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with Today's*

IMPAX & IMPAK-PF

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ALBANY, NEW YORK • USA



IMPAK & IMPAK-PF . . . a revolutionary new “soft” acrylic with MEMORY! IMPAK is not just another soft reline material, but has many remarkable uses which traditional soft reline materials cannot match. IMPAK material is used extensively by both professional and amateur athletes for comfortable, precision-fitting mouth protection. IMPAK can also be used to fabricate bruxism appliances with hard biting surfaces, night retainers following orthodontic correction, or as a retainer for surgical packs and splints.

Now, with the addition of IMPAK-PF “soft” acrylic resin, the problematic mandibular denture can be made stable and comfortable. By utilizing existing severe lingual undercuts which were previously impossible to engage with traditional hard acrylics, VB’s IMPAK-PF solves the problem. Call today for information on Vernon-Benshoff’s quality line of dental laboratory acrylics.

IMPAK-PF (Pink-Fibered)
“NEW” FOR HYBRID DENTURES

- **Hybrid Denture** – Traditional hard acrylic for denture teeth matrix, IMPAK-PF for soft, flexible flanges
- **Stabilized Lower Full Dentures** – Engage previously unusable posterior lingual undercuts
- **Pink-Fibered** – Matches popular hard acrylic shades
- **Excellent Bond** – Adheres well to traditional acrylics
- **Adjustable Softness** – Alterable powder/liquid ratio
- **Added Comfort** – Minimal Patient Adjustment Period
- **Economical Start-Up** – No special equipment needed

IMPAK Transparent
MOUTH GUARDS & HARD BITE SPLINTS

- **Time-Tested** – Over 900,000 appliances fabricated
- **Economical Start-Up** – No special equipment needed
- **Adjustable Softness** – Alterable powder/liquid ratio
- **Excellent Bond** – Adheres well to traditional acrylics
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- **Patient Comfort** – Effortless, pain-free insertion
- **Everlasting Fit** – Soft retention for easy repositioning
- **Athlete Safety** – Custom fit & comfort for all activities

DESCRIPTION	PINK-FIBERED
Trial Kit (1 Vial IMPAK-PF & 1 Vial IMPAK w/Liquid)	3313
1 Lb (454 Gm) & 11 Oz (325 cc) P & L	3749
6 Lb (2.72 Kg) & 1/2 Gal (1.89 Ltr) P & L	3750
1 Lb (454 Gm) Powder Only	3311
6 Lb (2.72 Kg) Powder Only	3312
11 Oz (325 cc) Liquid Only	3314
1 Qt (946 cc) Liquid Only	3316
1/2 Gal (1.89 Ltr) Liquid Only	3315

DESCRIPTION	TRANSPARENT
Trial Kit (1 Vial IMPAK & 1 Vial IMPAK-PF w/Liquid)	3313
1 Lb (454 Gm) & 11 Oz (325 cc) P & L	3746
6 Lb (2.72 Kg) & 1/2 Gal (1.89 Ltr) P & L	3300
1 Lb (454 Gm) Powder Only	3747
6 Lb (2.72 Kg) Powder Only	3305
11 Oz (325 cc) Liquid Only	3748
1 Qt (946 cc) Liquid Only	3306
1/2 Gal (1.89 Ltr) Liquid Only	3310



IMPAX TECHNIQUES

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A HARD MAXILLARY OR MANDIBULAR BITE SPLINT WITH SOFT RETENTION*

*See Special Note on Page 4

REQUIREMENTS FROM THE DENTIST

- 1) A prescription with a design for the appliance.
- 2) Maxillary and mandibular stone casts.
- 3) A bite registration in centric relation at the opening desired for the appliance.

CAST PREPARATION AND WAXING

- 1) Block out any major interproximal undercuts on the master cast (the gingival portion of fixed pontics).
- 2) Duplicate the cast to provide a working model.
- 3) Articulate the duplicate and opposing casts according to the bite registration.
- 4) Wrap the coronal portions of teeth using two layers of baseplate wax. If teeth are without undercuts, you may extend wax into vestibules. Seal edges of base plate wax to cast. (Figure 1)



Figure 1

- 5) Use die-lube or other similar material to lubricate teeth in opposing arch. (Figure 2)
- 6) Add sufficient layers of softened wax to fill the inter-occlusal space when articulator is in the closed position.
- 7) Close the articulator and slide member into working, balancing and protrusive excursions. (Figure 3)
- 8) Once the excursions are refined, clean wax and lightly flame it.



Figure 2



Figure 3

- 9) Remove the casts from the articulator.

