Technical Data Sheets

- Standard White Thermoplastics
- ZENTEC™ Thermoplastics
- FirmFit™ Thermoplastics
- Posicast® Thermoplastics
- Mastercast™ Pro Thermoplastics
- Solstice™ SRS Immobilization System
- Solstat Immobilization System
- GrayDuck Stents™
- Customizable Head Support
- AccuForm™ Cushions
Instructional Videos

GrayDuck Stents™

Solstice™ SRS Immobilization System

Solstat™ Immobilization System

Customizable Head Support
Thermoplastics
for enhanced positioning + immobilization
# 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.

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

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

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**
  - **Head Only with Open-face**
    - Designed for use with vision/camera systems
  - **Head, Neck & Shoulders**

<table>
<thead>
<tr>
<th>Component</th>
<th>Thickness</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Only</td>
<td>2.3 mm</td>
<td>MTAPUDMP</td>
</tr>
<tr>
<td>Head Only with Open-face</td>
<td>2.3 mm</td>
<td>MTAPUDMPSG</td>
</tr>
<tr>
<td>Head, Neck &amp; Shoulders</td>
<td>2.3 mm</td>
<td>MTAPSDMP</td>
</tr>
</tbody>
</table>
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 IMRT Style 18
Head Only
3.2 mm MTAPUID1832CL
FreedomView IMRT Style 18
Head Only, Radius 13”
3.2 mm MTAPUID1832CLRDS
FreedomView IMRT Style 27
Head, Neck & Shoulders
3.2 mm MTAPSID27NR32CL
ClearVision, Head Only
3.2 mm MTVRT20
ClearVision 2, Head Only
3.2 mm MTAPUID1832SG
ClearVision 2
Head, Neck & Shoulders
3.2 mm MTAPSID2732SG
PureVision
Head Only, Reloadable
3.2 mm MTVRTR

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.

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

The Neck Relief feature provides larger perforation around the neck. This increases patient comfort and may also make working around a tracheostomy tube easier.
Type-S™ Patient Positioning System

Standard Perforation

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

<table>
<thead>
<tr>
<th>Perforation</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Only</td>
<td>MTAPUD</td>
</tr>
<tr>
<td>2.4 mm</td>
<td>MTAPUD2.4</td>
</tr>
<tr>
<td>3.2 mm</td>
<td>MTAPUD</td>
</tr>
<tr>
<td>Head, Neck &amp; Shoulders</td>
<td>MTAPSD</td>
</tr>
<tr>
<td>2.4 mm</td>
<td>MTAPSD2.4</td>
</tr>
<tr>
<td>3.2 mm</td>
<td>MTAPSD3.2</td>
</tr>
</tbody>
</table>

Pediatric Masks

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

<table>
<thead>
<tr>
<th>Perforation</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head, Neck &amp; Shoulders</td>
<td>MTAPSP</td>
</tr>
<tr>
<td>2.4 mm</td>
<td>MTAPSP2.4</td>
</tr>
</tbody>
</table>
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.

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

Mastercast Pro PR3

<table>
<thead>
<tr>
<th>Description</th>
<th>Thickness</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Only (3 pt)</td>
<td>2.3 mm</td>
<td>990030</td>
</tr>
<tr>
<td>Head Only (3 pt) with Open-face</td>
<td>2.3 mm</td>
<td>990031</td>
</tr>
<tr>
<td>Head Only (3 pt) with Larynx Extension</td>
<td>2.3 mm</td>
<td>990044</td>
</tr>
<tr>
<td>Head Only (3 pt) with Open-face and Larynx Extension</td>
<td>2.3 mm</td>
<td>990045</td>
</tr>
<tr>
<td>Head, Neck &amp; Shoulders (5 pt)</td>
<td>2.3 mm</td>
<td>990145</td>
</tr>
<tr>
<td>Head, Neck &amp; Shoulders (5 pt) with Open-face</td>
<td>2.3 mm</td>
<td>991145</td>
</tr>
</tbody>
</table>
Posicast-Lite

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

- **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.

- **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

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
GrayDuck Oral Positioning Stents

GrayDuck oral positioning stents are currently the only custom fitted bite block system that can position the tongue in one of several positions; laterally (left or right), depressing (downward) or a combination thereof.

