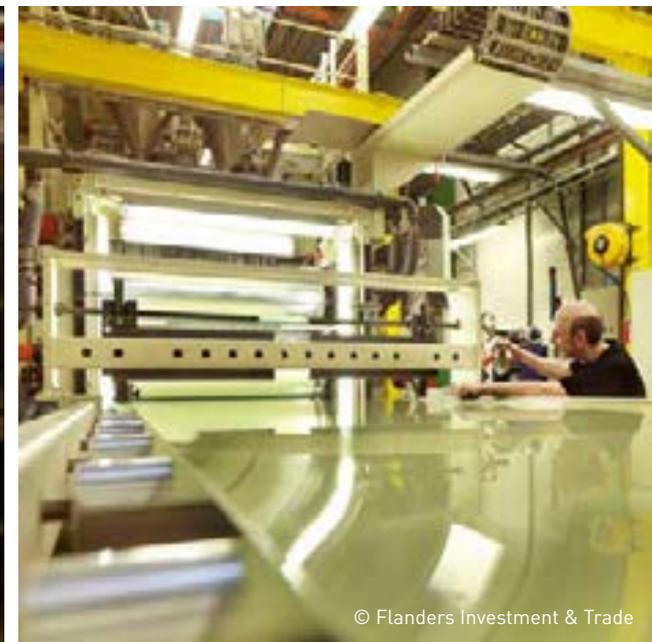


**orfit**

The  
precision  
expert

IN IMMOBILIZATION SYSTEMS  
FOR RADIATION ONCOLOGY





**Our products meet the requirements of ever increasing precision in radiation therapy**

For more than twenty years, Orfit has been providing solutions for immobilizing patients in radiation oncology.

In recent years, both our products and our production technology have thoroughly evolved by using the most innovative materials and production techniques.

Based on an in-depth knowledge of the worldwide market, our team of engineers and product designers has developed optimal solutions that correspond with the requirements of ever increasing precision in radiation therapy.

Our products and our market support offer you an important added value in your daily clinical practice where assuring a comfortable, reproducible and highly precise position of the patient is of critical importance.

Our thermoplastic masks and hardware form a complete range of high quality immobilization and positioning products for all conventional radiation therapy procedures as well as for IMRT, IGRT, hypofractionated RT, SRT, SRS, proton and other high energy therapy systems.

Today, no other company in this highly specialized market masters the full cycle of requirements that lead to innovative and highly functional products.

At Orfit, we achieve this because we control the entire process of Research & Development, Manufacturing, Quality Assurance, Marketing & Sales and Customer Education. Thanks to this process, we offer optimal solutions for patient positioning and immobilization, everywhere in the world.

Our R&D and manufacturing activities result in a product offering for radiation oncology that consists of specially formulated thermoplastic materials for patient immobilization, and high precision hardware for accurate and comfortable positioning on treatment couches and diagnostic machines.

We bring innovation into the market, with a clear understanding of the needs of Radiation Therapy Specialists, the patient's comfort and the requirements of the authorities.

**Antibacterial coating**

All Orfit masks are treated with a water-based non-stick coating that has antibacterial properties and that prevents sticking of the mask to skin, hair and hardware.

The antibacterial effect of the coating was determined using the ISO 22196:2011 test method. The results show a reduction of > 99.99% of the following bacteria:

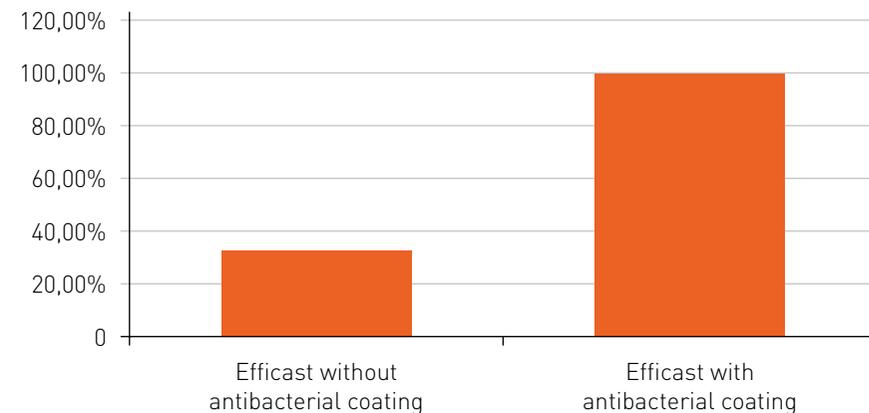
- > Methicillin-Resistant Staphylococcus aureus (MRSA)
- > Staphylococcus aureus
- > Escherichia coli
- > Vancomycin-Resistant Enterococci (VRE)