- 10) Cover the base of the cast with tin foil or separating medium to facilitate cast recovery and remounting after processing the appliance. (Figure 4)



Figure 4

FLASKING

- 1) Use the top half of a maxillary flask for either a maxillary (Figure 5) or a mandibular (Figure 6) appliance.



Figure 5



Figure 6

- 2) Mix a plaster flasking medium and half fill the top section of flask.
- 3) Submerge the cast and wax pattern into flasking medium, covering everything up to 1/8" (3 mm) from the occlusal surfaces and incisal edges.
- 4) Eliminate all undercuts, smooth surfaces and allow material to set. Apply a petrolatum or other separating medium to the exposed gypsum. (Figure 7)



Figure 7

5) Mix another plaster flasking medium and fill the bottom half of flask with plaster.

Note: Vibrate some plaster onto the pattern to prevent trapping of air during the final flasking procedure. (Figure 8)



Figure 8

6) Invert top half of flask onto bottom and press firmly to extrude all excess plaster. (Figure 9)



Figure 9

BOIL-OUT

1) Place flask in boiling water for 1 to 2 minutes (just long enough to soften but not liquefy base plate wax).

2) Separate flask halves, remove and discard as much wax as possible from cast side.

3) Place flask halves into detergent-enhanced boiling water and complete the wax removal procedure.

4) **Important:** Rinse molds thoroughly with clean, boiling water. (Figure 10)



Figure 10

5) Tip flasks on edge and allow to drain for 10 seconds.

6) Apply a mixture to casts of:

**2 Parts NobilShield Tin Foil Substitute
to
1 Part Warm Water**
(Figure 11)



Figure 11

7) Tip flasks on edge and allow to dry and cool.

8) Place a layer of cellophane or plastic sheet on bottom half of flask (the occlusal surface or matrix).

9) Soften a 1/2" (12 mm) wide strip of base plate wax and press it on top of cellophane into occlusal indentation in plaster surface at bottom of flask. This will act as a spacer for the hard acrylic to be packed later. (Figure 12)

10) Trim off excess wax and press flask together.

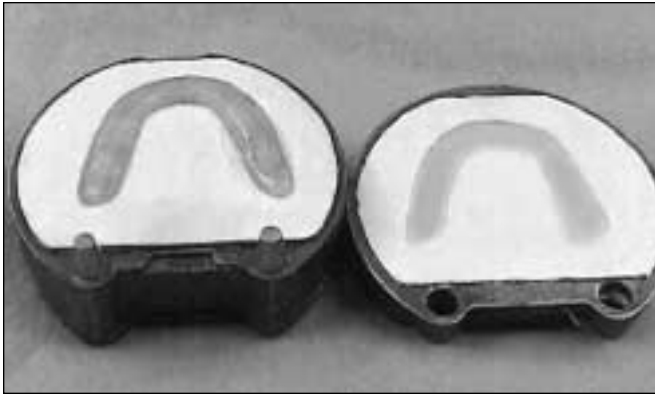


Figure 12

11) Open flask and check for cuspal indentations. Lightly relieve all such indentations to create a .2 to .3 mm spacing between the cusp tips and hard acrylic. This step will allow for a slight cushion and “forgiveness” factor.

PACKING AND CURING

IMPACT powder to liquid mixing ratio by volume:

**2 Parts Powder
to
1 Part Liquid**

Caution: Material has a limited time of fluidity (30 to 60 seconds). Mixing and filling the mold must be accomplished within this time limit.

Note: Increasing liquid will make the appliance softer and more pliable. Decreasing liquid will make the appliance stiffer. Remember, the IMPACT appliance will always feel stiffer in the hand than in the mouth at body temperature.

- 1) Pour polymer (powder) into monomer (liquid).
- 2) Stir only until the polymer is wet. This will help prevent the formation of bubbles.
- 3) Immediately, but carefully, pour mix into mold. Watch flow from one side to the other until full. (Figure 13)



Figure 13

Figure 14

Note: Again, you will only have between 30 to 60 seconds of fluidity, work with IMPACT accordingly.

4) As the material thickens, overfill mold by about 10%. (Figure 14)

5) Cover and leave excess material to set in jar. Be careful to cover jar to prevent monomer from evaporating.

6) While waiting for IMPACT to cure sufficiently to pack, mix regular-cure methyl methacrylate, either clear or pink, at normal ratio according to manufacturer's specifications. cover with cellophane and allow to stand.

7) Allow IMPACT to set until the material remaining in mixing jar is nearing the snapping stage.

8) Set top half of flask atop bottom half.

9) Place flask in pressure controlled press, increasing pressure slowly. Trial pack to a maximum of 500 PSI. Continue increasing pressure slowly over a 2 minute period to 2500PSI. (Figure 15)



Figure 15

10) When IMPACT is ready for final closure, open flask leaving cellophane covering IMPACT in place.