- Tongue-displacing and immobilizing oral stent
- Capable of providing repeatable tongue deviation and immobilizing in several directions
- Designed to provide repeatable immobilization and tissue sparing during radiotherapy
- Ergonomically developed to be a quick, easy-to-fit custom oral stent
- Usually requires less than 15 minutes to custom-fit a patient
- Can be secured to any CIVCO thermoplastic mask

CE MARKED, 510(K) CLEARED
US PATENT #9,504,537 AND OTHER PATENTS PENDING

<table>
<thead>
<tr>
<th>Size</th>
<th>Item Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium</td>
<td>GDS001</td>
</tr>
<tr>
<td>Small</td>
<td>GDS002</td>
</tr>
</tbody>
</table>

Precise Bite™

The Precise Bite attaches easily to a thermoplastic cast 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 provides an airway opening for easy breathing.

- 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 Uni-frame®, Type-S™, Posicast® and Solstice™ thermoplastic frame types
- Warmer softens Precise Bite without a microwave or water bath

<table>
<thead>
<tr>
<th>Size</th>
<th>Item Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>MTCBPBITE</td>
</tr>
<tr>
<td>Small</td>
<td>MTCBPBITES</td>
</tr>
<tr>
<td>w/ Tongue Depressor</td>
<td>MTCBPBITETD</td>
</tr>
<tr>
<td>Small w/ Tongue Depressor</td>
<td>MTCBPBITETDS</td>
</tr>
<tr>
<td>Warmer, 110 volt</td>
<td>MTCBPBITEWRM</td>
</tr>
</tbody>
</table>

WARMER HAS NOT BEEN CE MARKED

Global Sales 800.842.8688 | +1 712.737.8688
# Water Baths

**Digital Water Bath***
- 110 volt: MTCD1600
- 220 volt: MTCD1600EX

**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.

**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: MTCBPLL

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

---

# Reinforcement Thermoplastic Strips

**Reinforcement Thermoplastic Strips**

<table>
<thead>
<tr>
<th>Size</th>
<th>Quantity</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.375 x 24&quot; (3.5 x 70 cm)</td>
<td>1</td>
<td>MTAPS18391</td>
</tr>
<tr>
<td>1.375 x 9.75&quot; (3.5 x 24 cm)</td>
<td>5</td>
<td>MTAPS25</td>
</tr>
<tr>
<td>1.375 x 13.75&quot; (3.5 x 35 cm)</td>
<td>5</td>
<td>MTAPS35</td>
</tr>
</tbody>
</table>
Breast and Hip & Pelvic Thermoplastics

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.

<table>
<thead>
<tr>
<th>Standard Perforated (White, Qty 1)</th>
<th>2.4 mm</th>
<th>MTRFX9182.4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.2 mm</td>
<td>MTRFX918</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IMRT Reinforced (White, Qty 1)</th>
<th>2.4 mm</th>
<th>MTRFI9182.4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.2 mm</td>
<td>MTRFI918</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Solid Reloadable (Qty 5)</th>
<th>2.4 mm</th>
<th>MTHFX18222.4S</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.2 mm</td>
<td>MTHFX18222</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perforated Reloadable (Qty 5)</th>
<th>2.4 mm</th>
<th>MTHFX18222.4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.2 mm</td>
<td>MTHFX1822</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IMRT Reinforced Reloadable (Qty 5)</th>
<th>2.4 mm</th>
<th>MTHFI18222.4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.2 mm</td>
<td>MTHFI1822</td>
</tr>
</tbody>
</table>

| Reloadable Handles (Qty 2) & Groin Piece | - | MTPLHA01 |

<table>
<thead>
<tr>
<th>HipFix Baseplate</th>
<th>-</th>
<th>MTPLVC04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groin Piece</td>
<td></td>
<td>MTPLVCSUB8</td>
</tr>
</tbody>
</table>

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.

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.

3. Remove the mask from the bath and quickly remove excess water for patient comfort.

4. Place mask on the patient, ensuring proper alignment for chin and nasion capture (see thermoplastic forming tips below).
   
   *Note: If additional thermoplastic strips are used for reinforcement they should be added at this time.*

5. Ensure the mask has adequately cooled to near room temperature prior to imaging for simulation.

6. Note all positioning setup information during this time to encourage a repeatable patient setup for subsequent treatment visits.