MRSA, the so-called hospital bacteria, is the most common nosocomial infection in Europe. It is estimated that over 170,000 MRSA infections in Europe result in 5000 deceases every year. The department of Health and Human Services in the USA estimated 94,360 invasive MRSA infections in 2008, associated with 18,650 deaths each year.

The World Health Organization considers the Escherichia coli as a “super bacteria” because it is increasingly resistant to antibiotics.

Hand hygiene helps to prevent infections but it is not sufficient. Therefore a thorough hygienic care of the patient and of medical devices is of prime importance to prevent contamination. The antibacterial coating on all Orfit masks helps to reduce cross-contamination within a radiotherapy department.

**REDUCTION OF GRAM + AND GRAM - BACTERIA UNDER LAB TEST CONDITIONS**



#### **4 HEAD, NECK AND SHOULDERS**

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  - 19 High Precision Head Supports
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- 31 Pediatric Immobilization Systems**
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- 82 Sagittilt® Antibacterial Mask
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- 93 SBRT Antibacterial Masks
- 95 SBRT Base Plates
- 96 SBRT Solution Bundels

#### **100 THE EXTREMITIES SOLUTION**

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- 102 Extremities Base Plates
- 103 Antibacterial Masks for Extremities

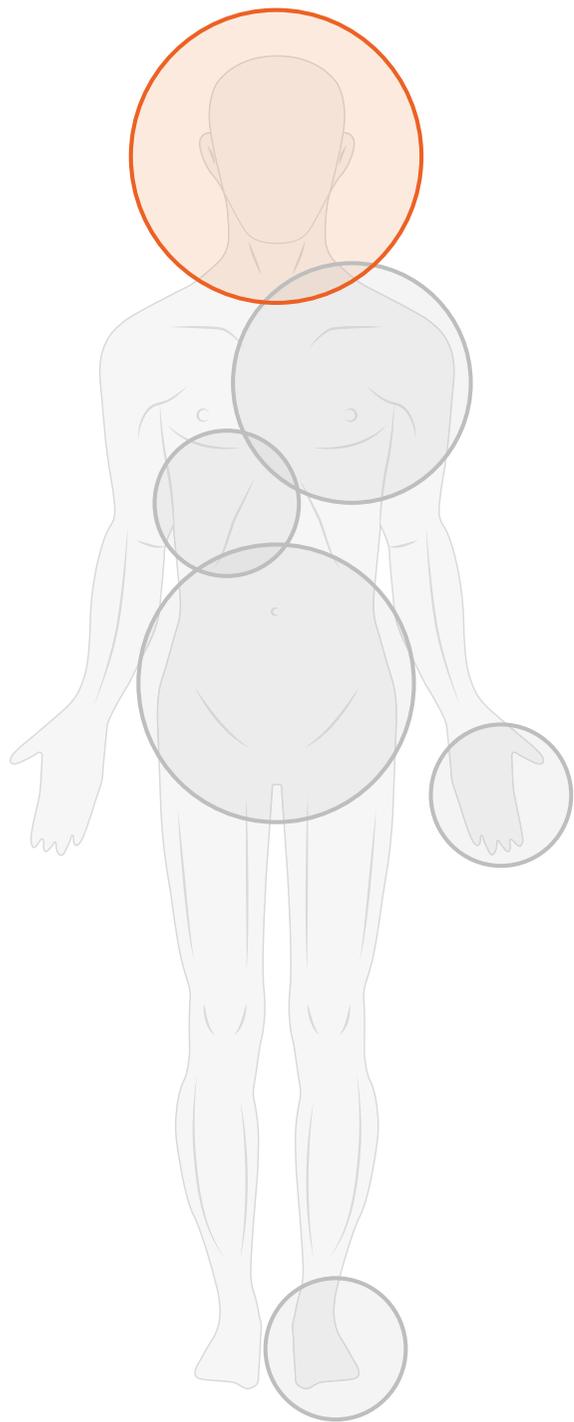
#### **104 ACCESSORIES**

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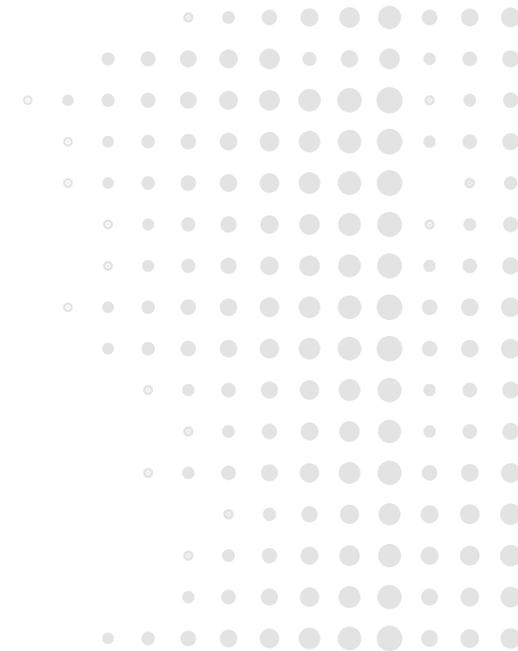
- 105 Vacuum Bags
- 108 Vacuum Bag Accessories
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- 111 Bolus Material
- 114 Cyberknife Full Body Cushion
- 115 Comfort Cushions
- 118 Water Bath
- 119 Digital Dry-Heat Convection Oven
- 120 Cleaning products
- 121 Storage Solutions
- 122 Fixation Devices

