

Thermoplastics

for enhanced positioning + immobilization










CIVCO[®]
Radiotherapy
a better way

Choosing a Head & Neck Positioning System

CIVCO Radiotherapy provides an extensive line of high quality thermoplastics for head, neck & shoulder positioning and immobilization that are comfortable, easy to use and cost effective from imaging through treatment.

This guide includes CIVCO's three positioning systems, Type-S, Posifix and Uni-frame. The first step in choosing the right mask is determining which patient positioning system appeals to you.

| | Type-S™ Pages 3–6 | Posifix® Pages 7–8 | Uni-frame® Pages 9–10 |
|------------------------|---|---|---|
| Positioning Systems |  |  |  |
| Thermoplastic Material | FirmFit™ ZENTEC™ Standard White | Mastercast® Pro Posicast® | ZENTEC Standard White |
| Special Features | Pre-cut eye and mouth Open-face, surface tracking Larynx extension IMRT Reinforced™ | Open-face Larynx extension | Pre-cut eye and mouth Open-face, surface tracking IMRT Reinforced |
| Frame | Continuous  Drape and SnapFrame™ to continuous  | Drape style  | Continuous  |

Visit CivcoRT.com for more information on our extensive line of Head & Neck positioning and immobilization solutions.



Customizable Head Support



AccuForm™ Cushions



Vac-Lok™ Cushions



Headrests

Type-S™ Patient Positioning System

The Type-S system was designed for IMRT and conformal treatments and is intended to provide minimal attenuation throughout 360° of treatment angles. Type-S thermoplastics offer the greatest variety of IMRT patterns, materials and frame type.

FirmFit™ Thermoplastics with SnapFrame™ Type-S **NEW!**

FirmFit thermoplastic with the new SnapFrame design introduces CIVCO's premier thermoplastic for Type-S system users. The SnapFrame creates a unique drape-style mask, requiring less stretch of the material than continuous frame masks, resulting in a more rigid mask. Once the mask is draped over the patient, the segmented frame snaps together into a continuous and easy to manage frame.



Head Only

2.3 mm MTAPUDMP



Head Only with Open-face

Designed for use with vision/camera systems

2.3 mm MTAPUDMPSPG



Head, Neck & Shoulders

2.3 mm MTAPSDMP



Type-S™ Patient Positioning System

Tranquility™ Series

Tranquility Series thermoplastics were designed with patient comfort and surface tracking in mind. These masks are made with CIVCO's IMRT Reinforced Standard White material and feature unique patterns that offer a more open feel, yet they are still designed with rigidity and hold in mind.

FreedomView™ Pre-cut eye and mouth holes, increasing patient comfort and setup efficiency

ClearVision™ Open face mask designed to use with vision/camera systems; compatible with Vision RT's Align RT® camera system

PureVision™ Open face mask designed to use with vision/camera systems; separate reinforcing thermoplastic strips included



FreedomView Style 27



ClearVision 2



PureVision

FreedomView IMRT Style 18 Head Only

3.2 mm MTAPUID1832CL

FreedomView IMRT Style 18 Head Only, Radius 13"

3.2 mm MTAPUID1832CLRD

FreedomView IMRT Style 27 Head, Neck & Shoulders

3.2 mm MTAPSID27NR32CL

ClearVision, Head Only

3.2 mm MTVRT20

ClearVision 2, Head Only

NEW!

3.2 mm MTAPUID1832SG

ClearVision 2 Head, Neck & Shoulders

NEW!

3.2 mm MTAPSID2732SG

PureVision Head Only, Reloadable

3.2 mm MTRVTR



For an even more customizable hold, see page 11 for Reinforcement Thermoplastic Strips.

Type-S™ Patient Positioning System

ZENTEC™, IMRT Reinforced Thermoplastics™

ZENTEC thermoplastics require less heating time than standard white thermoplastics and have an established reputation of being highly conforming masks. In the 2.4 mm thickness, these masks provide a lighter feeling, which offers a more pleasant experience for anxious patients. In the 3.2 mm thickness, this material offers a similarly conforming mask with the added benefit of being our most rigid continuous frame mask.