7. Acquire the simulation image.

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.
## Heating Times and Temperatures

<table>
<thead>
<tr>
<th>Thermoplastic Type</th>
<th>Heating Time</th>
<th>Waterbath Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zentec™ IMRT Reinforced™ (violet)</td>
<td>2–3 min</td>
<td></td>
</tr>
<tr>
<td>Standard Perforation (white) Head Only</td>
<td>4 min</td>
<td></td>
</tr>
<tr>
<td>Standard Perforation (white) Head Neck &amp; Shoulders</td>
<td>6 min</td>
<td></td>
</tr>
<tr>
<td>IMRT Reinforced (white) Head Only</td>
<td>5 min</td>
<td>75° C / 165° F</td>
</tr>
<tr>
<td>IMRT Reinforced (white) Head Neck &amp; Shoulders</td>
<td>7–9 min</td>
<td></td>
</tr>
<tr>
<td>Thermoplastic Strips (white)</td>
<td>4 min</td>
<td></td>
</tr>
<tr>
<td>Breast Support Thermoplastic</td>
<td>6 min</td>
<td></td>
</tr>
<tr>
<td>HipFix® Thermoplastic</td>
<td>7–9 min</td>
<td></td>
</tr>
<tr>
<td>FirmFit™ (white)</td>
<td>1 min</td>
<td></td>
</tr>
<tr>
<td>Mastercast™ Pro (white)</td>
<td>1 min</td>
<td>70° C / 158° F</td>
</tr>
<tr>
<td>Posicast® (green)</td>
<td>1 min</td>
<td></td>
</tr>
</tbody>
</table>
Solstice™ SRS Immobilization System

Variable pitch capability provides increased setup options in CT simulation, MR imaging (with glass fiber MR version) and corrective positioning flexibility during treatment setup.

Additional Features & Benefits
- Non-invasive immobilization with submillimeter accuracy for treatment of multiple lesions with a single isocenter
- Midline thermoplastic mask attachment provides increased rigidity and minimizes shrinkage to enhance patient comfort
- Highly conformal to the patient when using a customizable cushion and dedicated thermoplastic mask
- Unique thermoplastic frame provides easy to use, secure and quiet mask attachment
- Adaptable with Precise Bite™ to aid in effective and repeatable positioning

NEW! Shoulder Thermoplastic

IMRT Reinforced Thermoplastics™

ClearVision™ Open-face (with Precise Bite™) compatible with Vision RT’s Align RT camera system
System Customization

The system is comprised of a carbon fiber head support, customizable cushion and dedicated thermoplastic mask designed for secure and simple attachment. These components create a highly customizable and comfortable head and neck immobilization system for precise treatment to improve patient outcomes.

### SGRT Starter Kit

Kit includes: Carbon Fiber Head Support, Solstice ClearVision™ Open-face Thermoplastic, Standard (x10), 20 x 35 cm Chamfered AccuForm™ Cushion (x10), Precise Bite™ (x5).

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS03SGK</td>
<td>Posifix®</td>
</tr>
<tr>
<td>CHS04SGK</td>
<td>Type-S™</td>
</tr>
</tbody>
</table>

### Standard Starter Kit

Kit includes: Carbon Fiber Solstice Head Support, Solstice IMRT Reinforced Thermoplastic™ Style 18, Standard (x10), 20 x 35 cm Chamfered AccuForm Cushion (x10), Precise Bite (x5).

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS03K</td>
<td>Posifix</td>
</tr>
<tr>
<td>CHS04K</td>
<td>Type-S</td>
</tr>
</tbody>
</table>

### Individual Order Items

#### Head Support

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS03</td>
<td>Carbon Fiber, Posifix</td>
</tr>
<tr>
<td>CHS04</td>
<td>Carbon Fiber, Type-S</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSH03MR</td>
<td>Glass Fiber MR, Posifix</td>
</tr>
<tr>
<td>CSH04MR</td>
<td>Glass Fiber MR, Type-S</td>
</tr>
</tbody>
</table>

#### ClearVision™ Thermoplastic

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTAPCID1832SG</td>
<td>Standard (shown), Qty 5</td>
</tr>
<tr>
<td>MTAPCIN1832SG</td>
<td>Narrow, Qty 5</td>
</tr>
</tbody>
</table>

#### IMRT Reinforced Thermoplastic™ Style 18

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTAPCID1832</td>
<td>Standard, Qty 5</td>
</tr>
<tr>
<td>MTAPCIN1832</td>
<td>Narrow (shown), Qty 5</td>
</tr>
</tbody>
</table>