#### **cover DOSIMETRIC CHART**

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# HEAD, NECK AND SHOULDERS



Today's imaging and target localization possibilities allow you to see how your treatment plan corresponds with the location of the tumor. Based on this, corrections for better sparing of healthy tissue can be made. These innovative techniques can only be efficient if you are sure that your patient does not move during the delivery of the fraction.

The Patient Immobilization Systems from Orfit are an active component in achieving a high quality radiation therapy.

The unique features of our thermoplastic materials, in combination with our Head Supports with cranial stop and our L-profiles that fix the masks in the High Precision Hardware give you the possibility of choosing the most suitable mask for your patient and for the type of treatment that you have planned.

Thanks to a unique combination of advanced materials and innovative production methods, the Orfit system has achieved three critical goals for improving the quality of radiation therapy treatment:



### PRECISION/ACCURACY

#### Limit patient movement

Overall Efficast mask stability limits patient displacement to less than 2 mm within the mask and approximately 1 mm when using Hybrid masks.

Low-stretch draping provides greater contouring and rigidity.

L-profile technology secures more of the mask to the base plate.

### REPRODUCIBILITY

#### Reduce daily shifts

3D Head Supports with cranial back stop that cradle the patient's head.

Well-defined and indexable thermoplastic masks ensure consistent daily positioning.

Openings at the cranial end of the mask provide space for patients with long hair.

### PATIENT COMFORT

#### Increase acceptance

Antibacterial non-stick coating with soft surface feel.

Comfortable foam head supports.

Thermoplastic material with engineered limited shrinkage.

Remold a mask when the patient's volume has increased or decreased.

Cool activation temperature of 149°F-158°F.

