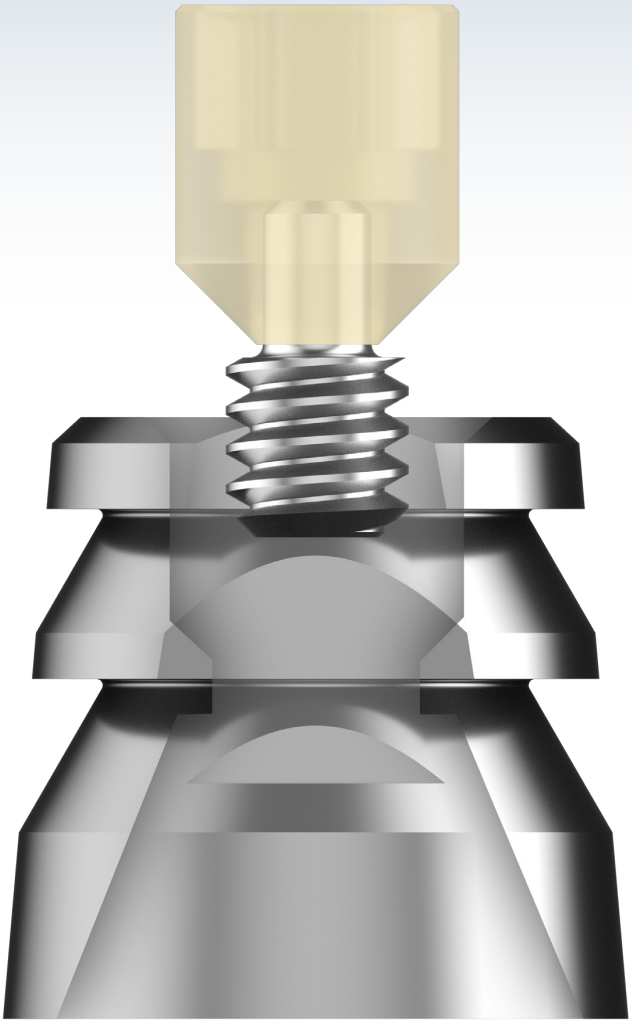
SMART
DENTURE CONVERSIONS
Work Smarter.



with SEPARABLE FASTENER TECHNOLOGY

Technique Manual

SMARTDENTURECONVERSIONS.COM

SDC Exhibit 2011

A MESSAGE FROM DR. KOFFORD

CONGRATULATIONS! You have just discovered the easiest way to convert a removable appliance into a high-quality implant prosthesis. As soon as I developed this system I was forever changed, and I couldn't go back to the way things were! I hope that you are as affected by this product and system as I have been. My practice of full arch implant prosthetics has been significantly improved by use of this system. I have learned a few tricks and tips along the process of developing this system that I'd love to share. This booklet is a brief summary of the tips I've learned along the way. If you have any clinical questions about how to use this product, please feel free to contact me directly at Brandon@smartdentureconversions.com. Once again, congratulations on finding and adopting a smarter way to convert removable into fixed prosthetics.

Sincerely,

Brandon

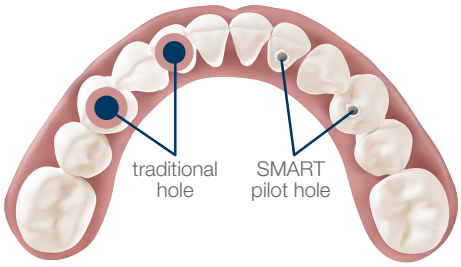
Brandon Kofford, DMD, MS, FACP

SDC Exhibit 2011

FEATURES & BENEFITS
OF SMART DENTURE CONVERSIONS

FASTER

Processing time is just **30 MINUTES** versus the traditional two hours, due to the provisional prosthesis being duplicated for the final. Overall treatment duration is significantly reduced.

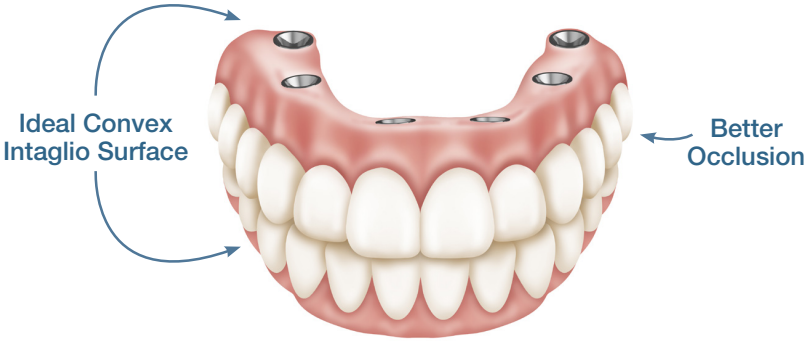


STRONGER

Smaller pilot holes help reduce fractures by preserving the **structural integrity** of the prosthesis.

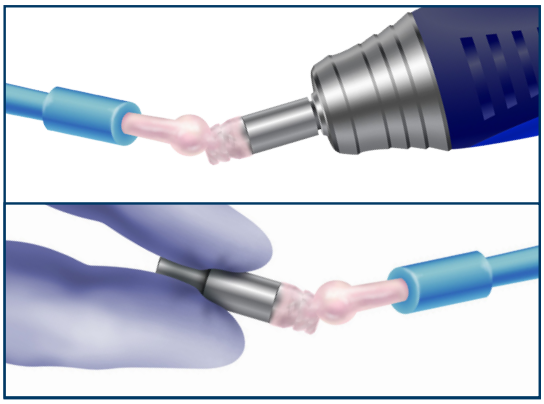
BETTER

Better contours without the need to unnecessarily bulk the prosthesis. **Better occlusion** using a closed mouth pickup, reducing the need for occlusal adjustments.