11) Remove wax shim from occlusal side of mold. (Figure 16)

12) Pack hard methyl methacrylate (acrylic) in occlusal side of mold and trial pack as necessary. (Figure 17)



Figure 16

Figure 17

Note: During this packing procedure, ensure that you have at least 2 sheets of cellophane between the IMPACT and hard acrylic.

13) When hard acrylic is ready for final closure, remove cellophane sheets from between IMPACT and hard acrylic. Close flask.

14) Bring pressure up to 2,500 PSI. (Figure 15)

15) Cure IMPAK for:

5 Hours at 165°F (74°C)

or

**1 1/2 Hours at 165°F (74°C)
and Boil for 30 Minutes**

DEFLASKING AND REMOUNTING

1) Deflask.



Figure 18

2) Remove all plaster from around appliance, leaving appliance on cast. (Figure 18)

3) Grind occlusal indoceses as necessary.

4) Place cast in hot water to soften IMPAK and allow appliance to be removed without damage.

5) Carefully remove softened appliance from cast. (One method is to tease a corner away from cast and keep hot water flowing between appliance and cast while you gently work it free.)

Caution: IMPAK is susceptible to tearing during this super-softened state. (Figure 19)



Figure 19

6) Once appliance is off cast, you may begin finishing procedures.

FINISHING

1) Keep appliance cool at all times during finishing and polishing procedures. This can be accomplished by dipping IMPAK into cold water as needed. (Figure 20)

2) Finish with acrylic burs, keeping it cool with cold water as mentioned in step 1.

3) Polish on a pumice lathe, using cold water, pumice and Ti-Gloss acrylic first-polish.

4) Finish with Ti-Gleam acrylic final-polish for a high luster.



Figure 20



Figure 21

Figure 22

Note: IMPAK may at first appear cloudy (Figures 21 and 22). This will clear in approximately 1 to 3 days, depending on thickness, and yield a bright, finished appliance.

Special Note

Sentage Corporation (Minneapolis, MN) owns a U.S. patent (no. 5,338,190; 8/16/94) on a dental appliance and process resembling that described in pages 1-4.

IMPAK



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MANDIBULAR REPOSITIONING APPLIANCES FOR OBSTRUCTIVE SLEEP APNEA (OSA) SINGLE PIECE FABRICATION TECHNIQUE

The following technique is provided only as an example for fabricating one of the many designs which could be prescribed by one of your dentists. It is in no way to be construed as being recommended by CMP Industries, Inc. or any of its employees. The following is provided only as an instructional guide to assist the laboratory in fabricating an appliance which may be prescribed by a dentist in the future.

REQUIREMENTS FROM THE DENTIST

- 1) A prescription with a design for the appliance.
- 2) Maxillary and mandibular stone casts.
- 3) Protrusive bite registration (%) and incisal opening (mm).

CAST PREPARATION AND WAXING

- 1) Block out any major interproximal undercuts on the master casts (the gingival portion of fixed pontics).
- 2) Duplicate the casts to provide working casts.
- 3) Grind bottom of working cast bases on model trimmer to a base thickness of 3 mm. This affords room for the casts and pattern to fit in the flask.
- 4) Articulate the master casts according to the provided open protrusive registration. (Figure 1)



Figure 1

- 5) Vestibular extensions will be determined by the amount of undercut present on the remaining dentition and soft tissues.

Note: If there is a normal amount of undercut on the remaining teeth, terminate the facial extension at the free gingival margin. If the remaining teeth have little or no undercut, extend the wax flanges into the facial vestibules on both arches.

- 6) For maxillary lingual coverage, use either a horseshoe or full palatal design.
- 7) Extend lingual wax on mandibular arch, half the distance to the floor of the mouth.
- 8) Fill interocclusal spaces (1st bicuspid to 2nd molar) with wax to join the maxillary and mandibular patterns. (Figure 2)

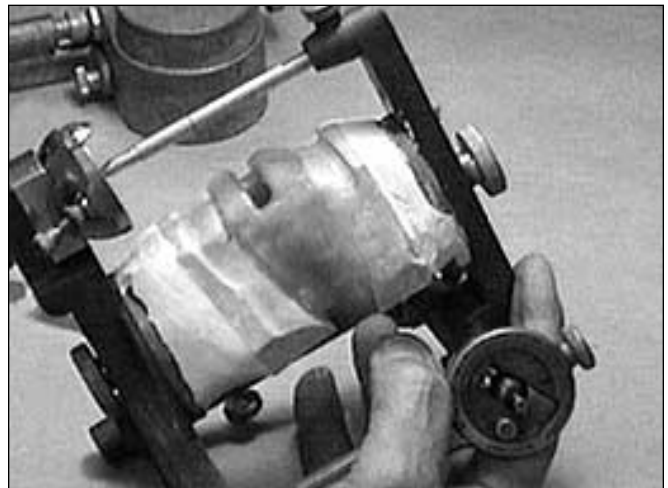


Figure 2

FLASKING (TWO METHODS)

Note: Due to the vertical space occupied by the assemblage, flasking will be a little unconventional.

