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# Clinical Results with the Obtura II



Maxillary first molar with large, open palatal canal. Note two apical exits and radiopaque line in the mesiobuccal. All canals filled with the Obtura system. (Radiograph courtesy of Dr. J. Marlin, Endodontist)



Maxillary first bicuspid with a small lateral canal, undetected prior to filling. Note Obtura's ability to completely fill both the main and accessory canals. (Courtesy of Dr. J. Schoeffel, Endodontist)



Maxillary central incisor with a lateral canal and slight internal resorption near the apex. Note the ability of the heated gutta percha to conform to the canal anatomy. (Courtesy of Dr. J. Schoeffel, Endodontist)



Maxillary central incisor with a blunderbuss apex. This demonstrates the apical control achieved with the Obtura system. (Courtesy of Dr. J. Schoeffel, Endodontist)



Maxillary second bicuspid with a severely curved canal, very difficult to clean and shape. But obturation was effortless with the Obtura. (Courtesy of Dr. J. Schoeffel, Endodontist)



Lower second molar with an unusual "C" shaped canal. The Obtura system easily filled the canals, the fins, and all the apical exits. (Courtesy of Dr. K. Serota, Endodontist)

Softening gutta percha allows it to be easily condensed into places it would not otherwise go. Heated, it can follow even the most difficult canals. Lateral or accessory canals? They can be a problem, too. Often they are completely invisible on x-rays, so you may never know they're there. But as you condense the softened gutta percha, you seal any peripheral canals present -- even if you never find them. You may never encounter canals in your practice like the ones shown above. But if the Obtura II can handle these tough cases with results like those shown...think how easy the canals you see every day will be.

# What about the possibility of overfilling?

This is the most common concern expressed about using the Obtura II system. Pressure is only applied to the softened gutta percha during condensation. You have complete control. And once the apical plug is set, the canal can be filled completely without the possibility of overfilling.

# Will the heated gutta percha run out of maxillary canals?

No. The Obtura II does not melt the gutta percha into a liquid. The softened material is semi-solid with enough viscosity and adhesion to fill completely any accessory canals it encounters without danger of running out.

# Can the viscosity be easily controlled?

Yes. The Obtura II control unit has a temperature control with a digital readout of the operating temperature. Higher temperature settings produce lower viscosity and faster flow rates. Lower temperature settings increase viscosity and retard the flow rate.

# Doesn't the softened gutta percha shrink?

No. Unlike gutta percha dissolved in a solvent, there is no detectable shrinkage with the Obtura. As the gutta percha is forced through the applicator needle, it expands slightly due to die swell, offsetting any thermal shrinkage and ensuring a perfect seal throughout the length of the canal.

# THE TEXCEED OBTURA II™ HEATED GUTTA PERCHA SYSTEM

### A Perfect Score

# For Our Patented System of Injectable Gutta Percha

There are eleven generally accepted requirements for an ideal filling material as first proposed by Dr. Louis Grossman, the "Father of Modern Endodontics." Gutta percha has been the filling material of choice for more than a century. It has come closest to being ideal, with a score of 8 out of 11. No filling material has met all eleven requirements. **Until now**.

Eleven Requirements	Regular Gutta Percha	Gutta Percha and the Obtura		
Easily introduced to canal		ν .		
Semi-solid upon insertion, becoming solid		x		
Seals laterally and apically		X		
No shrinkage after insertion	X	X		
Impervious to moisture	X	X		
Bacteriostatic	X	X		
Radiopaque	X	X		
Won't stain teeth	X	Χ		
No periapical irritation	X	X		
Sterile, or easily sterilized	X	Χ		
Easily removable	X	X		

The old standard, gutta percha, now earns a perfect score...with the help of the Obtura™ System.

The Obtura system is used by the following colleges and universities:

University of California at Los Angeles University of Southern California University of Connecticut Medical College of Georgia Southern Illinois University Northwestern University Loyola University Indiana University University of Iowa University of Louisville Louisiana State University University of Maryland Boston University Tufts University University of Minnesota University of Mississippi University of Missouri at Kansas City University of Nebraska Creighton University State University of New York-Buffalo Oregon Health Science University University of Tennessee Baylor College of Dentistry University of Texas University of Washington Hebrew University



The complete Obtura II system includes the handpiece and control unit, gutta percha, two sizes of applicator needles, and all the supplies you'll need to start using the system right away. Faster and easier is only the beginning with the Obtura II. The Texceed Obtura II can benefit anyone from the full-time endodontic specialist to the general practitioner who may handle only a few cases. Contact Texceed at (800) 344-1321 to find out how it can help your practice.