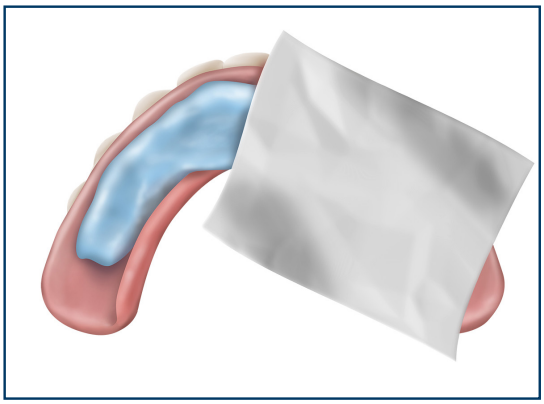


...SMARTER

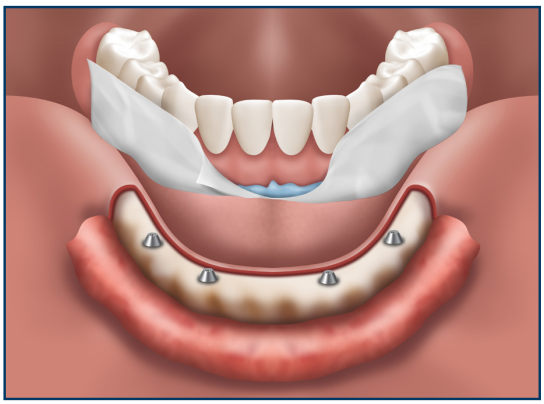
Outdated traditional conversion methods are inaccurate, messy and inefficient.
Chairtime is a valuable, finite resource...work smarter!



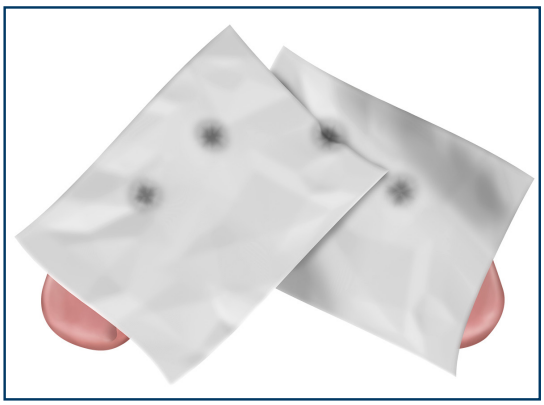
1 Using the Torque driver, attach a TiBase to the Coating Mandrel with a Separable Fastener. Apply a thin layer of acrylic to the TiBase, ensuring you cover the Separable Fastener head to lock the two components together. Rotate the Coating Mandrel in a handpiece on the lowest setting or rotate in non-dominant hand for an even precoating of the TiBase and Separable Fastener head.



2 Inject fast set bite registration material into conversion denture intaglio and cover bite registration with two pieces of Blu-Bite Blocker® 2" PTFE Tape (Teflon tape).

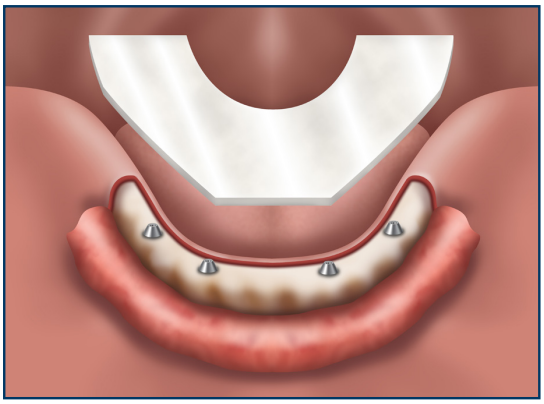


3 Seat conversion denture with bite registration and Teflon tape in patient's mouth and manipulate patient into proper maxillo-mandibular position. There is no need to wait for bite registration to set completely due to the Teflon tape.

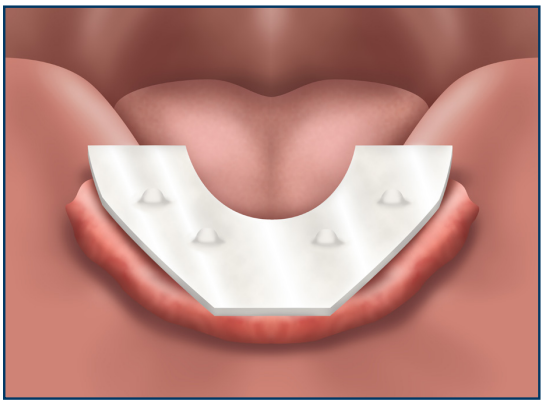


4 Location of multi-unit abutments (MUAs) will be imprinted in Teflon tape/bite registration.

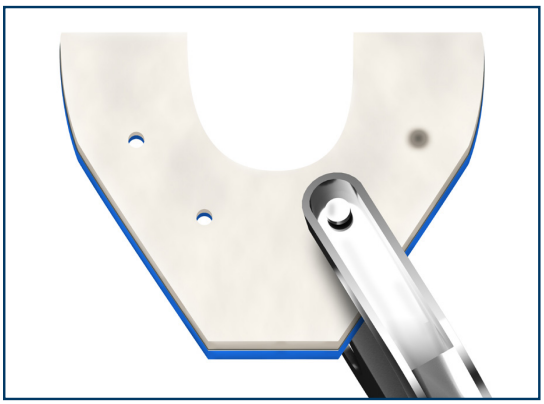
5 Align one white dam template with paper backing side facing the MUAs (the glossy side of the template should be facing up).



6 Press dam template onto each MUA, beginning with the anterior, working posteriorly until all MUAs have left a permanent indentation on the paper side of the dam template.