IMRT Style 18 Head Only

2.4 mm MTAPUID1824VT

3.2 mm MTAPUID1832VT

IMRT Style 27 Head, Neck & Shoulders

2.4 mm MTAPSID2724VT

3.2 mm MTAPSID2732VT



Standard White, IMRT Reinforced Thermoplastics™

CIVCO's patented IMRT Reinforced Thermoplastics feature a combination of perforated and solid thermoplastic in the same mask to provide rigidity and secure immobilization for IMRT treatments. By providing solid bands in areas where a secure hold is essential while maintaining perforation elsewhere, these masks provide a balance of immobilization and comfort.



The Neck Relief feature provides larger perforation around the neck. This increases patient comfort and may also make working around a tracheostomy tube easier.

IMRT Style 18 Head Only

2.4 mm MTAPUID1824

3.2 mm MTAPUID1832

IMRT Style 18 Head Only, 13" Radius

3.2 mm MTAPUID181332RD

IMRT Style 27 Head, Neck & Shoulders

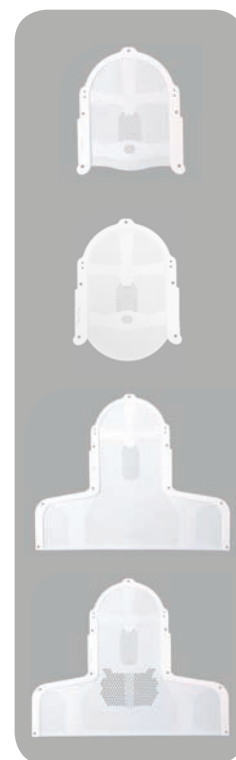
2.4 mm MTAPSID2724

3.2 mm MTAPSID2732

IMRT Style 27 Head, Neck & Shoulders with Neck Relief

2.4 mm MTAPSID27NR24

3.2 mm MTAPSID27NR32



Type-S™ Patient Positioning System

Standard Perforation

These thermoplastics feature standard perforation and offer solutions for secure hold.



Head Only

2.4 mm MTAPUD2.4

3.2 mm MTAPUD

Head, Neck & Shoulders

2.4 mm MTAPSD2.4

3.2 mm MTAPSD3.2



Pediatric Masks

Narrower, reloadable thermoplastic frame and masks are available to accommodate pediatric patients.



Reloadable Frame

- 20CFHNPSUB1P

Pediatric Standard Perforation Head, Neck & Shoulders

2.4 mm MTAPSP2.4

Posifix® Patient Positioning System

Mastercast Pro and Posicast® thermoplastics were both specifically formulated for use with CIVCO's Posifix Patient Positioning System. These masks are drape-style which requires less stretching, therefore resulting in less shrinkage. Drape-style masks also allow for closer attachment of the mask to the patient, unlike continuous frame masks which must be wide enough to accommodate a variety of head sizes.

Mastercast™ Pro

Mastercast Pro is the premier thermoplastic for CIVCO's Posifix family of positioning and immobilization products, providing increased rigidity over other Posicast thermoplastics.



Mastercast Pro PR3

CIVCO worked diligently with clinical collaborators to arrive at an ideal formulation for Mastercast Pro that offers increased strength.

Head Only (3 pt)

2.3 mm 990030

Head Only (3 pt) with Open-face

2.3 mm 990031

Head Only (3 pt) with Larynx Extension

2.3 mm 990044

Head Only (3 pt) with Open-face and Larynx Extension

2.3 mm 990045

Head, Neck & Shoulders (5 pt)