**The antibacterial coating helps in reducing the spread of harmful microbes in a hospital environment.**

**A unique combination of high precision immobilization, ease of molding, safety and patient comfort**

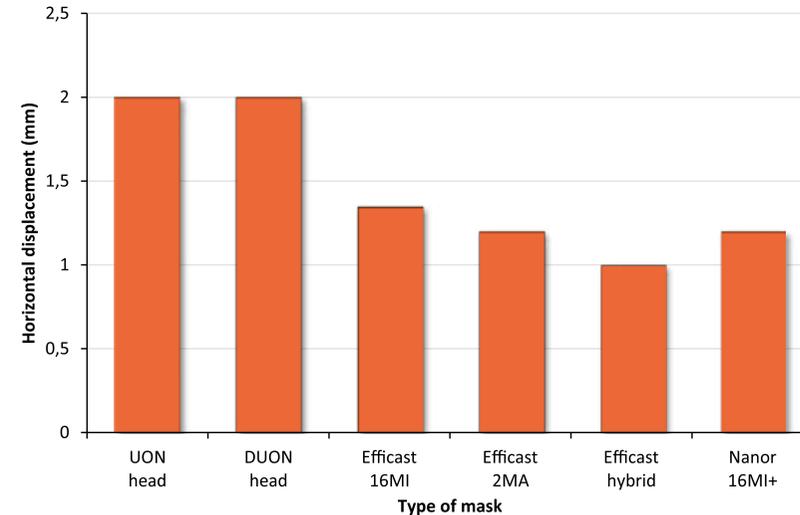
Our engineering and production capabilities with proprietary thermoplastic formulations result in the best mask materials available. Stretch and shrinkage properties are always the same and assure a reliable mask molding technique, resulting in a perfect fit around the patient's anatomy and a high degree of patient comfort.

Orfit's engineers developed a patented method (BE1015081) to measure the relationship between mask contraction and fixation force. The Orfit range of products allows for a perfect balance between patient comfort and restriction of movement.

**Both mask contraction and fixation force are a measure for precision, stability and comfort of patient immobilization in radiation therapy.**

**Dr. Bogdan Bogdanov**

### **STABILITY OF DIFFERENT IMMOBILIZATION MASKS FROM ORFIT INDUSTRIES**



Orfit Industries, Inge Jordaens - 2016

Horizontal displacement of different mask types. Measurements are based on applying a lateral force of 100N on a dummy head that is immobilized with each mask.

## Meet specific patient requirements

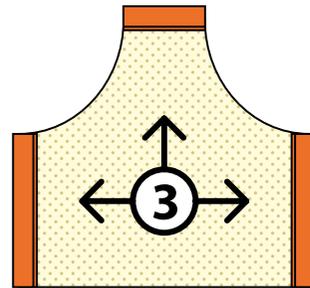
An extensive range of Orfit Efficast masks is available to meet specific patient requirements and your immobilization preferences.

- > Chin only
- > Head only
- > Head and neck (with neck flap)
- > Head, neck and shoulders
- > Head, neck and shoulders with cranial flap
- > Hybrid masks of all types for significantly increased precision of the immobilization and for use with large patients
- > Open Face Hybrid mask
- > Pediatric masks - All configurations for head, neck and shoulders.

Orfit masks are available with various combinations of prepunched cutouts for ease of use.

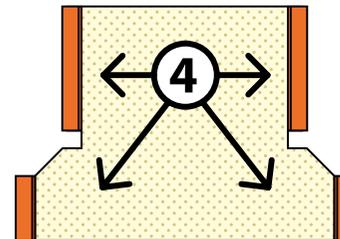
- > Nose only
- > Nose and mouth
- > Nose, eyes and mouth

**All Orfit masks have an antibacterial, non-stick coating.**



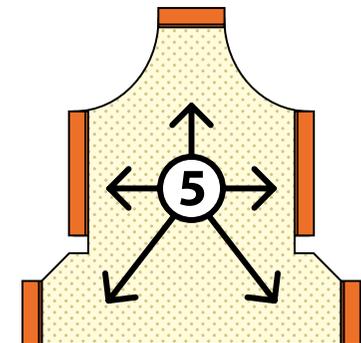
head

**3-points**



head, neck  
and shoulders

**4-points**



head, neck  
and shoulders

**5-points**  
(with cranial flap)

A number of clinical studies have proven the effectiveness of Efficast in combination with Raycast High Precision Hardware.

## CLINICAL STUDIES

Fuss, M. (2004), Repositioning accuracy of a commercially available thermoplastic mask system, *Radiotherapy and Oncology*, 71 (3), 339-345

Linthout, N. (2006), Six dimensional analysis with daily stereoscopic x-ray imaging of intrafraction patient motion in head and neck treatments using five points fixation masks, *Med. Phys.*, 33 (2), 504-513

Woo, SY (2003), The evolution of quality assurance for intensity-modulated radiation therapy (IMRT): sequential tomotherapy, *Int J Radiat Oncol Biol Phys.*, 56 (1), 274-86

Li (2013), Migration from a full head mask to open-face mask for immobilization of patients with head and neck cancer, *JACMP*, 14 (5), 243-54

Ouzidane, M. (2013), Spine stereotactic body radiotherapy - Experience from Cleveland Clinic, *Applied Radiation Oncology*, 2(2), 12-16



# HIGH PRECISION IMMOBILIZATION SYSTEMS

**The Patient Immobilization Systems from Orfit are an active component in achieving a high quality radiation therapy.**

Thermoplastics with superior molding properties that result in a high but comfortable degree of patient immobilization.