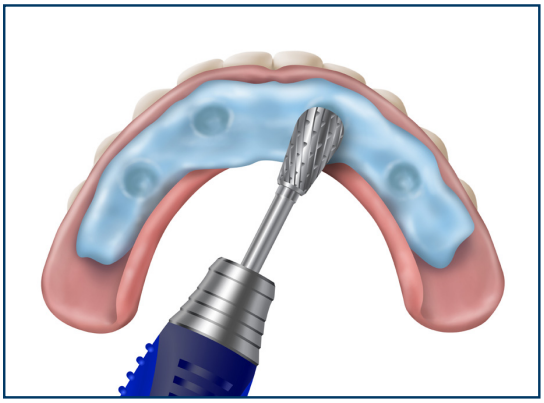


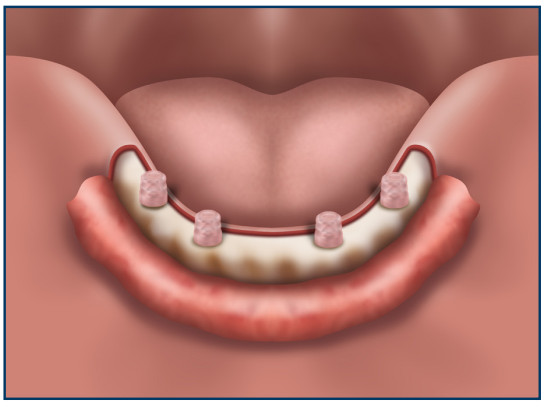
7 Overlay the white template and silicone dam with the glossy side of both facing away from you. With a hole punch, perforate the template and silicone dam simultaneously at each location marked from the MUA locations.



8 Once bite registration sets, remove Teflon tape and use a cutting acrylic bur to create 5.5mm deep wells in the bite registration and underlying denture base where the MUAs left an imprint. Remove all remaining bite registration from denture.

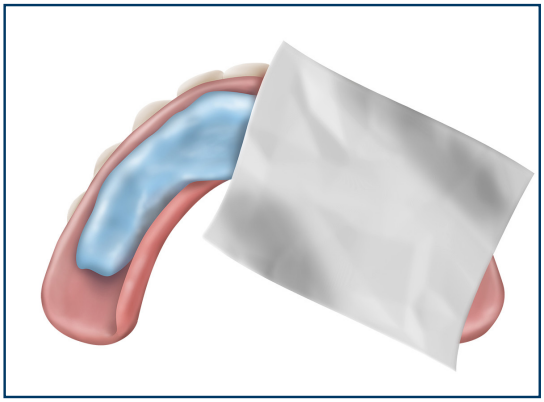
Suggested Komet Bur: H77E.104.060



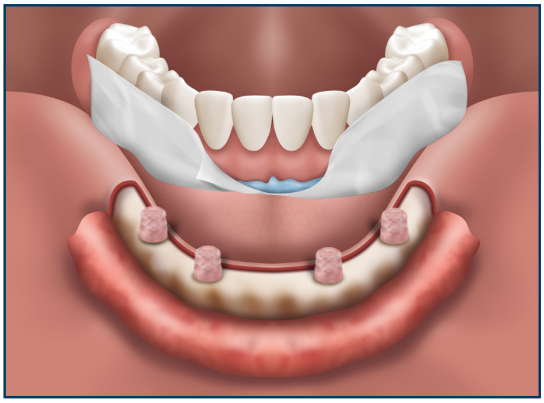


9 Screw pre-coated TiBases/Separable Fasteners onto MUAs using fingers until seated flush. Be sure not to overtighten, as this can cause the Separable Fastener to separate.

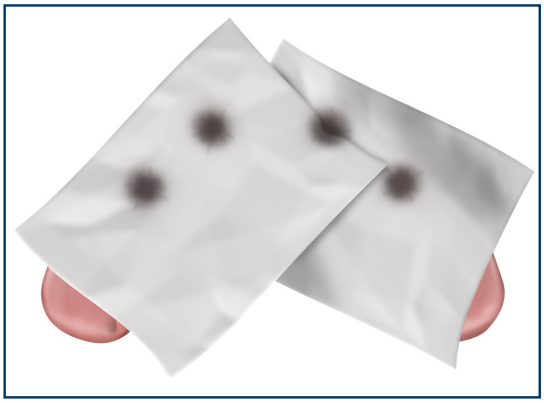
Note: If the TiBase comes loose, the Separable Fastener has come apart. To correct this, ensure the top of the threaded section of the Threaded Post is flush with the top of the MUA. This can be done either by hand or by using the Retrieval Tool in a contra angle. With the Threaded Post at the proper height, the TiBase with embedded Peek Cap can simply be pressed back on, then turned clockwise slightly to ensure a snug fit.



10 To verify passivity again, inject fast set bite registration material into conversion denture intaglio and cover with two pieces of Teflon tape.



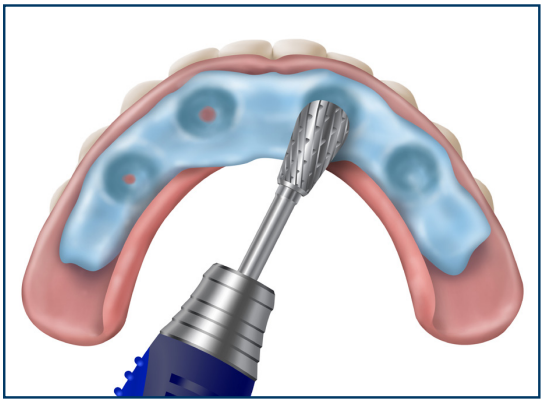
11 Seat conversion denture with bite registration and Teflon tape in patient's mouth and manipulate patient into proper maxillo-mandibular position. There is no need to wait for bite registration to set completely due to the Teflon tape.



12 Locations of the pre-coated TiBases on the MUAs will be imprinted in Teflon tape/bite registration.

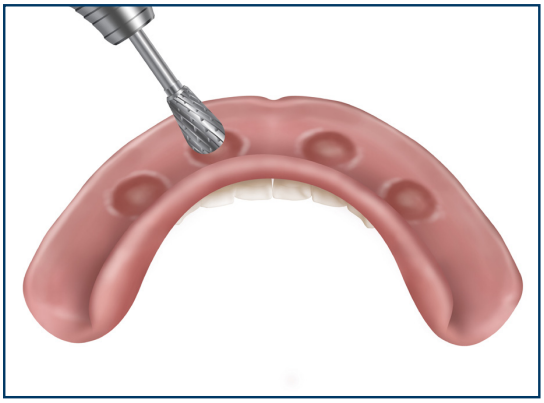
13 Verify passivity of denture over pre-coated TiBases and adjust any areas where the denture base is visible, which is an indication that the prosthesis is not seating passively.