2.3 mm 990145

Head, Neck & Shoulders (5 pt) with Open-face

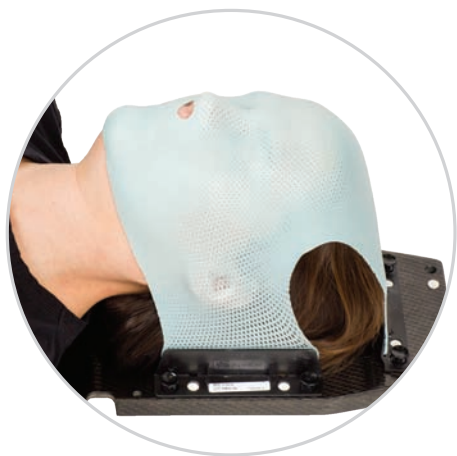
2.3 mm 991145



Posifix® Patient Positioning System

Posicast-Lite

Posicast-Lite feels like a traditional thermoplastic with a smooth spray coating on both sides of the mask.



Posicast-Lite PR3

Head Only (3 pt)

2.3 mm 772030



Head Only (3 pt) with Open-face

2.3 mm 970031

Compatible with trUpoint ARCH™
SRS/SRT System



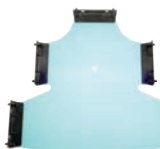
Head Only (3 pt) with Larynx Extension

2.3 mm 772044



Head, Neck & Shoulders (5 pt)

2.3 mm 772145



Posicast-Plus

Posicast-Plus has a soft polyurethane coating on the patient-contacting side for comfort, while the other side features a smooth spray coating to facilitate marking treatment fields on the mask.



Posicast-Plus PR5

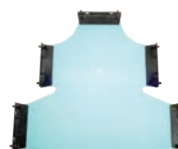
Head Only (3 pt)

2.3 mm 930030



Head, Neck & Shoulders (5 pt)

2.3 mm 930145



Head Only (3 pt) with Larynx Extension

2.3 mm 930044



Pediatric Head, Neck & Shoulders (5 pt)

2.3 mm 930055



Pediatric Head Only (3 pt)

2.3 mm 930033



Uni-frame® Patient Positioning System

The Uni-frame system is our legacy line and has become an industry standard solution for head-only thermoplastics. Uni-frame masks are available in a variety of standard and IMRT patterns, including Tranquility Series masks and the highly conformal ZENTEC™ material.

Tranquility™ Series

Tranquility Series Thermoplastic Masks were designed with patient comfort and surface tracking in mind. The masks feature unique patterns that offer a more open feel, yet they are still designed with rigidity and hold in mind.

- FreedomView™ Pre-cut eye and mouth holes, increasing patient comfort and setup efficiency
- ClearVision™ Open face mask designed to use with vision/camera systems; compatible with Vision RT's Align RT® camera system
- PureVision™ Open face mask designed to use with vision/camera systems; separate reinforcing thermoplastic strips included



FreedomView

FreedomView IMRT Style 18 Head Only

3.2 mm MTAPUI1832CL

FreedomView IMRT Style 18 Head Only, Reloadable

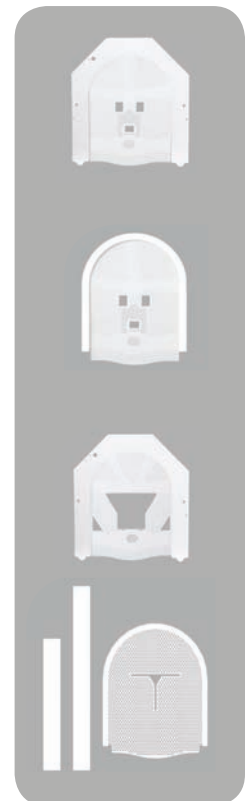
3.2 mm MTAPUIR1832CL

ClearVision Head Only

3.2 mm MTVRTW

PureVision Head Only, Reloadable

3.2 mm MTVRTR



For an even more customizable hold, see page 11 for Reinforcement Thermoplastic Strips.

Uni-frame® Patient Positioning System

ZENTEC™, IMRT Reinforced Thermoplastics™

ZENTEC thermoplastics require less heating time than standard white thermoplastics and have an established reputation of being highly conforming masks. In the 2.4 mm thickness, these masks provide a lighter feeling, which offers a more pleasant experience for anxious patients. In the 3.2 mm thickness, this material offers a similarly conforming mask with the added benefit of being our most rigid continuous frame mask.