Very stable mask preventing chin-drop and shoulder rotation.

Memory effect which allows the user to remold a finished mask as needed. This provides significant flexibility for modification during a patient treatment or simply to save on waste.

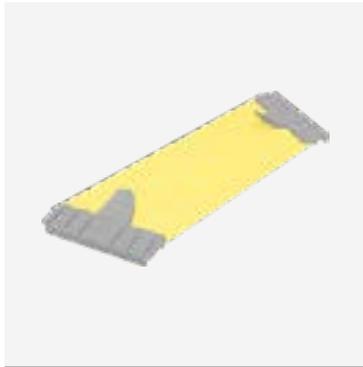
Thinner masks resulting in less absorption and increased skin sparing.

Positioning blocks and wedges that effectively support different neck shapes and allow flexion and extension of the head.

Quick release system allows for fast and safe removal of the mask from the patient.

# HIGH PRECISION ANTIBACTERIAL MASKS

## SINGLE LAYER



Art. N° 33776/2MA  
2-points chin mask



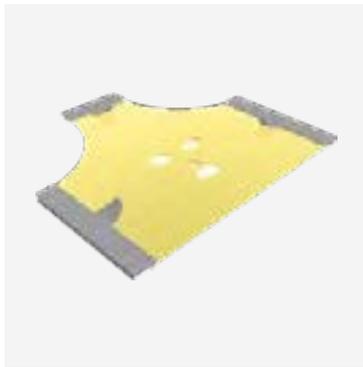
Art. N° 35763/2MA/NH\*  
3-points head mask



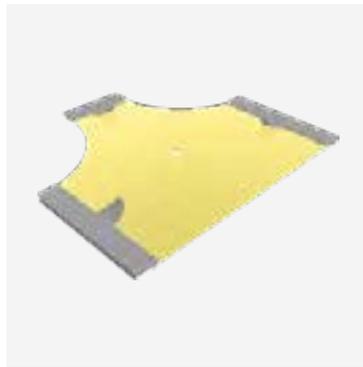
Art. N° 35763/2MA\*  
3-points head mask  
with nose hole



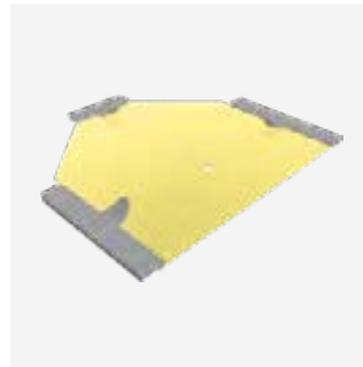
Art. N° 35763/2MA/M\*  
3-points head mask  
with nose and mouth hole



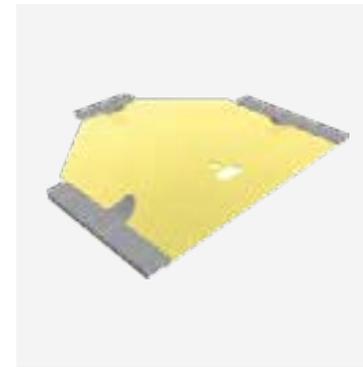
Art. N° 35763/2MA/EM\*  
3-points head mask  
with nose, eyes and mouth hole



Art. N° 35763/2MA/G35  
3-points head mask  
with nose hole 35 mm up



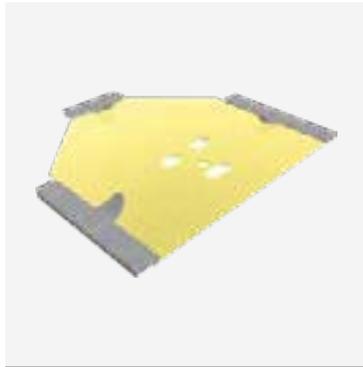
Art. N° 35760/EFF2MA\*  
3-points head mask  
with nose hole  
with extra cranial flaps



