

## Apical Negative Pressure Irrigation and Activation System



Pac-Dent iVac<sup>™</sup> irrigation system provides the synergistic effect of negative pressure continuous irrigation and ultrasonic activation in one easy-to-use single device.



670 Endeavor Circle, Brea, CA 92821 • 909.839.0888 • info@pac-dent.com • www.pac-dent.com



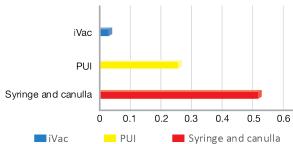
The iVac system was created using the three most important concepts established by the endodontic research.

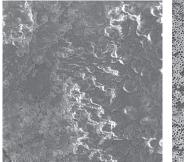
Ultrasonic Vibration, which acts as a chemical catalyst of the irrigating solutions in conjunction and microstreaming effects, determining a chemical-mechanical cleaning action in areas of difficult access in the root canal.

Apical Negative Pressure, by which the irrigation fluid moves from the pulp chamber to the apical limit without extruding beyond the foramen.

And Concomitant Irrigation, a principle whereby the volume of irrigating liquid is renewed continuously. Constant fluid replacement provokes ideal chemical activity by repositioning the solution for a new one.

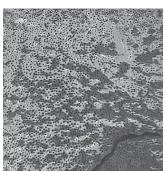
## Volume of irrigating solution extruded through the apical foramen<sup>2</sup>





Apical third dentin walls after instrumentation

USP, Brazil.



Apical third dentin walls after iVac final irrigation protocol<sup>8</sup>

- 1. Desai P, Himel V. JOE 2009 Apr;35(4):545-9.
- 2. Gomes, B. Extrusion Preliminary Report iVac. UNICAMP, Brazil, 2022. In Press.
- 3. Mitchell RP, Yang SE, Baumgartner JC. JOE 2010 Feb;36(2):338-41.
- 4. Layton G et al. JOE 2015 Jun;41(6):884-9.
- 5. Nielsen BA, Craig Baumgartner JOE 2007 May;33(5):611-5.
- 6. Siu C, Baumgartner JC. JOE 2010 Nov;36(11):1782-5.
- Doppler Vibrometry Analysis. Preliminary report results. Akisue, E. POLI, USP, Brazil, 2022. In Press.
   Data and images courtesy of Marco A. Hungaro Duarte, DDS, MS, PhD,

- 0.6

   ulla

   0.6

   ulla

  The iVac can be used with the majority of piezo ultrasonic units, with or without reservoir.
  THE BEST OF ALL IRRIGATION SYSTEMS TOGETHER IN A SAFE AND INTUITIVE PRODUCT
   The iVac™ uses apical negative pressure with concomitant irrigation, which avoids the risk of extrusion of the irrigant while allowing the irrigating fluid to clean and disinfect the entire root canal to the working length<sup>1,2</sup>
  - iVac is highly instrumental in cases where irrigation depth control is essential<sup>3</sup>, such as young teeth, apexification, regeneration, and apical foramen resorptions.
  - The iVac design allows the continuous exchange of ultrasonically activated irrigants with constant refreshment into the root canal system throughout the procedure.
  - $\bullet$  It can effectively clean and disinfect irregularities of the root canal system with the action of continuous ultrasonic irrigation  $^{4,\,5,\,6}$
  - The polymer microcannula allows effective ultrasonic activation<sup>7</sup> of the irrigant, even in curved canals.
  - The iVac system is simple to install and has an intuitive operation. It can be used in most piezo ultrasonic devices (Type-S or E), with or without a reservoir.
  - In addition to the ultrasonic vibration, the cannula's external and internal diameters rate significantly reduces the risk of clogging.



Scan QR Code for more information.

 Aspiration tube

 Organization

 Organization

 Organization

 Organization

 Organization

 Organization

## The iVac<sup>™</sup> introduction kit (REF#9542IVC) Contents:



- 5 x 0.35 iVac tips 27mm 5 x 0.50 iVac tips 27mm 10 x Angled capillary tips 1 x iVac S-type piezo connector 2 x Rings
- 5 x Short silicone tubing with 1 female connector and 1 elbow connector
- 1 x Long silicone tubing with 1 female connector and 1 male connector
- 1 x Low Vac adaptor 1 x High Vac adaptor
- 1 x Technique Guide 1 x Instructions for Use

## The iVac™ system Refill kit components:

REF#	Description	Figure
954235G	20x iVac 0.35 tips 27mm (Green)	
954250Y	20x iVac 0.50 tips 27mm (Yellow)	
9542SC	1x iVac S-type piezo connector, 2 x Rings	
9542EC	1x iVac E-type piezo connector, 2 x Rings	
9542ACT	10x Angled capillary tips 0.60mm	
9542R	2x Rings	Ő
9542ST	5x Short (170mm) silicone tubing with 1 female connector and one elbow connector	
9542LTA	1x Long (1700mm) silicone tubing with 1x female connector and 1 male connector 1x Low Vac-adaptor / 1x High Vac-adaptor	

The iVac<sup>™</sup> can be used with the majority of piezo ultrasonic units, with or without reservoir.