IMRT Reinforced Style 18 Head Only

| | |
|-------------|---------------|
| 2.4 mm | MTAPUI1824VT |
| 2.4 mm Wide | MTAPUIW1824VT |
| 3.2 mm Wide | MTAPUIW1832VT |



Standard White, IMRT Reinforced Thermoplastics

IMRT Reinforced Thermoplastics feature a combination of perforated and solid thermoplastics to provide rigidity and secure immobilization for IMRT treatments.



IMRT Reinforced Style 18 Head Only

| | |
|--------|------------|
| 2.4 mm | MTAPUI1824 |
| 3.2 mm | MTAPUI1832 |



Standard Perforation

These thermoplastics feature standard perforation and are available in a variety of lengths and thicknesses.



Head Only

| | |
|--------|----------|
| 2.4 mm | MTAPU2.4 |
| 3.2 mm | MTAPU |

Wide Head Only

| | |
|--------|-----------|
| 2.4 mm | MTAPUW2.4 |
| 3.2 mm | MTAPUW |



Thermoplastic Accessories

Precise Bite™

The Precise Bite attaches easily to a thermoplastic mask and conforms to the teeth and/or maxilla to aid in effective and repeatable positioning. The Precise Bite with tongue depressor assists in tongue displacement and encourages an open airway.

- Softens in warm water and comfortably conforms to the patient's dental contours
- Precise Bite docking plate simply snaps on top to secure the bite to the thermoplastic mask
- Compatible with Type-S™, Posicast® and Uni-frame® thermoplastics
- Precise Bite Warmer softens Precise Bite without a microwave or water bath



Precise Bite (Qty 5)

| | |
|------------------------------|--------------|
| Standard | MTCBPBITE |
| Small | MTCBPBITES |
| Standard w/ Tongue Depressor | MTCBPBITETD |
| Small w/ Tongue Depressor | MTCBPBITETDS |

Precise Bite Warmer

| | |
|----------|--------------|
| 110 volt | MTCBPBITEWRM |
|----------|--------------|

This product has not been CE Marked.
Available in 110 volt only.

Reinforcement Thermoplastic Strips & Pellets

Miscellaneous configurations are available for your convenience.

Reinforcement Thermoplastic Strip (Qty 1)

| | |
|---------------------------|------------|
| 1.375 x 24" (3.5 x 70 cm) | MTAPS18391 |
|---------------------------|------------|

Reinforcement Thermoplastic Strips (Qty 5)

| | |
|------------------------------|---------|
| 1.375 x 9.75" (3.5 x 24 cm) | MTAPS25 |
| 1.375 x 13.75" (3.5 x 35 cm) | MTAPS35 |

Thermoplastic Pellets

| | |
|-----------------|---------|
| 3 lbs (1.36 kg) | MTAPS3A |
|-----------------|---------|

Water Baths



Digital Water Bath*

| | |
|----------|-------------|
| 110 volt | MTCD1600 |
| 220 volt | MTCDD1600EX |

Dimensions (W x D x H)**

| | | |
|-----------|-----------------------|-----------------------|
| Overall: | 33.71 x 25.86 x 8.02" | 85.6 x 65.7 x 20.4 cm |
| Internal: | 26 x 22 x 5" | 66 x 55.9 x 12.7 cm |

The water bath accommodates all thermoplastic sizes including Type-S™ head, neck and shoulders and HipFix® thermoplastics.



Water Bath*

| | |
|----------|------------|
| 120 volt | MTRH1500 |
| 230 volt | MTRH1500EX |

Dimensions (W x D x H)**

| | | |
|-----------|------------------|-----------------------|
| Overall: | 28 x 22 x 12.65" | 71.1 x 55.9 x 32.4 cm |
| Internal: | 25 x 19 x 5" | 63.5 x 48.3 x 12.7 cm |

The commercial water bath accommodates all thermoplastic sizes including Type-S head, neck and shoulders and HipFix thermoplastics.