Suggested Komet Bur: H77E.104.060

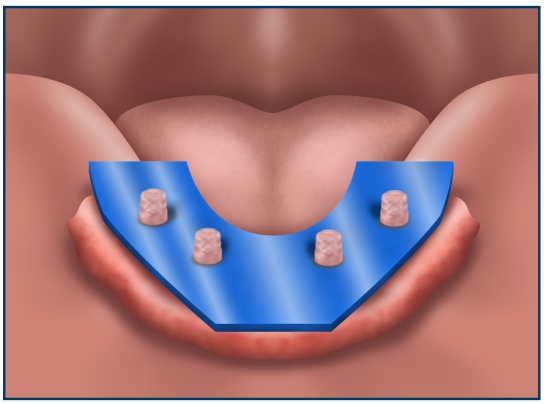


14 To ensure passivity, repeat process 10-13 and remove additional material as needed

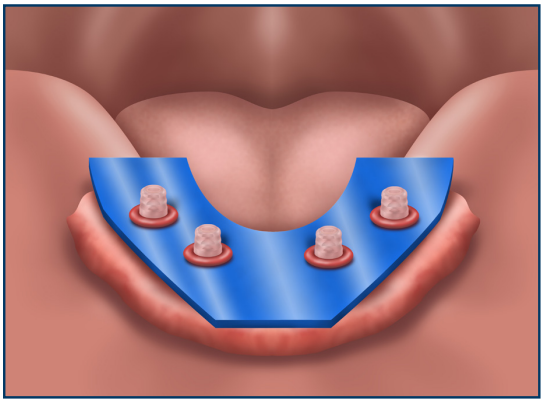
Suggested Komet Bur: H77E.104.060

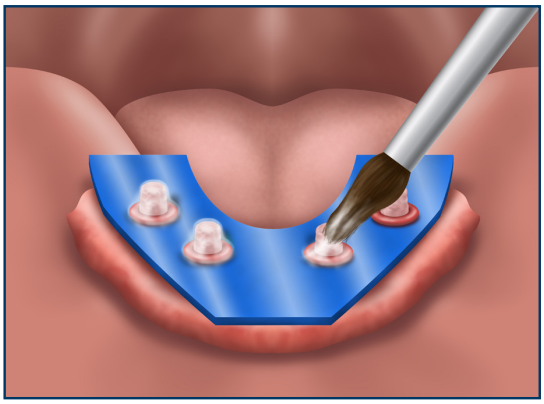


15 Seat blue silicone dam (glossy side away from the gums) with custom perforations over TiBases to block out MUAs and surgical site.

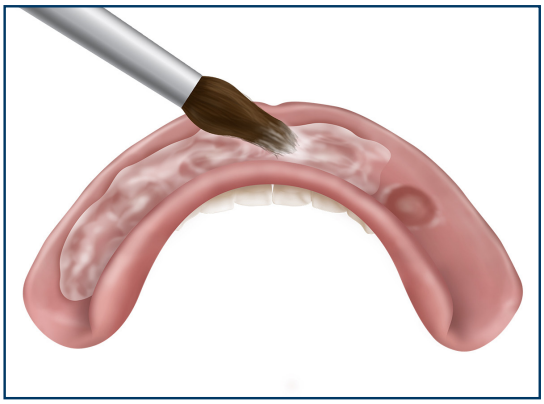


16 Place Dam Doughnuts onto pre-coated TiBases to secure silicone dam to desired height on TiBase/MUA interface.

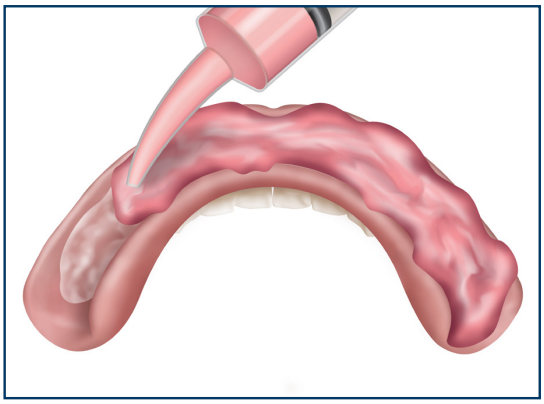




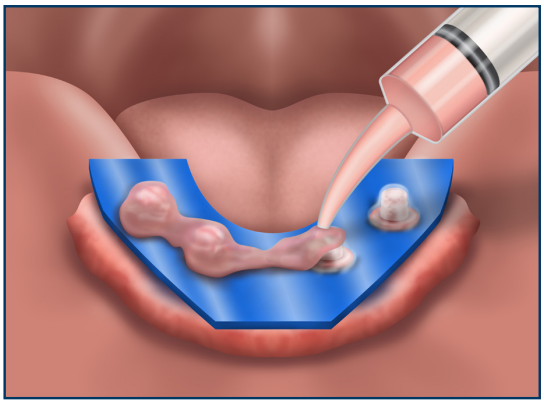
17 Prime pre-coated surfaces of TiBases by painting with liquid monomer.