The Obtura II is patented in the U.S. and other countries. U. S. patent numbers: 4,265,618 and 4,357,136. Additional patents pending. The name Obtura is trademarked internationally.



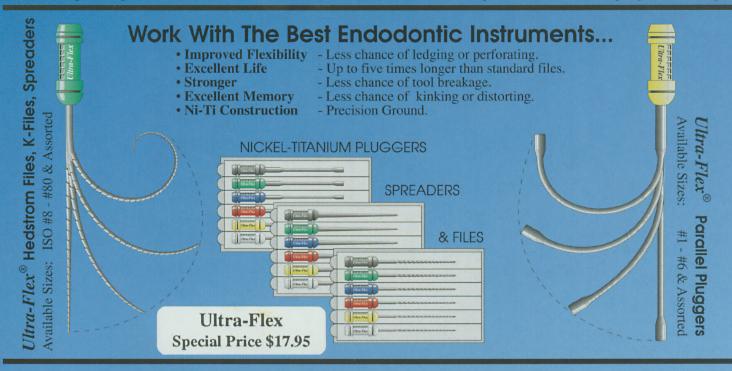
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# Ultra-Flex® ... Superior Strength & Performance

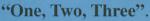


Introducing the *Ultra-Flex*<sup>®</sup> line of **SUPER-ELASTIC** files, pluggers, and spreaders made from the latest in space-age metals: Nickel-Titanium. Conforms to almost any bend without ledging or binding.



# Work With The Best Obturation System...

The Obtura II is the only heated injectable gutta-percha placement system that is as easy to use as



- Place. Simply point and squeeze to place heated gutta-percha precisely.
- 2. Condense. You are in control. It's easy to work the pliable gutta-percha into the apex and into accessory canals.
- **3.** Backfill. As you can imagine, it's the best tool for the job. The seal is excellent.

You can use the Obtura II with confidence!

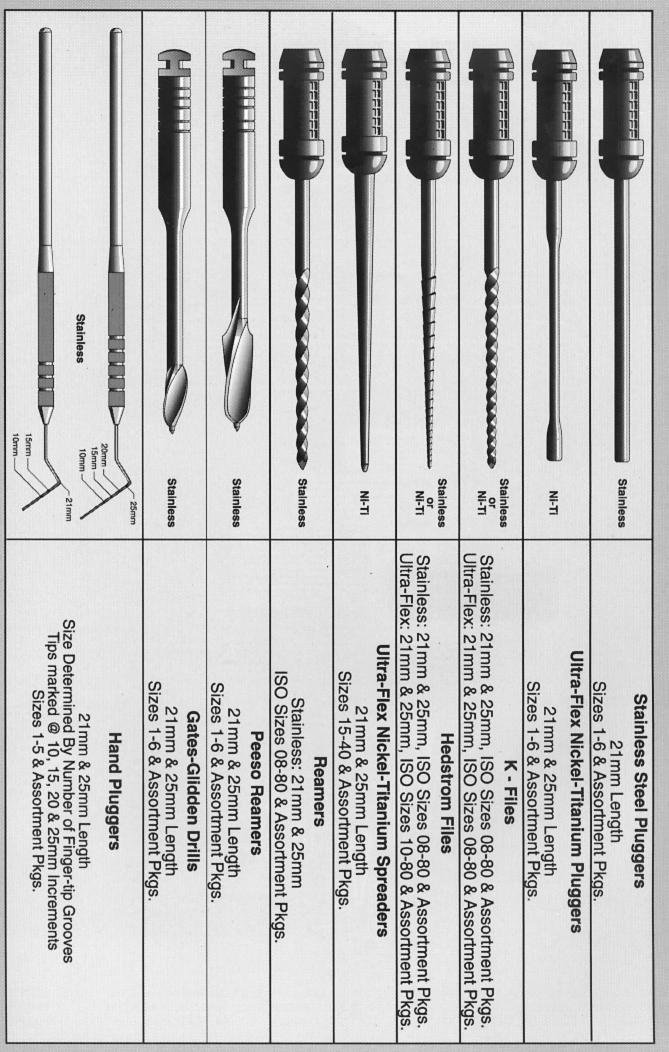


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# Obtura Endodontic Instruments