Commercial Water Bath*

| | |
|----------|------------|
| 120 volt | MTAPWW3V |
| 230 volt | MTAPWW3VEX |

Dimensions (W x D x H)

| | | |
|-----------|------------------|-----------------------|
| Overall: | 14.5 x 22.5 x 9" | 36.8 x 57.2 x 22.9 cm |
| Internal: | 12 x 20 x 6.25" | 30.3 x 50.6 x 15.9 cm |

The commercial water bath accommodates Uni-frame®, Type-S head-only masks and Posicast head-only masks.



Water Bath Cart

| | |
|---|-----------|
| - | MTMC01003 |
|---|-----------|

Dimensions (W x D x H)

| | | |
|----------|-----------------|------------------------|
| Overall: | 25.5 x 43 x 38" | 64.8 x 109.2 x 96.5 cm |
|----------|-----------------|------------------------|

The Water Bath Cart provides an easy, efficient way to transfer a water bath from room to room. The cart has a capacity of 500 lbs.

Pan Liner (Qty 2)

| | |
|-------|----------|
| Large | MTCBPLLG |
|-------|----------|

The pan liner helps prevent thermoplastics from sticking to the bottom of the water bath.

*Contact your sales representative for country compatibility

**Dimensions do not include shut off valve mounted on side

Breast and Hip & Pelvic Thermoplastic

Standard Breast Thermoplastics

These standard white thermoplastics for breast positioning require two reusable handles that mount to the MT-350 and C-Qual™ Breastboards. They are available in Standard Perforated and IMRT Reinforced™ perforation styles.



Standard Perforated (White, Qty 1)

| | |
|--------|-------------|
| 2.4 mm | MTRFX9182.4 |
| 3.2 mm | MTRFX918 |

IMRT Reinforced (White, Qty 1)

| | |
|--------|-------------|
| 2.4 mm | MTRFI9182.4 |
| 3.2 mm | MTRFI918 |

Breast Support Handle System (Qty 2)

| | |
|---|--------|
| - | MTRFH3 |
|---|--------|

HipFix® Thermoplastics

HipFix Thermoplastics, 18 x 22" (45.7 cm x 55.8 cm), are available in standard white material with reloadable or disposable handles with solid, standard perforated or IMRT Reinforced perforation styles. The handles and groin piece secure to the HipFix board, providing an indexable setup. They are sold in boxes of 5.



Solid Reloadable (Qty 5)

| | |
|--------|---------------|
| 2.4 mm | MTHFX18222.4S |
| 3.2 mm | MTHFX1822S |

Perforated Reloadable (Qty 5)

| | |
|--------|--------------|
| 2.4 mm | MTHFX18222.4 |
| 3.2 mm | MTHFX1822 |


IMRT Reinforced Reloadable (Qty 5)

| | |
|--------|--------------|
| 2.4 mm | MTHFI18222.4 |
| 3.2 mm | MTHFI1822 |

Reloadable Handles (Qty 2) & Groin Piece

| | |
|---|----------|
| - | MTPLHA01 |
|---|----------|

HipFix Baseplate

| | |
|--|----------|
| - | MTPLVC04 |
|  MR Series™ | MTPLVCMR |

Solid Disposable (Qty 5)

| | |
|-----------------------------|------------|
| 3.2 mm | MTPLHA0201 |
| Groin piece sold separately | |

Perforated Disposable (Qty 5)

| | |
|-----------------------------|------------|
| 3.2 mm | MTPLHA0202 |
| Groin piece sold separately | |

IMRT Reinforced Disposable (Qty 5)

| | |
|-----------------------------|-------------|
| 3.2 mm | MTPLHAI0203 |
| Groin piece sold separately | |

Groin Piece

| | |
|--|------------|
| - | MTPLVCSUB8 |
| For use with disposable thermoplastics | |