USING A MAXILLARY “JUMBO” FLASK (Flask in the top half)

- 1) Half fill flask with plaster flasking medium, completely filling tongue space with same mix. (Figure 3)



Figure 3

2) Submerge the assemblage into the top half of flask and cover all areas up to the height of contour on the maxillary pattern. (Figure 4)



Figure 4

3) Smooth plaster and allow to set; cover with petrolatum or other separating medium. (Figure 5)

4) Mix final flasking mix of plaster and fill the bottom half of flask. Also, fill in the area around the maxillary cast to prevent voids.

5) Rotate top half of flask onto the bottom half and press firmly to eliminate the excess flasking material. (Figure 6) Flasking is now complete.



Figure 5

6) Remove excess plaster and allow material to set.

USING A CONVENTIONAL MAXILLARY FLASK

Note: This procedure will require parts from 2 maxillary flasks (2 bottoms and 1 center).



Figure 6

1) Invert center section onto the first bottom section of flask. This provides guidance for final closure onto the second bottom. (Figure 7)

2) Mix plaster and stone. Half fill bottom and inverted center section of flask.

3) Use same mix to completely fill tongue space. (Figure 3)

4) Submerge the assemblage into flasking medium covering everything to the maxillary height of contour on wax pattern. (Figure 4)

5) Smooth the plaster and allow to set. Cover with petrolatum or other separating medium. (Figure 5)

6) Mix a final flasking mix of plaster or stone and fill the second bottom half of flask. Fill area around the maxillary cast to prevent voids.

7) Rotate the first half of flask onto the second bottom half and press firmly to eliminate excess flasking material. (Figure 6) Flasking is now complete.

8) Remove excess plaster and allow material to set.

BOIL-OUT

1) Place flask in boiling water for 2 to 3 minutes (just long enough to soften but not liquefy the base plate wax).

2) Separate flask halves, remove and discard as much wax as possible. (Figure 8)



Figure 7



Figure 8

- 3) Place flask halves back into detergent-enhanced boiling water and complete wax removal procedure.
- 4) Rinse molds thoroughly with clean boiling water.
- 5) Tip flasks on edge and allow them to drain for about 10 seconds.
- 6) Apply a mixture to casts of:

**2 Parts NobilShield
Tin Foil Substitute
to
1 Part Warm Water**
(Figure 9)



Figure 9

- 7) Tip flasks on end and soak up any puddles with a cotton tipped applicator. (Figure 10)



Figure 10

- 8) Allow flask halves to cool to about 100°F (38°C). (Figure 11)



Figure 11

PACKING AND CURING

IMPAK powder to liquid mixing ratio by volume:

**2 Parts Powder
to
1 Part Liquid**

Caution: Material has a limited time of fluidity (30 to 60 seconds). Mixing and filling the mold must be accomplished within this time limit.



Figure 12

- 1) Pour polymer (powder) into monomer (liquid).
- 2) Stir only until the polymer is wet. This will help prevent the formation of bubbles.
- 3) Immediately, but carefully, pour mix into mold. Watch flow from one side to the other until full. (Figure 12)

Note: Again, you will only have between 30 to 60 seconds of fluidity, work accordingly.

- 4) Cover both material in mold and that remaining in mixing jar with plastic sheets to prevent monomer evaporation.
- 5) Allow IMPAK to set until the material remaining in mixing jar is nearing the snapping stage.
- 6) Set top half of flask atop bottom half. (Figure 13)
- 7) Place flask in press and slowly trial pack to 500 PSI. (Figure 14)



Figure 13



Figure 14

8) After trial packing to check and correct voids or other discrepancies, close flask and increase pressure slowly over a 2 minute period to a maximum of 2500 PSI.