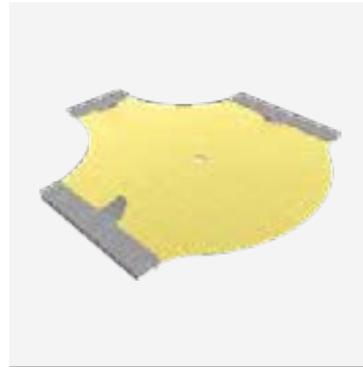
Art. N° 35760/EFF2MA/M\*  
3-points head mask  
with nose and mouth hole  
with extra cranial flaps

# HIGH PRECISION ANTIBACTERIAL MASKS

## SINGLE LAYER



Art. N° 35760/EFF2MA/EM\*  
3-points head mask  
with nose, eyes and mouth hole  
with extra cranial flaps



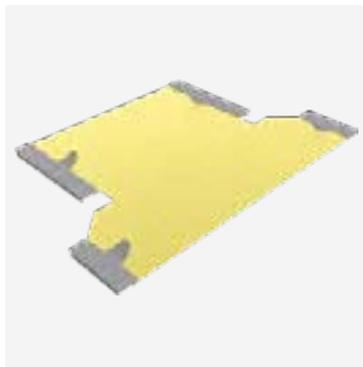
Art. N° 35779/2MA\*  
3-points head mask  
with nose hole  
with neck flap



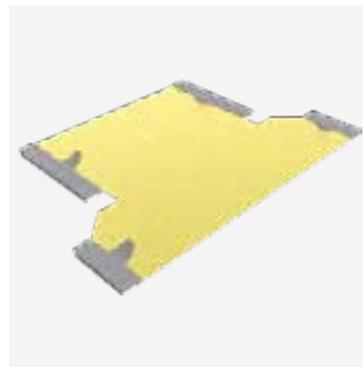
Art. N° 35779/2MA/M\*  
3-points head mask  
with nose and mouth hole  
with neck flap



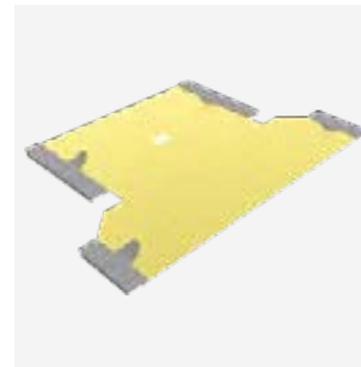
Art. N° 35779/2MA/EM\*  
3-points head mask  
with nose, eyes and mouth hole  
with neck flap



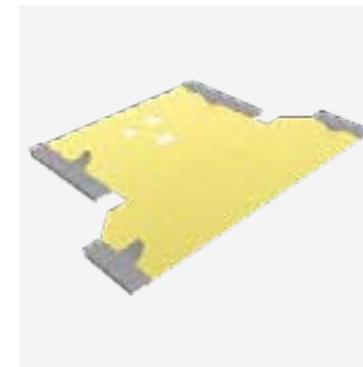
Art. N° 35764/2MA/NH  
4-points head, neck and shoulders mask



Art. N° 35764/2MA\*  
4-points head, neck and shoulders mask  
with nose hole



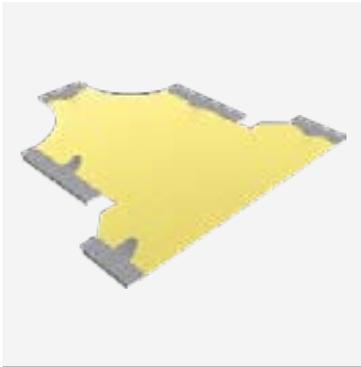
Art. N° 35764/2MA/M\*  
4-points head, neck and shoulders mask  
with nose and mouth hole



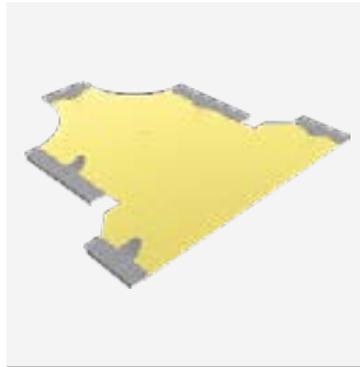
Art. N° 35764/2MA/EM\*  
4-points head, neck and shoulders mask  
with nose, eyes and mouth hole