# Obtura Heated Gutta Percha Systems and Accessories

	Item No.	Quantity	Description	Each	Total				
	823-600		Complete New Obtura™ II System, including gutta percha, thermal protectors, applicator needles, cleaning solution, and all the supplies needed to get started. 115VAC / 230VAC	1095.00					
1	823-610_		Obtura II Thermal Protectors, Pack of 10						
1	823-616_		_Obtura    Needle Lock Nuts, Pack of 2						
3		18Plunger Seal Assembly (Brown Seal, with Hex Fastener)							
201 LIES	823-619_		_Plunger Shaft Assembly (Brown Seal, with Hex Fastener						
51	823-620_		Obtura II Needles, 20 Gauge, Pack of 6						
3	823-623_		Obtura II Needles, 23 Gauge, Pack of 6	43.75					
í	822-602_		_Gutta Percha, Box of 100						
CHANGABLE DADED	822-609_		_Cleaning Kit (Two 4 oz. Bottles with Two Brushes)						
	822-611		_Needle Wrench						
1	822-612_		_Needle Bending Tool						
	822-613_		_Cleaning Brushes, Pack of 2						
	822-625_		_Practice Block with Plugger						
	825-101_		_Precision Screwdriver (For changing the Phillips type Se						
ı	825-103_		_Heater Reamer Tool (For removing hardened Gutta-Pe						
ľ	825-104_		Hex Wrench (For changing the 823-618 type Seal Asse						
4	825-105_		_Heater Cleaning Toolkit (Reamer & 2 Brushes)						
	822-610_		Obtura Thermal Protectors, Pack of 10						
2	822-616_		_Obtura Needle Lock Nuts, Pack of 2	17.50					
	822-618_		_ Piston Shaft and Brown Seal, Pack of 2						
1	822-619_		_Updated Plunger Shaft Assembly (With Brown Seal)						
H	822-620_	200	Obtura Needles, 20 Gauge, Pack of 6						
CRIGINAL	822-623_		Obtura Needles, 23 Gauge, Pack of 6						
4	822-630_		_Obtura Handpiece Bushing						
П	824-200_		_Touch 'n Heat 115VACModel 5002						
al	824-400_		_Touch 'n Heat Battery Powered, Model 5004						
N DEV	824-222_		_Touch 'n Heat 220VAC Model 5002 - 2:						
	824-422_		_Touch 'n Heat Battery Powered, Model 5004 - 2						
ŧ	824-101_		_Heat Carrier, Standard Anterior						
200	824-102_		_Heat Carrier, Standard Posterior						
4	824-103_		_Heat Carrier, Narrow Anterior						
4	824-104_		_Heat Carrier, Narrow Posterior						
2	999-001_		_Regular Charges - Parts & Supplies - 1 Lb. or less						
O LILL	999-003_		_Overnight Charges - Parts & Supplies - 1 Lb. or less						
H	999-003_		_Regular Charges - Obtura Systems	15.00					
2	999-005_		_Overnight Charges - Obtura Systems	25.00					
	Additional o	arts for bot	th original Obtura and Obtura II are available upon request.	Other Side Total					
			ground. Orders for complete systems are sent COD unless prepaid. econd Day Air shipping is available at additional cost.	Other side roldi	1				
				SUB TOTAL					
		Check here	If this is a new address: A new customer:	(Minimum order \$15)					
h	lores e :	CA Customers							
P	Name:		Customer No.:	Add Sales Tax					
				SHIPPING					
(	City:		State or Province:						
			Phone No.:	ORDER TOTAL					

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SEE OTHER SIDE FOR SYSTEM ACCESSORIES.

For questions or ordering information, call (714) 432-7083 or fax (714) 432-1633.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.



# OBTURATM SYSTEM ACCESSORIES

	Con	den	sers	(Ste	ainle	ss St	eel)												
Length / Size		1		- 1	2		3	-	4		5			1-8	5 Assor	tment	Price Each	Qty.	Total
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25mm																	\$11.95		
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25mm								4									\$17.95		
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# **SCIENTIFIC STUDIES**

# Thermoplasticized Injectable Gutta-Percha Condensation Techniques

Compared to: The Obtura System, Ultrafil, Thermafil, and Lateral & Vertical Condensation

## **Abstracts of Studies**

Studies are listed in chronological order with the most recent studies appearing before older ones.