Thermoplastic Tips

Basic Workflow

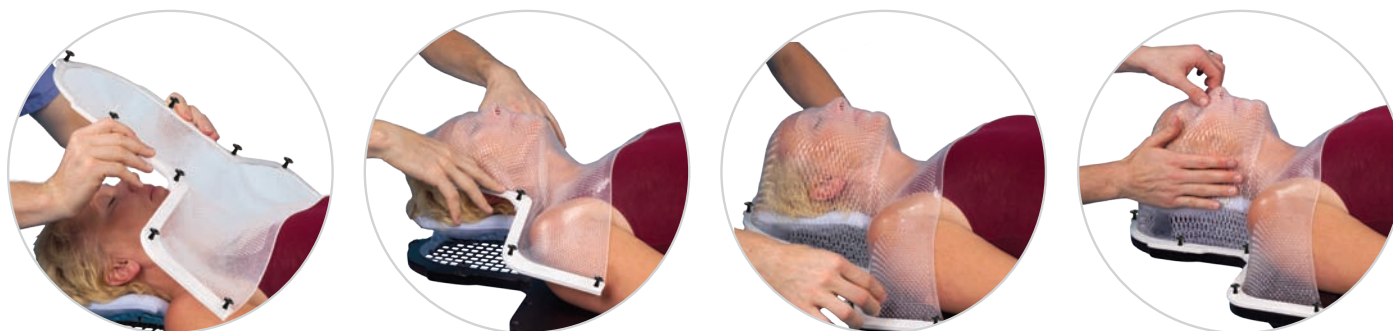
Some patients experience anxiety or claustrophobia during setup and treatment, so be sure to discuss this with the patient prior to placing the mask. Consider the FreedomView™ or an open-face mask for patients who express concerns or demonstrate significant anxiety.

-
- | | |
|--|--|
| 1 Place the thermoplastic in the waterbath for the time and temperature specified in the table above. | 5 Ensure the mask has adequately cooled to near room temperature prior to imaging for simulation. |
|--|--|
-
- | | |
|--|---|
| 2 Setup the patient for simulation with head support, Vac-Lok™, Kneefix™ or other options to encourage a comfortable starting position to be used both during simulation and subsequent treatments. | 6 Note all positioning setup information during this time to encourage a repeatable patient setup for subsequent treatment visits. |
|--|---|
-
- | | |
|---|--|
| 3 Remove the mask from the bath and quickly remove excess water for patient comfort. | 7 Acquire the simulation image. |
|---|--|
-
- | | |
|--|---|
| 4 Place mask on the patient, ensuring proper alignment for chin and nasion capture (see thermoplastic forming tips below). <i>Note: If additional thermoplastic strips are used for reinforcement they should be added at this time.</i> | 8 Remove and store the mask and other patient-specific products according to your standard procedures. |
|--|---|
-

Forming Thermoplastics

When thermoplastic has been in the waterbath for the appropriate amount of time, pull it out of the bath and remove excess water from the thermoplastic.

Carefully form the thermoplastic over the patient and dock the mask onto the baseplate. Gently form the thermoplastic around the bony anatomy of the patient such as the nasion and chin. Make sure the thermoplastic is lying evenly on the patient's skin and the patient is still in the desired position for treatment.



Type-S shown

Heating Times and Temperatures



| Thermoplastic Type | Heating Time | Waterbath Temp | |
|---|--------------|----------------|----------------|
| Zentec™ IMRT Reinforced™ (violet) | 2–3 min | 75° C / 165° F | |
| Standard Perforation (white) Head Only | 4 min | | |
| Standard Perforation (white) Head Neck & Shoulders | 6 min | | |
| IMRT Reinforced (white) Head Only | 5 min | | |
| IMRT Reinforced (white) Head Neck & Shoulders | 7–9 min | | |
| Thermoplastic Strips (white) | 4 min | | |
| Breast Support Thermoplastic | 6 min | | |
| HipFix® Thermoplastic | 7–9 min | | |
| FirmFit™ (white) | 1 min | | 70° C / 158° F |
| Mastercast™ Pro (white) | 1 min | | |
| Posicast® (green) | 1 min | | |



CIVCO

Radiotherapy

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