

... HOW TO

RECORD AN IMPRESSION

Taking a simultaneous two-stage putty/wash impression for Invisalign submissions.

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Information provided by Heraeus.

Rejected impressions cause delays in starting your patient's Invisalign treatment, adding unnecessary cost and time to the procedure for all involved. Ideal Invisalign treatment outcomes are directly affected by the accuracy of your Invisalign VPS impression, therefore, it is critical to make every effort to ensure the impression accurately represents your patient's dentition. An inaccurate impression will lead to poorly fitting aligners and less-than-optimal performance of the aligners.

The two-stage custom putty/wash technique with **Flexitime VPS impression material** offers potential benefits such as the elimination of custom trays, impression taking in a moist/wet field, increased chair-time efficiency, lower cost impressions and minimized re-takes.

Flexitime addition silicone polyvinyl siloxane impression material incorporates Advanced ThermoSense™ technology, which causes the material to set fast once it is placed in the mouth. It is activated by intraoral temperature so the clinician has control as to when the setting begins. Clinicians can use as much or as little of its purported 2½-minute working time and be assured that it will set soon after placement in the mouth.

Other beneficial properties of Flexitime are its optimal slump resistance, flowability, wettability and dimensional stability. Other handling characteristics such as viscosity, ease of removing impressions, and tear strength give this impression material desirable properties. Also, Flexitime's colors make it easy to read critical areas of the impression.

Steps for Invisalign impression taking

STEP 01 A bite registration is required when submitting an Invisalign case, so the bite registration can be used to determine the proper Align tray size. There are four tray sizes: Small, Medium, Large and Extra Large (Fig. 1). Choose a tray size that best encompasses the bite registration (Flexitime Bite) (Fig. 2).

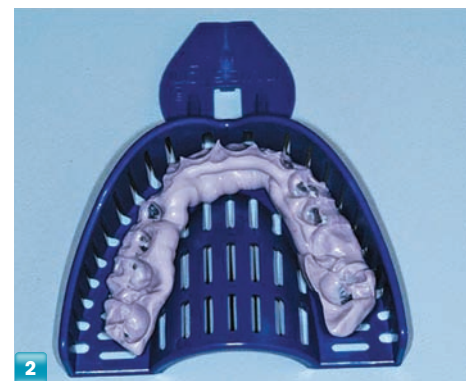
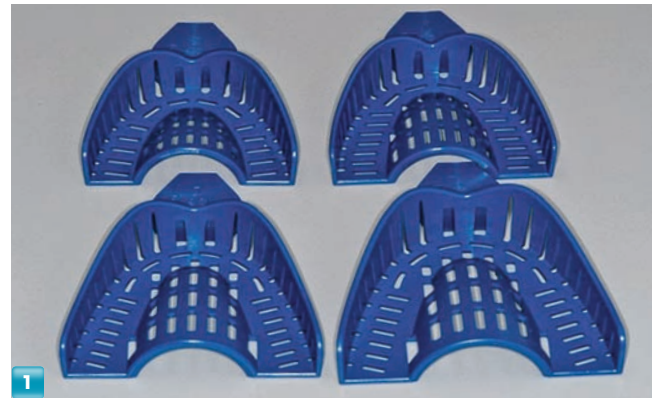
STEP 02 Upon trying in the impression tray, make sure there is ample room to impress the maxillary tuberosity and mandibular retromolar pad area distal to the second molars while at the same time allowing for approximately 5 mm of anterior space (Fig. 3).

STEP 03 The mixing ratio for Flexitime Easy Putty is 1:1, and the quantity is determined by the tray size. The putty should fill approximately ⅓ of the tray. For large trays, mix 1¼ scoops of each the base and catalyst; medium trays, 1 scoop of each; small trays ¾ scoop of each. Mix the putty with your finger tips until the putty is free of streaks and is uniform in color (Fig. 4). When mixing putty, only use vinyl or nitrile gloves; latex gloves will impede the setting of the material.