18 Prime the denture intaglio by painting with liquid monomer.

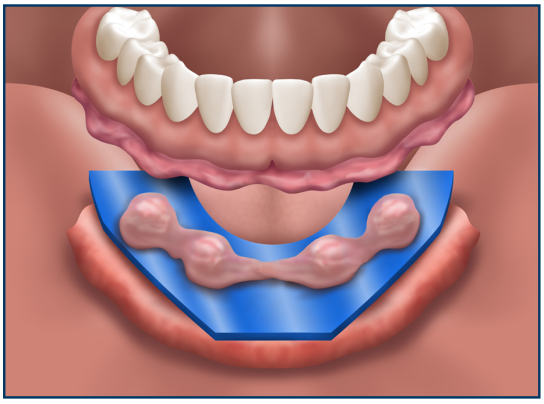


19 Using a syringe, fill the intaglio surface of the denture with pickup acrylic.



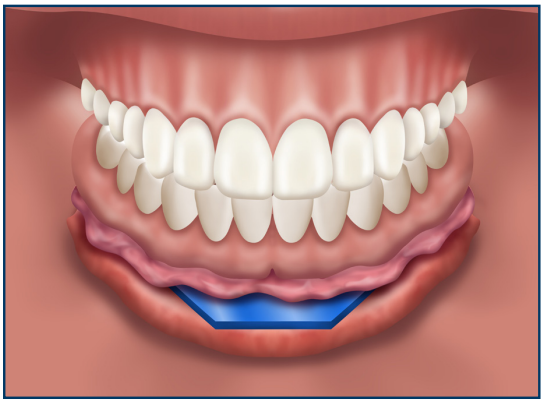
20 Inject pick-up acrylic over precoated TiBases.

21 Insert conversion denture with acrylic in the mouth.

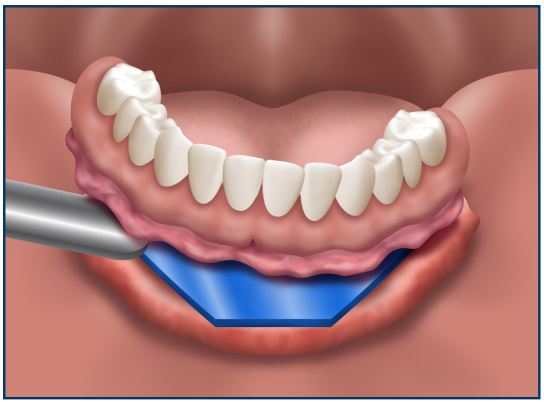


22 Seat the conversion denture with pick-up acrylic in patient's mouth and manipulate patient into proper maxillo-mandibular position.

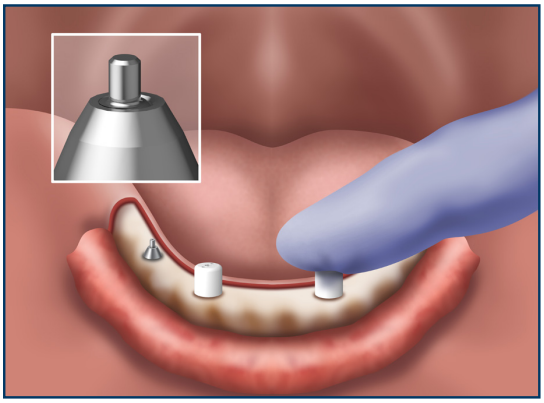
Caution: Due to the exothermic reaction of curing acrylic, it is important to prevent overheating of the tissue by irrigating with a saline solution.

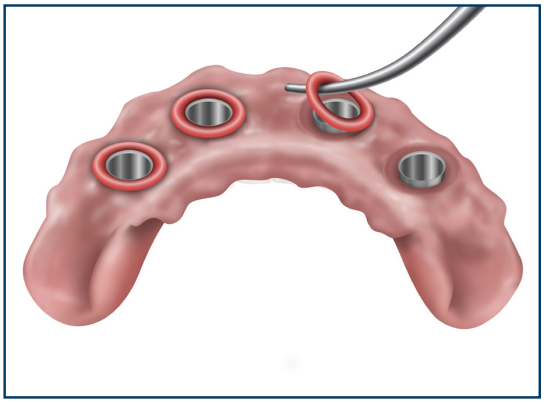


23 Once pick-up acrylic has set, pry denture off of MUAs using the back end of cotton forceps at the distal-most portion of the conversion denture. This will disengage the Separable Fastener head (PEEK Cap) from the threaded portion (Threaded Post). The TiBases are now embedded into the denture with the PEEK Cap while the threaded posts remain in the MUA.

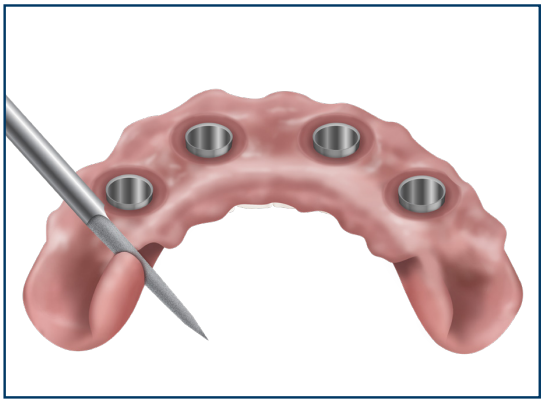


24 Using finger pressure, place the Press-On Caps (POCs) over each MUA until they engage the exposed end of the Threaded Post. Suture loosely around POCs. If the POCs will not engage the Threaded Posts, the Threaded Posts have been driven into the MUA too deep. They can be backed out using the Retrieval Tool and contra angle, until the threads are even with the top of the MUA. Once the Threaded Post is at the proper height, the POCs should engage the post properly.



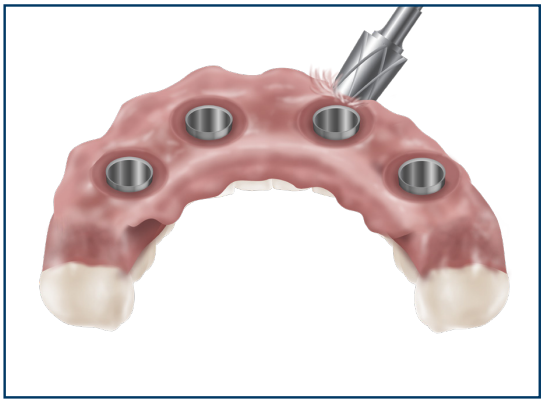


25 Remove the dam doughnuts.



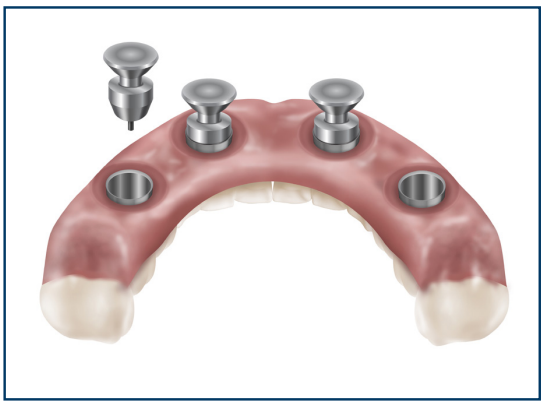
26 Use a Pointed Cutter bur to cut off excessive cantilevers and flanges.