9) Cure IMPAK for:

5 Hours at 165°F (74°C)
or
1 1/2 Hours at 165°F (74°C)
and **Boil for 30 Minutes**

DEFLASKING AND FINISHING

1) Remove both flask bottoms and chisel plaster away from lower cast side to allow case to slide out of flask center. (Figure 15)

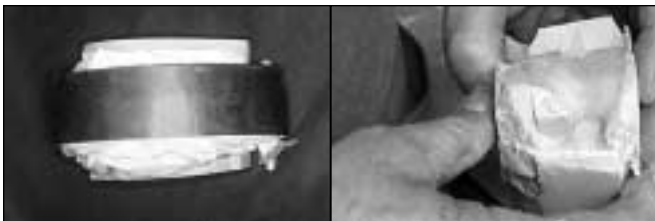


Figure 15

Figure 16

2) Remove all plaster from around appliance, leaving the appliance on the casts. (Figure 16)

3) Place casts in hot water to soften IMPAK.

4) Carefully remove softened appliance from casts. (One method is to tease a corner away from cast and keep hot water flowing between appliance and cast while you gently work it free.)

Caution: IMPAK is susceptible to tearing during this super-softened state. (Figure 17)



Figure 17

5) With IMPAK still in its softened state, gently remove the tongue section. (Figure 18)



Figure 18

Figure 19

6) Finish with acrylic burs, keeping IMPAK cool with cold water. (Figure 19)

7) Polish on the pumice lathe, using cold water, pumice and Ti-Gloss.

8) Finish with Ti-Gleam for a high luster.

9) Remounting is not required for the single piece technique. (Figure 20)

Note: IMPAK may at first appear cloudy. This will clear in approximately 1 to 3 days, depending on thickness, and yield a bright, finished appliance.

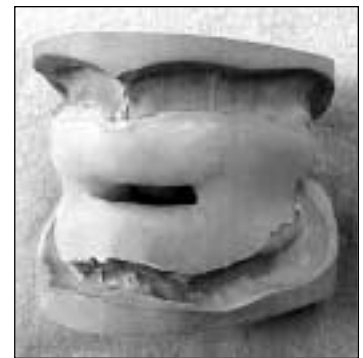


Figure 20

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MANDIBULAR REPOSITIONING APPLIANCES FOR OBSTRUCTIVE SLEEP APNEA (OSA) TWO PIECE FABRICATION TECHNIQUE

The following technique is provided only as an example for fabricating one of the many designs which could be prescribed by one of your dentists. It is in no way to be construed as being recommended by CMP Industries, Inc. or any of its employees. The following is provided only as an instructional guide to assist the laboratory in fabricating an appliance which may be prescribed by a dentist in the future.

REQUIREMENTS FROM THE DENTIST

- 1) A prescription with a design for the appliance.
- 2) Maxillary and mandibular stone casts.
- 3) Protrusive bite registration (%) and incisal opening (mm).

CAST PREPARATION AND WAXING

- 1) Block out any major interproximal undercuts on the master casts (the gingival portion of fixed pontics).
- 2) Duplicate the casts to provide working casts.
- 3) Articulate the master casts according to the provided open protrusive registration. (Figure 1)
- 4) Wax maxillary and mandibular splints by applying two layers of baseplate wax over each arch.



Figure 1

- 5) Vestibular extensions will be determined by the amount of undercut present on the remaining dentition and soft tissues.

Note: If there is a normal amount of undercut on the remaining teeth, terminate the facial extension at the free gingival margin. If the remaining teeth have little or no undercut, extend the wax flanges into the facial vestibules on both arches.

- 6) Bring the lingual wax on the mandibular arch to at least half the distance to the floor of the mouth. (Figure 2)



Figure 2

- 7) For maxillary lingual coverage, use either a horseshoe or full palatal design

- 8) Extend the lingual wax on the mandibular arch, half the distance to the floor of the mouth.

- 9) Add bite blocks to each arch to fill the posterior inter-occlusal space. DO NOT allow them to be joined to each other.

- 10) Remove the casts from the articulator. (Figure 3)

- 11) Cover the base of the casts with tin foil or separating medium to facilitate cast recovery and remounting after processing the appliances.



Figure 3

FLASKING

- 1) Use the top half of a maxillary flask for each cast. (Figures 4 & 5)



Figure 4

Figure 5

- 2) Mix a plaster flasking medium and half fill the top section of flask.