Clinical Experience in Root Canal Obturation by Thermoplasticized Injectable Gutta-Percha Technique  By: Victor Sobarzo-Navarro, DDS. A total of 41 teeth with 71 root canals were obturated with the Obtura. The success rate was 93%. This obturation technique produced good results. Time saved during obturation was considerable. Journal of Endodontics, Vol. 17, No.8, August 1991
A Comparison of Thermoplasticized Injectable Gutta-Percha Obturation Techniques  By: Cheryl S. Budd, DMD, MS, R. Norman Weller, DMD, MS, FICD, and James C. Kulild, DDS, MS. The results of this study found that the thermoplasticized injectable obturation techniques were significantly better than lateral condensation. Journal of Endodontics, Vol. 17, No. 6 June 1991
An In Vitro Investigation of the Apical Seal Produced by a New Thermoplasticized Gutta-percha Obturation Technique By: James E. Haddix, Michael Jarrell, Gordon D. Mattison, and Frank E. Pink. The results of this investigation indicated that, although Thermafil was a rapid endodontic obturation technique, it did not yield an apical seal as good as that provided by the lateral condensation technique. Quintessence International, The Journal of Practical Dentistry, Vol.22, February 1991p.151
Adhesion of Sealer Cements to Dentin with and without the Smear Layer  By: Bradley H. Gettleman, DDS, MS, Harold H. Messer, MDSc, PhD, and Mahmoud E. ElDeeb, BDS, MS. With the exception of the AH26 sealer, adhesive strengths of the sealers tested were not significantly affected by the absence or presence of the smear layer. AH26 sealer, though, adhered twice as well with the smear layer removed as when present. AH26 mean adhesive strength measured as much as 20 times stronger than the weakest sealer tested, and ranged 2 to 3 times stronger than the next best sealer tested. Journal of Endodontics, Vol.17, No.1, January 1991
The Sealing Ability of the Thermafil Obturation Technique By: Carmen Lares, DDS, MS, and Mahmoud E. ElDeeb, BDS, MS. Linear dye leakage measurements showed canines obturated with the Thermafil technique leaked significantly more than those obturated with the lateral condensation technique. Journal of Endodontics, Vol.16, No.10, October 1990
Evaluation of Temperature Rise on the Outer Surface of Teeth During Root Canal Obturation Techniques  By: Rahmat A. Barkhordar, Harold E. Goodis, Larry Watanabe, and Jack Koumdjian. The temperature rise on the outer surface of the root as a result of the Obtura heat-generating obturation procedure is negligible and will not have an effect on the supporting attachment structures.  Quintessence International, Vol. 21, No. 7, 1990
The Comparative Leakage Behavior of Reverse Filling Materials  By: Scott A. Becker, DDS, and J. A. von Fraunhofer, PhD. Reverse apical preparation was much simpler and faster using the Obtura system than using the amalgam/varnish technique, with no difference in leakage. Journal of Endodontics, Vol. 15, No. 6,  June 1990
Leakage In Vitro with High-Temperature Thermoplasticized Gutta-percha, High Copper Amalgam, and Warm Gutta-percha when Used as Retrofilling Materials  By: Michael G. MacPherson, DDS, Gary R. Hartwell, DDS, MS, FICD, FACD, Daniel L. Bondra, DDS, and R. Norman Weller, DND, MS. Obtura high temperature thermoplasticized Gutta-percha retrofills had significantly less leakage than did high copper amalgam retrofills. Journal of Endodontics, Vol. 15, No.5, May 1989
Dental Gutta-percha: Chemical Composition, X-Ray Identification, Enthalpic Studies, Clinical Implications  By: Joseph Marciano, DCD, and Pierre M. Michailesco, DCD, DSO. The purpose of this study was to determine the composition and thermal plasticity of some of the commercially available dental gutta-percha to account for their great differences in thermal behavior in Endodontic practice. Journal of Endodontics, Vol. 15, No. 4, April 1989
Retrograde Instrumentation and Obturation with New Devices  By: Robert K. Flath, DDS, and M. Lamar Hicks, DDS, MS. Success in the treatment approaches used in the two surgical cases presented is attributed in part to satisfactory obturation with the Obtura equipment, only recently available in the marketplace. There was no doubt clinically that the Obtura gutta-percha/sealer filling was well condensed and well adapted marginally. Journal of Endodontics, Vol. 13, No. 11, November 1987
Microbiological Evaluation of the Unitek Obtura Heated Gutta-percha Delivery System  By: Thomas E. Winford, MS, James L. Gutmann, DDS, and Clay A. Henry, DDS, PhD. None of the micro-organisms tested survived the