# HIGH PRECISION ANTIBACTERIAL MASKS

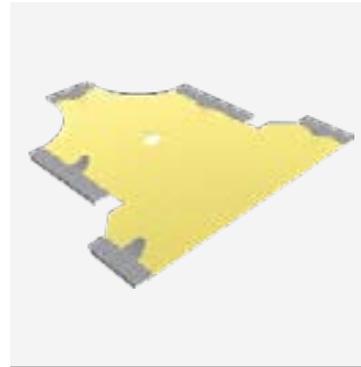
## SINGLE LAYER



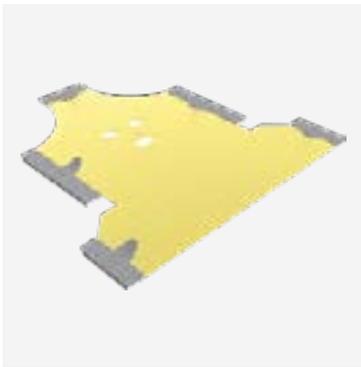
**Art. N° 33700/2MA/NH**  
5-points head, neck and shoulders mask



**Art. N° 33700/2MA\***  
5-points head, neck and shoulders mask  
with nose hole



**Art. N° 33700/2MA/M\***  
5-points head, neck and shoulders mask  
with nose and mouth hole



**Art. N° 33700/2MA/EM\***  
5-points head, neck and shoulders mask  
with nose, eyes and mouth hole



**Art. N° 33730/4**  
5-points head, neck and shoulders mask  
with nose hole  
large size

All masks are available in 2 mm thickness with maxi perforation [Art. N° with extension /2MA]  
\* Additional available thickness and perforation type:  
1.6 mm micro perforation [Art. N° with extension/16MI]

# HIGH PRECISION ANTIBACTERIAL MASKS

## NANOR® SINGLE LAYER



Art. N° 35763/16MI+N  
3-points head mask  
with nose hole



Art. N° 35764/2MI+N  
4-points head, neck and shoulders mask  
with nose hole



Art. N° 33700/2MI+N  
5-points head, neck and shoulders mask  
with nose hole

Blending nanoparticles in our thermoplastic material substantially improves the mechanical properties of the immobilization mask.

Strong, thin mask

Reduced shrinkage of the mask after cooling

Lower pressure on the patient's face

Adapts to minor patient swelling

[www.orfit.com/nanor](http://www.orfit.com/nanor) for more information.

## HIGH PRECISION ANTIBACTERIAL MASKS

### HYBRID

Precision has always been, and will always be, the main driving force in radiation oncology for improving existing treatment techniques and for adopting changes resulting from new techniques.

The search for improvement of the overall precision of cancer treatment has led to the introduction of techniques like SRS, SRT, IGRT, Adaptive RT, real time robotic techniques, etc. It has also led to a better understanding of the importance of an accurate and sustainable patient positioning system.

Very often, standard immobilization devices will not deliver the precision and reproducibility needed for these treatments as they leave too much room for the patients to move. A stereotactic treatment for example requires millimeter precision immobilization.

Orfit has created an innovative and patented range of hybrid thermoplastic immobilization masks that clearly overcome the above-mentioned positioning and immobilization problems.

These reinforced thermoplastic masks offer the ease of use of a regular thermoplastic mask with unparalleled horizontal stability and fixation force. In combination with the unique Orfit High Precision Head Supports, one is able to really achieve a good immobilization and positioning of the patient.

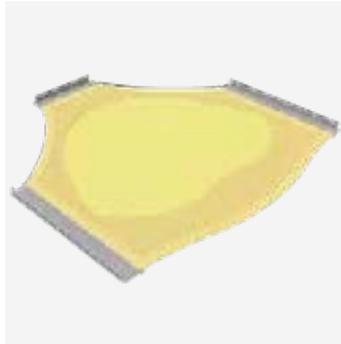
Even the largest and biggest-shouldered patients will be immobilized properly with these masks thanks to the reinforcement rim around the mask and the chin strap offering excellent control over the position of the patient's head.

The reinforcement rim in the mask is made from Nanor thermoplastic material. This ultra-thin material (1.2 mm thick) dramatically improves the stability of the mask, while maintaining the comfort. The use of nanotechnology allows the production of a material that has a high bending modulus with a limited thickness. Additionally the material has limited shrinkage.