3) Submerge each cast and wax pattern into the medium, covering everything except the occlusal incisal surfaces and incisal edges. (Figure 6)



Figure 6

4) Eliminate all undercuts, smooth surfaces and allow material to set. Apply a petrolatum or other separating medium to the exposed gypsum. (Figure 7)

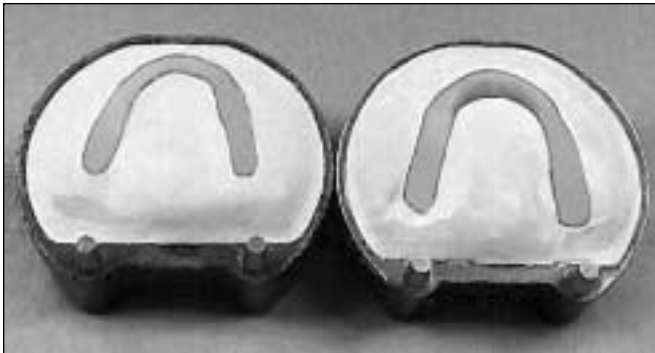


Figure 7

5) Mix another plaster flasking medium and fill the bottom half of flask with plaster.

Note: Vibrate some plaster onto the pattern to prevent trapping of air during the final flasking procedure.

6) Invert top half onto bottom and press firmly to extrude all excess plaster. (Figure 8)



Figure 8

BOIL-OUT

1) Place flask in boiling water for 1 to 2 minutes (just long enough to soften but not liquefy base plate wax).

2) Separate flask halves, remove and discard as much wax as possible. (Figure 9)



Figure 9

3) Place flask halves back into detergent enhanced boiling water and complete the wax removal procedure.

4) **Important:** Rinse molds thoroughly with clean, boiling water. (Figure 10)

5) Tip flasks on edge and allow to drain for 10 seconds.

6) Apply a mixture to casts of:

**2 Parts NobilShield Tin Foil Substitute
to
1 Part Warm Water**



Figure 10

7) Tip flasks on edge and allow to dry and cool.

PACKING AND CURING

IMPAK powder to liquid mixing ratio by volume:

**2 Parts Powder
to
1 Part Liquid**

Caution: Material has a limited time of fluidity (30 to 60 seconds). Mixing and filling the mold must be accomplished within this time limit.

- 1) Pour polymer (powder) into monomer (liquid).
- 2) Stir only until the polymer is wet. This will help prevent the formation of bubbles.
- 3) Immediately, but carefully, pour mix into mold. Watch flow from one side to the other until full. (Figure 11)

Note: Again, you will only have between 30 to 60 seconds of fluidity, work accordingly.



Figure 11

Figure 12

- 4) As the material thickens, overfill mold by about 10%. (Figure 12)
- 5) Cover both material in mold and that remaining in mixing jar with plastic sheets to prevent monomer evaporation.
- 6) Allow IMPAK to set until the material remaining in mixing jar is nearing the snapping stage.
- 7) Set top half of flask atop bottom half.
- 8) Place flask in press and trial pack at least once, raising pressure slowly to 500 PSI to check for density. (Figure 13)



Figure 13

Figure 14

- 9) For final closure, increase pressure slowly over a 2 minute period to a maximum of 2500 PSI. (Figure 14)

10) Cure IMPAK for:

5 Hours at 165°F (74°C)
or
1 1/2 Hours at 165°F (74°C)
and Boil for 30 Minutes

DEFLASKING AND FINISHING

- 1) Deflask. (Figure 15)



Figure 15

- 2) Remove all plaster from around appliance, leaving the appliance on the casts.
- 3) Place casts in hot water to soften IMPAK.
- 4) Carefully remove softened appliance from casts. (One method is to tease a corner away from cast and keep hot water flowing between appliance and cast while you gently work it free.)

Caution: IMPAK is susceptible to tearing during this super-softened state. (Figure 16)



Figure 16

- 5) Initial trimming may be done with a pair of scissors.

6) Keep appliance cool at all times during finishing and polishing procedures. This can be accomplished by dipping IMPAK into cold water as needed. (Figure 17)



Figure 17

7) Finish and polish all areas of appliance except the occlusal surfaces which will be bonded using a self-curing acrylic in a later procedure.

8) Polish on a pumice lathe, using cold water, pumice and Ti-Gloss acrylic first-polish.

9) Finish up with Ti-Gleam acrylic final-polish for a high luster.

Note: IMPAK may at first appear cloudy. This will clear in approximately 1 to 3 days, depending on thickness, and yield a bright, finished appliance.

REMOUNTING

1) Place appliances on the working casts. (Figure 18)



Figure 18

2) Remount working casts on articulator. (Figure 19)

3) Using self-cure clear acrylic, fill the posterior interocclusal space from bicuspid to second molar areas.



Figure 19

4) Cure in a pressure pot with warm water for 15 minutes.

5) Remove appliance from casts.

6) Finish and polish the newly bonded areas.

ALTERNATE MOUNTING METHOD

If the dentist would prefer: You may send the remounted case to him/her for try-in. The appliances may then be luted or indexed and returned to the lab for bonding.