#### Shoulder Thermoplastic

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTAPSSSTS</td>
<td>Type-S Standard White, Solid (left)</td>
</tr>
<tr>
<td>MTAPSSPF</td>
<td>Posifix Standard White, Solid (right)</td>
</tr>
</tbody>
</table>

#### AccuForm™ Cushions

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTACL2035</td>
<td>20 x 35 cm Chamfered, Qty 1</td>
</tr>
<tr>
<td>MTACL2035HF</td>
<td>20 x 35 cm Chamfered, Half Fill, Qty 1</td>
</tr>
</tbody>
</table>

#### Precise Bite™

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTCBPBITE</td>
<td>Standard, Qty 5</td>
</tr>
<tr>
<td>MTCBPBITES</td>
<td>Small, Qty 5</td>
</tr>
</tbody>
</table>

• Vision RT is unable to comment on, nor make claims, about the immobilization rigidity or patient alignment reproducibility when using this mask;
• Compatibility is subject to users following CIVCO guidelines for forming open masks in conjunction with Surface Guided Radiotherapy Systems, and subject to users following Vision RT’s guidelines for drawing Regions of Interest for use in SRS with Open Masks;
• The mask vendor is responsible for ensuring that users are in receipt of guidelines for forming masks for use in conjunction with Surface Guided Radiotherapy Systems. Vendors may change their guidelines from time to time without reviewing these changes with Vision RT. Vision RT is not liable for misuse of masks;
• Vision RT makes no comment on, and is not liable for, suitability or otherwise of masks for SRS or any other procedure;
• Purchasers are responsible for making their own choices as to the masks selected by them.
Increased Patient Comfort and Rigidity

**Solstat™ Immobilization System**

CIVCO Radiotherapy brings leading-edge innovation, increased patient comfort and rigidity for head and neck treatment with the Solstat Immobilization System. The Solstat system is comprised of a rigid head support, customizable cushion or non-custom headrest and a dedicated thermoplastic mask designed for secure and simple attachment. These components create a highly customizable and comfortable setup for more accurate head and neck treatments.

Not available in the U.S.

**Features & Clinical Benefits**

- Midline thermoplastic mask attachment provides increased rigidity and minimizes shrinkage to enhance patient comfort
- Highly conformal to the patient when using a customizable cushion and dedicated thermoplastic mask
- Adaptable with Precise Bite to aid in effective and repeatable positioning
- Unique thermoplastic frame provides easy to use, secure and quiet mask attachment
- Type-S™ and Posifix® version compatible
- MR Compatible

See CIVCO's YouTube channel for the Solstat Instructional Video
System Customization
The system is comprised of a rigid head support, customizable cushion or non-custom headrest and a dedicated thermoplastic mask designed for secure and simple attachment. These components create a highly customizable, comfortable and rigid setup for accurate head and neck treatments.

Individual Order Items

Head Support
- CHS05 Posifix® (left image)
- CHS06 Type-S™ (right image)

ClearVision™ Thermoplastic
- MTAPCID1832SG Standard (left)
- MTAPCIN1832SG Narrow (right)

IMRT Reinforced Thermoplastic™, Style 18
- MTAPCID1832 Standard (left)
- MTAPCIN1832 Narrow (right)

Headrests
- CHS40K Headrest Kit (includes B, C, & F), Qty 3
- CHS40 Headrest B, Black, Qty 1
- CHS41 Headrest C, Black, Qty 1
- CHS42 Headrest F, Black, Qty 1

AccuForm™ Cushions
- MTACL2035HF 20 x 35 cm Chamfered, Half Fill
- MTACL2035 20 x 35 cm Chamfered

Precise Bite™
- MTCBPBITE Standard, Qty 5
- MTCBPBITES Small, Qty 5

- Vision RT is unable to comment on, nor make claims, about the immobilization rigidity or patient alignment reproducibility when using this mask;
- Compatibility is subject to users following CIVCO guidelines for forming open masks in conjunction with Surface Guided Radiotherapy Systems, and subject to users following Vision RT’s guidelines for drawing Regions of Interest for use in SRS with Open Masks;
- The mask vendor is responsible for ensuring that users are in receipt of guidelines for forming masks for use in conjunction with Surface Guided Radiotherapy Systems. Vendors may change their guidelines from time to time without reviewing these changes with Vision RT. Vision RT is not liable for misuse of masks;
- Vision RT makes no comment on, and is not liable for, suitability or otherwise of masks for SRS or any other procedure;
- Purchasers are responsible for making their own choices as to the masks selected by them.
The unique shape of the Customizable Head Support shell was designed to encourage the cushion to return the patient to a repeatable position from fraction to fraction. The shell may be used with any customizable cushion such as Chamfered AccuForm™.