STEP 04 Roll the putty into a rope and insert into the tray, pressing the putty firmly to engage the slits of the tray (Fig. 5). Make certain the rope of putty ends on the distal aspect of the tray.

STEP 05 To prepare the arch for the impression, dry the buccal, lingual, occlusal and incisal edges of the teeth with 2x2 gauze squares. Critical areas are the tuberosity areas and the mandibular retromolar pad.

STEP 06 Seat the tray by inserting the tray into the mouth. Upon seating the posterior aspect of the tray should be seated first, slowly allowing the material to flow anteriorly (Fig. 6).





STEP 07 Seat the tray, fully watching the material extrude through the slats of the tray. Look for the anterior facial wall of the tray to make contact with the lip. Line the tab up with the center of the patient's nose. Ensure the putty has extruded into the vestibule by pulling the drape of the cheek over the tray (Fig. 7). The border of the putty should be at least 2 mm above the free gingival margin of the clinical crowns of the teeth.



STEP 08 Wait 10 seconds. Holding the tab of the tray, firmly wiggle the tray in a clockwise and counterclockwise rotational direction several times (Fig. 8). This step creates a "wash space" between the arch and the putty for the wash material to fill in the second stage of the impression.



STEP 09 Pull the tray out of the mouth. The material is not yet hardened, but will retain its dimensional shape.

STEP 10 Examine the putty for important landmarks such as the tuberosity areas, retromolar pad areas and border mold, and see if any tray material is showing through the impression (Fig. 9).

STEP 11 Air-dry the putty to remove any moisture or saliva.



STEP 12 Having identified the proper landmarks in the putty, proceed with the wash stage by injecting the wash material into the putty material



AT A GLANCE

1. Only Invisalign trays may be used for submission impressions.
2. Choose a tray that best encompasses the Flexitime Bite registration.
3. Check for ample room at tray try-in.
4. Mix Flexitime Easy Putty until free of streaks and uniform in color.

5. Press the putty firmly to engage the slits of the tray.

6. Seat the posterior aspect of the tray, lining the tab with the center of the patient's nose.

7. Pull the drape of the cheek over the tray to ensure the putty has extruded into the vestibule.

8. Wiggle the tray several times to create a "wash space."

9. Examine the putty for landmarks and to see if any tray material is showing

through the impression.

10. Inject enough wash material (Flexitime Light Flow shown) into the putty so the clinical crowns of the teeth are covered.

11. Insert the tray back into the mouth first seating the posterior slowly allowing the material to extrude anteriorly.

12. Verify that all anatomy is present and accurate and that there are no voids, folds, wrinkles, or stretches in the impression.



FLEXITIME FEATURES

- Offers optimal hydrophilicity on a polyether level
- Provides precise detail even in adverse conditions
 - 6 viscosities

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while the putty is still setting. Inject enough wash material (Flexitime Light Flow) into the putty so the clinical crowns of the teeth are covered (Fig. 10)

STEP 13 Insert the tray back into the mouth, first seating the posterior slowly and allowing the material to extrude anteriorly. Seat fully with a steady light hand. Observe for the wash material to extrude while draping the cheeks and lip over the tray. The wash material will activate with the oral temperature (Fig. 11).

STEP 14 Let the impression set for 2½ minutes.

STEP 15 For both mandibular and maxillary impressions (upper and lower arch impressions are required, even if you are treating only one arch), ask the patient to bite down to release the suction of the impression to allow for an easy tray removal. You should see a crisp impression, evenly placed at least 2 mm beyond the free gingival margins of the teeth and well-captured tuberosity and retromolar areas. Verify that all occlusal, buccal, lingual and incisal anatomy are present and accurate. Verify that there are no voids, folds, wrinkles or stretches in the impression (Fig. 12).

Accurate impressions are the foundations for your patient's successful treatment outcomes. Taking the time to ensure quality and consistency in every impression will allow you to achieve the results you and your patients are looking for. ●