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IMPAK FLEXIBLE DENTURE ONE STEP PROCESSING TECHNIQUE

The following technique is provided only as an example for fabricating one of the many designs which could be prescribed by one of your dentists. It is in no way to be construed as being recommended by CMP Industries, Inc. or any of its employees. The following is provided only as an instructional guide to assist the laboratory in fabricating an appliance which may be prescribed by a dentist in the future.

REQUIREMENTS FROM THE DENTIST

In addition to the requirements for conventional dentures, the impressions should include extension into the retromylohyoid and all other undercut areas of each arch.

These may then be used for mechanical retention.

SPACER PREPARATION

Prior to articulating the casts, create a 1 mm spacer for each arch using either:

- 1) A vacuum-formed sheet of .080 mouthguard material. (Figure 1)
- 2) Shellac baseplate material.
- 3) Any other material that you would normally use to create a 1 mm thick spacer.

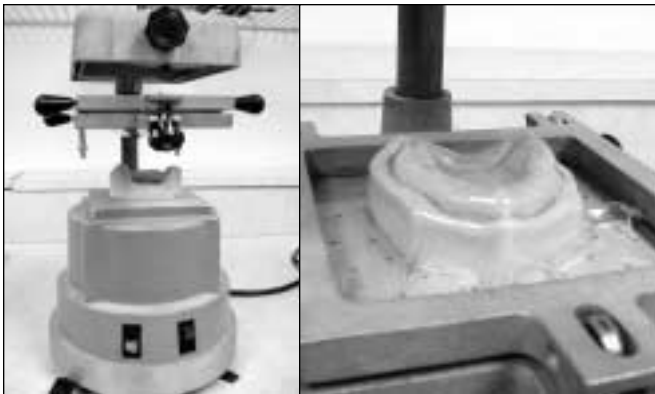


Figure 1

Remove and trim the spacers. They will be used during the packing portion of processing the appliances. (Figure 2)



Figure 2

WAXING

Articulate the casts and set the teeth in same manner as for conventional dentures. (Figure 3)

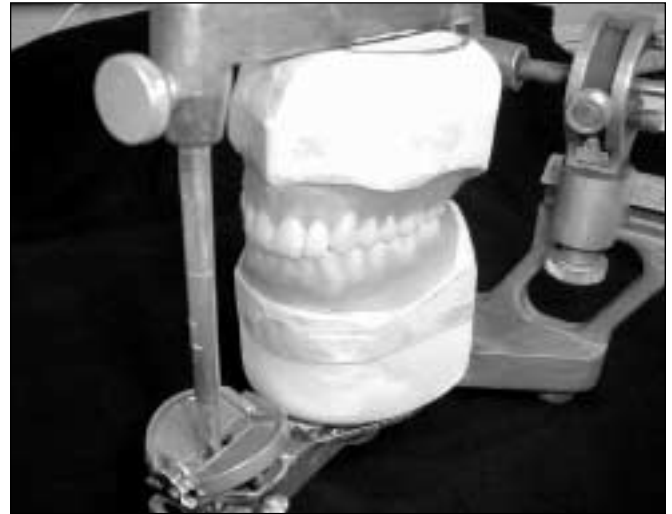


Figure 3

In addition to waxing the appliances in the conventional manner, in order to maintain cross arch rigidity, it will be necessary to:

- 1) Maxillary arch – increase the palatal thickness by 1 mm.
- 2) Mandibular arch – increase the thickness of the lingual flange by 1 mm from cuspid to cuspid.



Figure 4

FLASKING

Flask in the conventional manner (Figure 4), except:

1) Use insulating paste to cover the pattern during the second half of flasking procedure. This will allow removal of appliance from mold during packing procedure. (Figure 5)

Note: Mix stone and insulating paste to set together.

2) Paint the paste over the pattern being careful to keep the occlusal surfaces and incisal edges free of insulating paste.



Figure 5

Note: You can use walnut shells on the paste for retention.

3) Paint stone core over insulating paste, blending stone and paste.

BOIL-OUT

Boil-out in the conventional manner.

PACKING & CURING

Paint both sides of mold with NobilShield tin foil substitute.

Mixing and packing the hard acrylic:

1) Mix powder and liquid according to manufacturer's instructions.

2) Cover mixing jar and allow material to mature to the "snap" stage.

3) When material reaches the "snap" stage, pack material into mold side with cellophane between the material and spacer. (Figure 6 & 7)



Figure 6

Figure 7

4) With cellophane in place, trial pack flask to 500 PSI pressure for 30 seconds. Open flask, check density and do final closure at 3,000 PSI pressure. Hold pressure for 5 minutes at 165°F (74°C).