Evaluation of Heat Transfer during Root Canal Obturation with Gutta-percha. Part 1. In Vitro Heat Levels during Extrusion By: James L. Gutmann, DDS, Deborah C. Creel, DDS, and William H. Bowles, PhD, DDS. Due to the short injection times, and to the lower temperature of the material during the initial injection, and to rapid cooling, it appears that the levels of heat generated by Obtura plasticized Gutta-percha are not at clinically dangerous levels. Journal of Endodontics, Vol. 13, No. 9, August 1987
Evaluation of Heat Transfer during Root Canal Obturation with Gutta-percha. Part 2. In Vivo Response to Heat Levels Generated By: James L. Gutmann, DDS, Hedley Rakusin, BDS, MSc, Regina Powe, and William H. Bowles, PhD, DDS. In using the Obtura, no deleterious heat responses to the root canal system, the periodontal ligament, or the alveolar bone were evident in the immediate or shorterm. Journal of Endodontics, Vol. 13, No. 9, September 1987
The Sealing Ability of Injection-molded Thermoplasticized Gutta-percha with and without the Use of Sealers By: Robert L. Skinner, MS, and Van T. Himel, DDS. The sealing ability of the Obtura thermoplasticized method of obturating large straight root canal systems has been demonstrated to be enhanced with the use of sealer vs. use without sealer. Journal of Endodontics, Vol. 13, No.7, July 1987
Perspectives on Root Canal Obturation with Thermoplasticized Injectable Gutta-percha By: J. L. Gutmann and H. Rakusin of Dept. of Endodontics, Baylor College of Dentistry. Based on experience with the commercially available Obtura product, there exists few, if any, substantive criticisms of the technique. Rather, what has been identified is the need for the clinician to master the technique, thus reducing error and enhancing the delivery of quality treatment to the patient. International Endodontic Journal, Vol. 20, 1987
Evaluation of the Apical Seal Produced by Injected Thermoplasticized Gutta-percha in the absence of Smear Layer and Root Canal Sealer
By: John T. Evans, DDS, and James H. S. Simon, DDS. Although Obtura injected gutta-percha has been shown to penetrate dentin tubules when the smear layer has been removed, the use of root canal sealer is necessary to prevent apical leakage in vitro. Journal of Endodontics, Vol. 12, No. 3, March 1986
Injectable Standard Gutta-percha as a Method of Filling the Root Canal System  By: Jay Marlin, DMD. Post treatment evaluation clearly demonstrates the ability of the Obtura technique to complete endodontic obturation requirements, and in addition, obliterating many types of intradicular irregularities including fins, cul-de-sacs, and minute intercanal communications. Journal of Endodontics, Vol. 12, No. 8, August 1986
Injectable Gutta-percha By: Jay Marlin, DMD. All indications are that the use of injectable gutta-percha will become the filling technique of the future by virtue of its ease and speed of use, versatility and, most significantly, the consistently excellent quality of the result. Clinical Dentistry, Vol. D9, 1985
Obturation of the Radicular Space By: John Ide Ingle, DDS, MSD, and Jerry F. Taintor, BS, MS. With the Obtura system there is a great time savings over the conventional warm gutta-percha / vertical condensation method. Endodontics, Third Edition, 1985
Injection Molded Gutta Percha By: Jay Marlin, DMD. Injection molded gutta-percha in vitro and in vivo evaluation appears to be at least equivalent and possibly superior conventional obturation techniques. It is simpler, quicker, and more effective without sacrificing quality. Techniques in Clinical Endodontics, W. B. Saunders Co., 1983
Clinical use of Injection-molded Thermoplasticized Gutta-percha for Obturation of the Root Canal System: a Preliminary Report By: Jay Marlin, DMD, Alvin Krakow, DDS, Rodger P. Desilets, DDS, and Poul Grøn, DMD. The method shows promise because the success rate seems comparable to the rate achieved with conventional gutta-percha obturation procedures. The obvious cost reduction in chair time should make endodontic treatment available to a larger portion of the population. Journal of Endodontics, Vol. 7, No. 6, June 1981
Scanning Electron Microscopic Study of Root Canal Obturation using Thermoplasticized Gutta-percha By: Mahmoud Torabinejad, DMD, MSD, Ziedonis Skobe, MS, PhD, Paul L. Trombly, MA, Alvin Arlen Krakow, DDS, Poul Grøn, DMD, and Jay Marlin, DMD. This preliminary in vitro study indicates that root canal systems are obturated at least as well by the injection of thermoplasticized gutta-percha as by the more traditional methods of obturation. Detailed clinical studies are in progress. Journal of Endodontics, Vol. 4, No. 8, August 1978

Abstracts of studies compiled by: Harold W. Rubel, BS., Medical Business Consultant Services Westminster, CA., Revision 1.4, July 1, 1991

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