Suggested Komet bur: H219.104.023



27 Using a mushroom cutter, perform a gross reduction of the excess acrylic.

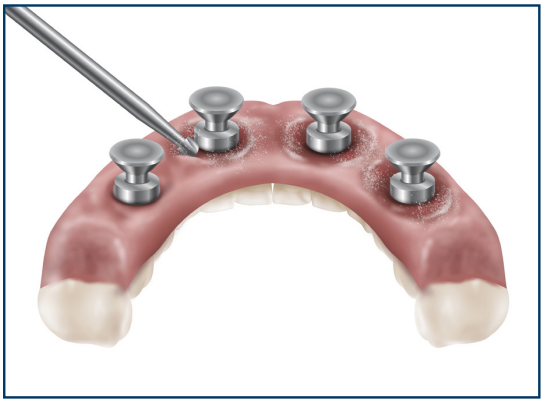
Suggested Komet bur: H79SGEA.104.070



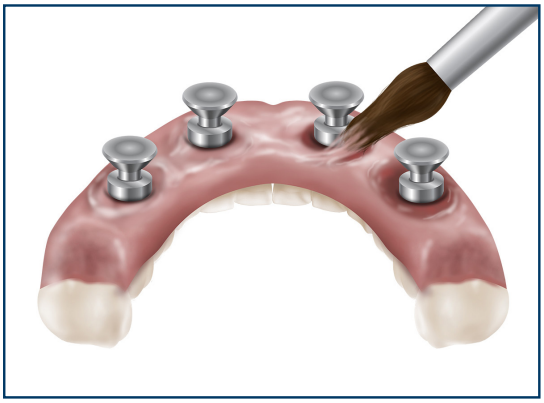
28 Using finger pressure, press Protective Plug into each of the TiBases. The tip of the Protective Plugs will snap into the PEEK Cap that is still embedded in the TiBase. This will help prevent infiltration of acrylic into the TiBase while filling voids around the TiBase.

29 Being careful not to damage the TiBases, use a fine tip, round bur to open up any voids around the TiBases.

Suggested Komet bur: H1.104.023



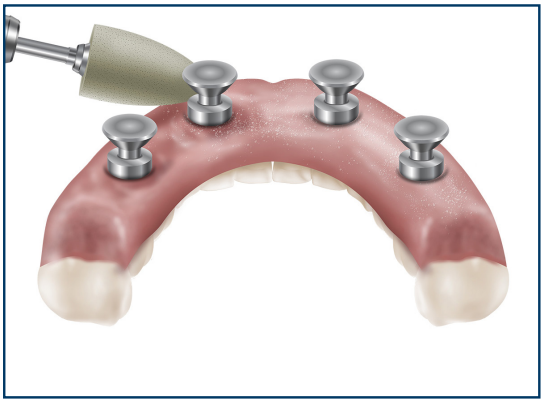
30 Add acrylic to intaglio as needed to fill voids and to idealize contours.

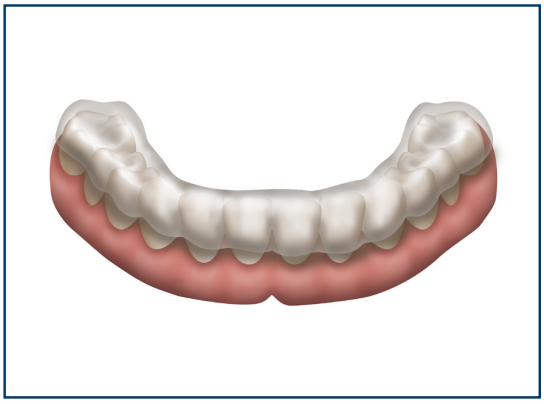


31 *OPTIONAL:* Place provisional prosthesis into pressure pot at 15 PSI for 5 min to set acrylic.

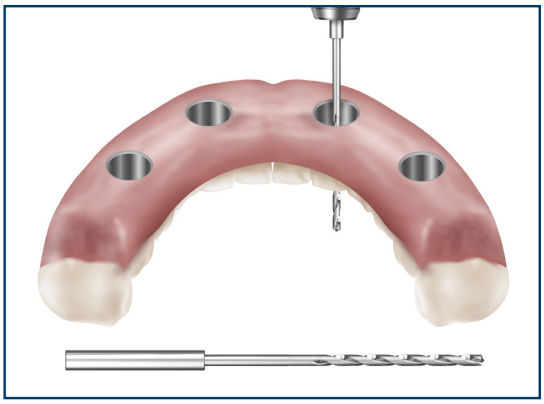
32 With a handpiece, use an acrylic polisher and Robinsons brush to polish surfaces. Then finish the intaglio and cameo surfaces on a laboratory lathe with pumice and high shine.

Suggested Kerr Polishers: P0672 and PBR03





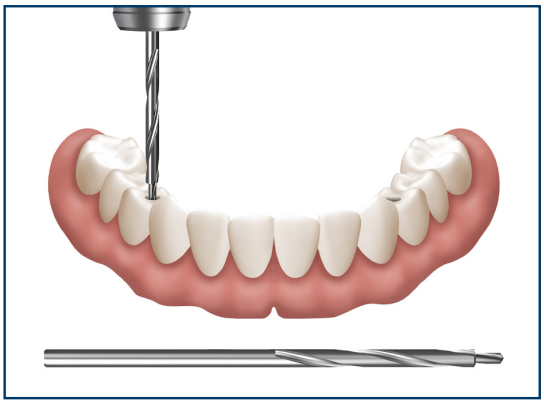
33 *OPTIONAL:* Fabricate thermoplastic night guard with vacuform or biostar machine.