Open flask and remove facial flanges by either of the following methods:

1) If insulating paste was used in the flasking process, carefully remove denture from mold. (Figure 8)

2) Use heavy gauge scissors to remove the bulk of stiffened acrylic material from flanges. (Figure 9)

3) If insulating paste was not used, use a Bard Parker or other sharp blade to remove material from flanges. (Figure 10)



Figure 8

CAUTION: Removal of all hard acrylic from the facial areas, especially on the mandibular arch, can reduce cross arch rigidity. This problem can be prevented by only removing half of the facial flange, from cuspid to cuspid, on the mandibular denture.



Figure 9

Figure 10

4) Mandibular arch – in addition to the facial flange, remove: (Figure 11)

A) 2 mm from lingual flange cross arch between the first bicuspids.

B) From second bicuspids to retromolar pads, remove the flanges at a 45° angle.

5) Maxillary arch – in addition to facial flange removal, trim 3 to 5 mm from postdam area.



Figure 11

6) Place trimmed dentures into mold.

IMPAK-PF PREPARATION

MIXING RATIOS

The degree of softness/density is determined by IMPAK-PF's powder (polymer) to liquid (monomer) ratios **BY "VOLUME" not WEIGHT.**

Mixing ratios for desired softness/density are for the average sized denture:

Firm: 20 cc Powder to 10 cc Liquid
Softer: 20 cc Powder to 13 cc Liquid
Softest: 20 cc Powder to 15 cc Liquid

While higher powder to liquid ratios can be used, a mix greater than a 4 to 3 ratio decreases the desirable physical properties of IMPAK-PF.

CAUTION: Cross-contamination can cause severe polymerization problems. Always use two separate vials when measuring IMPAK-PF "soft" denture liquid (ethyl-methacrylate) and acrylic "hard" denture liquid (methyl-methacrylate) as they are not compatible.

1) Measure IMPAK-PF powder and liquid according to the above formula to match desired density as the dentist prescribed.

2) Pour "powder into liquid" and mix only until powder becomes saturated. (Figure 12)

3) Place a cover on mixing jar and allow material to mature for approximately 5 minutes or until it nears

the "snap" stage. More liquid = more time.

4) Remove spacers.

5) Just prior to "snap" stage, remove IMPAK-PF from mixing jar.

Note: Be careful not to contact the material with your bare hands. Material is very sticky at this stage.



Figure 12

6) Place "3" sheets of cellophane on top of hard acrylic to keep hard and soft acrylic separated during trial packing.

7) Trial pack at 500 PSI pressure.

8) Remove cellophane from between acrylics and close flask.

9) Final pack at 3,000 PSI pressure.

FINAL CURING

CURE IMPAK-PF DENTURES FOR 9 HOURS AT 165°F (74°C).

Note: Boiling IMPAK-PF is not recommended as it may decrease the elasticity of the material.

Cool IMPAK-PF denture to room temperature and deflask. Remount for selective grinding. (Figure 13)

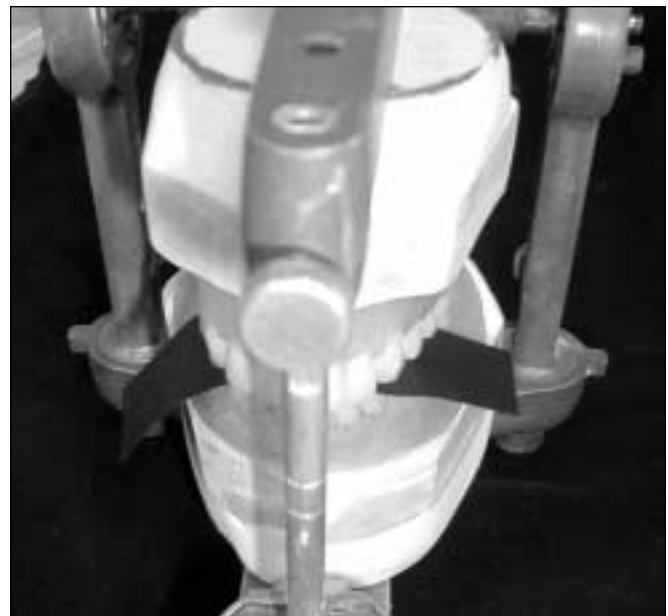


Figure 13

FINISHING

- 1) Place in warm water to help remove appliance from cast, especially if deep undercuts are involved.
- 2) Chill appliances in cold water, preferably ice water, and finish with conventional acrylic finishing and polishing materials.

Note: Ice water added to the pumice tray will aid in polishing.

An IMPAK-PF Denture is a Unique Appliance Providing the Patient with the Utmost in Comfort, Form & Function!



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