concentrated Dental Appliance Cleaner and the patient care pamphlet that is included with the raw materials. If the laboratory cannot provide, it is possible that the product is not a genuine TCS product or that it is a TCS product but it is being fabricated outside the USA.

What are the insurance codes for TCS Flexible Partial?

D5225 Maxillary | D5526 Mandibular

What are the insurance codes for TCS Full Dentures?

D5110 Maxillary | D5120 Mandibular

What is the difference between TCS and other brands?

Differences include, natural shades, durability, functionality, resistance to stains and odors, patient comfort, and more. View page 3, "Why Choose TCS". Additionally, TCS resins are manufactured in the USA from the highest quality medical grade components meeting ISO 13485:2003 and NS-EN ISO 13485:2012 standards.

Does the laboratory have to be certified to offer TCS?

No, many high quality laboratories do not participate in our certification program. However, laboratories that do participate have gone through the application process and demonstrated

mastery working with thermoplastic restorations.

What is the difference between Unbreakable™ (aka TCS) and iFlex™?

Although Unbreakable™ and iFlex™ are very similar and are used for the same indications, there are some differences to be mentioned.

Unbreakable™ is a nylon based material, this technology has been used for flexible partials for over 60 years, it has long-lasting proven success. It is a durable material that is guaranteed unbreakable under normal usage. Special carbide burs, green points and brown rubber points are recommended. Adjusting Unbreakable™ is simple however, it takes some specialty skills.

iFlex™ is a newer technology that was launched in 2012, it is a polyolefin based material. It is durable and clinically unbreakable under normal usage. iFlex™ tends to be easier to adjust and is slightly more translucent than Unbreakable. It is also slightly more flexible, although flexibility of both products will depend on design and thickness of the partial. iFlex™ can be adjusted with most carbide burs.

Both materials, formulated for removable flexible partials are aesthetic, functional and extremely comfortable for the patient. It is simply a matter of preference by you and the dental technician.

TCS, Inc.
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info@tcsdentalinc.com | www.tcsdentalinc.com | www.tcsfresh.com (for patients)