Shell and Cushion System

- Deep “bowl” shape allows more support under patient’s neck for less superior – inferior movement (pitch)
- Provides enhanced comfort so patient is less likely to move during treatment
- Shell provides several unique contours to guide the cushion into the same position for each fraction
- 20 x 35 cm chamfered cushion features clipped corners that provide support without interfering with thermoplastic

<table>
<thead>
<tr>
<th>Customizable Head Support, Posifix® Style</th>
<th>CHS01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customizable Head Support, Type-S™ Style</td>
<td>CHS02</td>
</tr>
<tr>
<td>Chamfered AccuForm, Half Fill, 20 x 35 cm</td>
<td>MTACL2035HF</td>
</tr>
</tbody>
</table>
Protect Your Patient’s Tongue, Taste Buds & Salivary Glands During Radiotherapy

GrayDuck oral positioning stents are currently the only custom-fitted bite block system that can position the tongue in one of several positions; laterally (left or right), depressing (downward) or a combination thereof.

Key Benefits

- Tongue-displacing and immobilizing oral stent
- Capable of providing repeatable tongue deviation and immobilizing in several directions
- Designed to provide repeatable immobilization and tissue sparing during radiotherapy
- Ergonomically developed to be a quick, easy-to-fit custom oral stent
- Usually requires less than 15 minutes to custom-fit a patient
- Can be secured to any CIVCO thermoplastic mask

CE MARKED, FDA 510(k) CLEARED.
US PATENT #9,504,537. OTHER PATENTS PENDING.

CIVCO
Radiotherapy
## Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom tongue displacement</td>
<td>• Deviates the tongue in several directions; left, right or downward</td>
</tr>
<tr>
<td></td>
<td>• Secures tongue out of path of radiation beam in 3 directions</td>
</tr>
<tr>
<td></td>
<td>• Aids mucosal sparing</td>
</tr>
<tr>
<td></td>
<td>• Supports reduction in radiation backscatter</td>
</tr>
<tr>
<td></td>
<td>• Helps protect dental work</td>
</tr>
<tr>
<td>EVA material for teeth impression</td>
<td>• Stabilizes mobile tissues &amp; jaw to allow more precise field control</td>
</tr>
<tr>
<td></td>
<td>• Provides enhanced comfort</td>
</tr>
<tr>
<td>Custom-fit design</td>
<td>• Significantly reduces time to form a custom-molded device</td>
</tr>
<tr>
<td></td>
<td>• RadOnc clinic workflow improved</td>
</tr>
<tr>
<td>Polycarbonate and EVA materials</td>
<td>• Commonly used materials for oral devices</td>
</tr>
<tr>
<td></td>
<td>• No metal components</td>
</tr>
<tr>
<td></td>
<td>• Designed to be easy to clean and store</td>
</tr>
<tr>
<td>Anterior portion of stent</td>
<td>• Designed to attach to thermoplastic face mask for additional immobilization</td>
</tr>
</tbody>
</table>

## Ordering Information

Each kit includes: Stent with boil-n-bite material and attached set screws (Qty 1), left, right and depressing paddles (1 each), struts (Qty 2), instructions for use and storage container.

- **Medium Size Kit, Qty 4**: GDS001
- **Small Size Kit, Qty 4**: GDS002

---

**Protect Your Patient’s Tongue, Taste Buds & Salivary Glands During Radiotherapy**

---

**GrayDuck Stents™**

---

**Global Sales Office**
Orange City, Iowa, USA
800.842.8688 | +1 712.737.8688
info@CivcoRT.com
www.CivcoRT.com

**COPYRIGHT © 2019. CIVCO RADIOTHERAPY IS A REGISTERED TRADEMARK OF CIVCO MEDICAL SOLUTIONS. ALL OTHER TRADEMARKS ARE PROPERTY OF THEIR RESPECTIVE OWNERS. ALL PRODUCTS MAY NOT BE LICENSED IN ACCORDANCE WITH CANADIAN LAW. 2018P1439 REV B**