34 Set handpiece to 10,000RPM and drill from the open end of the TiBase to the occlusal/cameo surface using the Pilot Drill. Use a pumping action while drilling to help clear acrylic from the bit and prevent overheating.

Caution: Generating excess heat can dislodge the TiBase from the pickup material.

35 The pilot holes indicate trajectory of the screw channels.



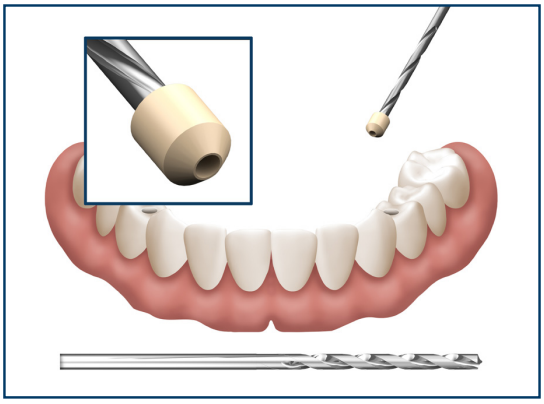
36 The turned down tip of the Access Drill is properly sized to follow the pilot hole and the shoulder of the bit will bottom out on the top of the TiBase. Use a pumping action while drilling to help clear acrylic from the bit and prevent overheating.

Caution: Always counter the pressure against the drill bit by pushing against the bottom of the TiBase with the thumb on your opposite hand. Generating excess heat can dislodge the TiBase from the pickup material.

37 Use the Pin Vise with the Cleanout Drill installed to remove the remaining PEEK Cap and other debris from the screw channel using the 5x5 rule. If PEEK cap doesn't come out, it can be pushed out by taking the Pilot Drill in your hand and poking through from the open end of the TiBase.

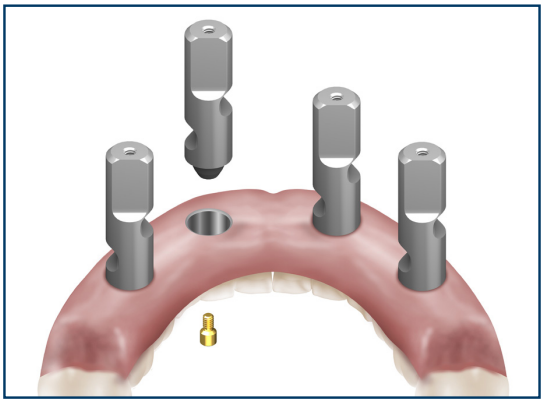
Caution: Always counter the pressure against the drill bit by pushing against the bottom of the TiBase with the thumb on your opposite hand.

5x5 Cleanout Drill Rule:
- 5 turns clockwise with light pressure on pin vise
- 5 turns clockwise while wobbling bit in screw channel
- 5 turns clockwise with firm pressure on pin vise
- 5 turns clockwise with light pressure on pin vise
- 5 turns clockwise while retracting cleanout drill from screw channel

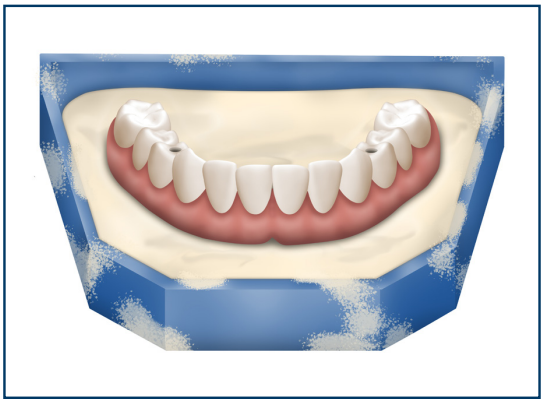


38 Secure Lab Analogs to TiBases in provisional prosthesis with Prosthetic Screws.

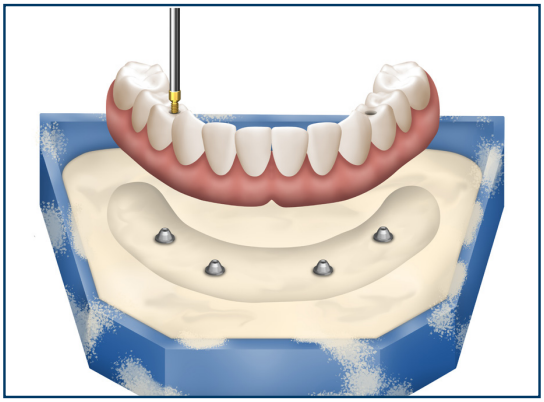
Note: If Prosthetic Screw doesn't fully seat in the TiBase or does not engage the Lab Analog, return to step 37 and ensure the PEEK Cap has been fully removed.

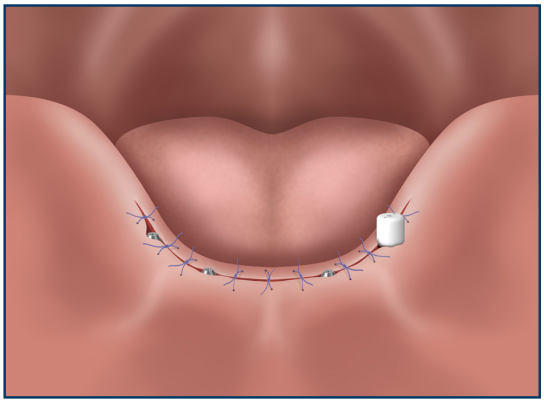


39 Place prosthesis with attached Lab Analogs into quick set stone to produce a jig/repair model.

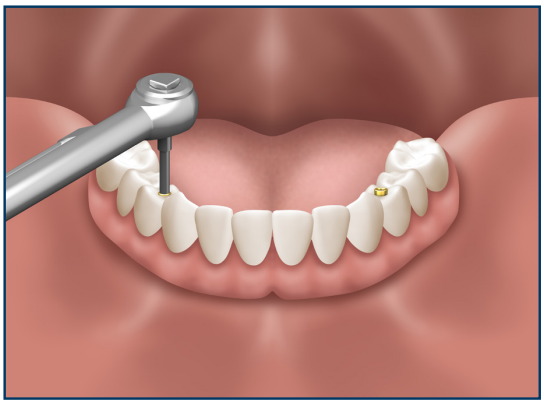


40 Unscrew prosthesis from analogs after stone has set completely.



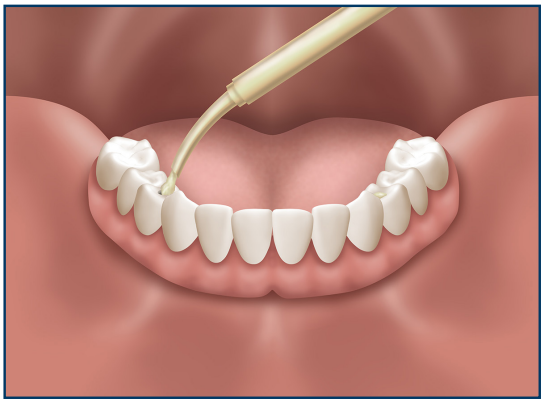


41 When the prothesis is ready for delivery, unscrew the Press-On Caps, which will have the Threaded Posts lodged into them. Ensure all Threaded Posts are removed from the MUA before moving onto the next step. If the Threaded Post doesn't come out, the Press-On Cap can be pressed onto the post again and unscrewed. If you are still unable to remove the Threaded Post, the Retrieval Tool can be used in a contra angle Drill.



42 Deliver prosthesis by tightening the prosthetic screws with implant driver, following the implant manufacturer's torque specifications.

Note: If Prosthetic Screw doesn't fully seat in the TiBase or does not engage the MUA, return to step 37 and ensure the PEEK Cap has been fully removed.



43 Add filling material of choice to cover prosthetic screw access holes.

44 Verify occlusion of finished conversion prosthesis.

Congratulations,
you have successfully completed
a Smart Denture Conversion!

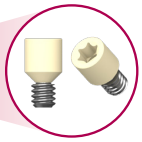
SMART DENTURE CONVERSIONS
Work Smarter.

Make your conversion process FASTER, STRONGER and BETTER with SMART DENTURE CONVERSIONS!
Ready to work SMARTER?

SCAN TO ORDER

PREMIUM STARTER KIT (PSK)

Provides the parts and tools to fabricate an immediate load fixed prosthesis for up to 6 multi-units.



Patented Separable Fastener (SF10PK)
Designed like a prosthetic screw that splits into two pieces after the pickup, allowing the denture to be removed from the mouth and precise screw channels to be created in the lab.

TiBase (TB10PK)
Manufactured at the proper height including special undercuts to allow for a closed-tray pickup without the need to cut temporary copings.

Press-On Caps (POC10PK)
A temporary healing cap that doubles as the preferred method for retrieving the threaded post from the multi-unit.

RECHARGE KIT (RK)

When you already have a Premium Starter Kit, but need enough components to perform a dual arch conversion or just need to refill.

BUR BLOCK KIT (BBK)

Get the acrylic burs, cutters, and polishers needed to convert a denture.

You can also learn about our entire system with a TRAINING KIT!

Don't let your first experience be with the patient in the chair!! The Training Kit includes all the parts needed to learn the system on a model before you go to your live patient experience. You will also have access to a step-by-step video tutorial and a meeting with our clinical consultant. Hands-on learning in the comfort of your own environment!

Training Kit Contents

- Printed Technique Manual
- Training Model (Unconverted Denture and Stone Model with embedded Lab Analogs)
- Training Parts: 4 Separable Fasteners & 4 Standard TiBases
- Premium Starter Kit
- Smart Denture Conversions Bur Block
- Dam Good Punch
- 5 White Dam Templates
- 5 Blue Silicone Dams
- 30 Dam Doughnuts
- 1 Roll Blu-Blocker PTFE Tape
- Access to Training Course and videos
- Zoom meeting with a clinical consultant

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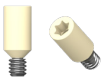
COMPONENTS & KITS

SCAN TO ORDER

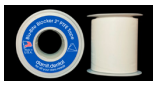
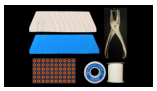
PSK	Premium Starter Kit		POC10PK	Press-On caps (10-pack)	
RK	Recharge Kit		PP10PK	Protective plugs (10-pack)	
SF10PK	Separable Fasteners (10-pack)		CM10PK	Coating Mandrels (10-pack)	
TSF10PK	Tall Separable Fasteners (10-pack)		TD	Torque Driver	
STB10PK	Standard TiBases (10-pack)		RT	Retrieval Tool	
TTB10PK	Tall TiBases (10-pack)		PV	Pin Vise	
LA10PK	Laboratory Analogs (10-pack)		DK	Drill Kit	
PS10PK	Prosthetic Screws (10-pack)		BBK	Bur Block Kit	

DAMIT DENTAL PRODUCTS

TO COMPLEMENT YOUR SDC SYSTEM

damitdental.com
for all your dam needs

SCAN TO ORDER

10 pack White Silicone Dam Template	
10 pack Colored Silicone Dam	
5 Dozen Dam Doughnuts These little gems will eliminate the need for finishing at the bottom of the Ti base which will save you time in the laboratory.	
The Blu-Bite Blocker® 2" PTFE Tape This tape is essential to block blue bite from getting in your MUAs and into surgical flap areas.	
Dam Smart Starter Kit This Smart Kit has everything you need to start having a dam successful conversion experience. Contents includes enough dam materials to convert 10 arches.	

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