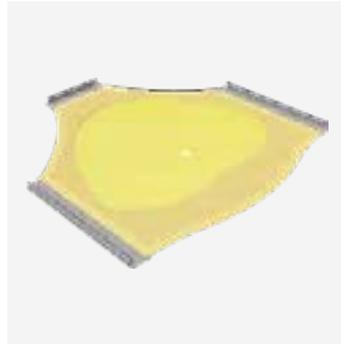
The range of hybrid precuts consists of a 3-points head precut and a 4-points and 5-points head, neck and shoulders precut.

# HIGH PRECISION ANTIBACTERIAL MASKS

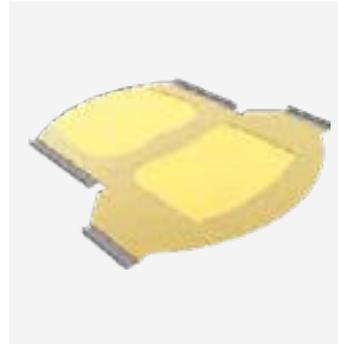
## HYBRID



Art. N° 33740/2MA/12MI+N/NH  
3-points hybrid head mask

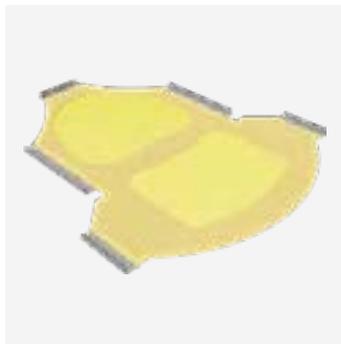


Art. N° 33740/2MA/12MI+N  
3-points hybrid head mask  
with nose hole



Art. N° 33737/2MA/12MI+N/NH  
4-points hybrid  
head, neck and shoulders mask

**Nanor-reinforced  
thermoplastic masks  
are thinner and lighter  
with excellent stability  
and patient comfort.**



Art. N° 33730/2MA/12MI+N/NH  
5-points hybrid  
head, neck and shoulders mask



Art. N° 33730/2MA/12MI+N  
5-points hybrid  
head, neck and shoulders mask  
with nose hole



Art. N° 33730/2MA/12MI+N/NH/G17  
5-points hybrid  
head, neck and shoulders mask  
with trachea hole



Art. N° 33730/2MA/12MI+N/G17  
5-points hybrid  
head, neck and shoulders mask  
with nose and trachea hole



**NEW**

Art. N° 33791/2MA/12MI+N  
5-points hybrid  
head, neck and shoulders mask  
**enlarged shoulder area**

## HIGH PRECISION ANTIBACTERIAL MASKS

### OPEN FACE HYBRID

The innovative Open Face Hybrid mask leaves eyes, nose and mouth exposed, and is the ideal immobilization solution for brain, head and neck patients who suffer from claustrophobia and for treatments with a long duration, as on the Cyberknife. Like all thermoplastic materials made by Orfit, this high precision mask is easy to mold and it can be shaped very closely to the patient's anatomy.

It provides excellent reproducibility of the patient's position. It results in increased patient comfort and provides the same high precision immobilization as the standard single layer Efficast head and neck masks.

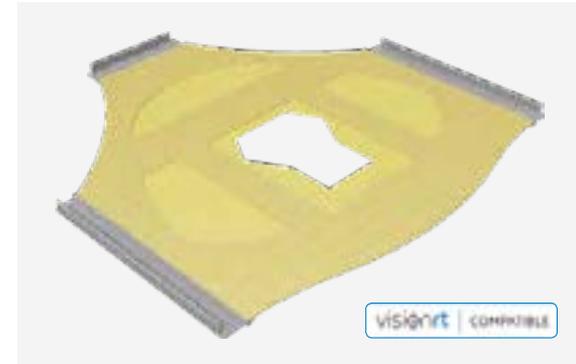


The Open Face Hybrid mask is reinforced with Nanor, an innovative thermoplastic material, based on high end nano-technology, that results in a mask that is thinner, lighter and yet stable.

The new open face mask is compatible with modern motion management systems, enabling radiation oncology clinicians to keep the target in the path of the radiation beam at all times.

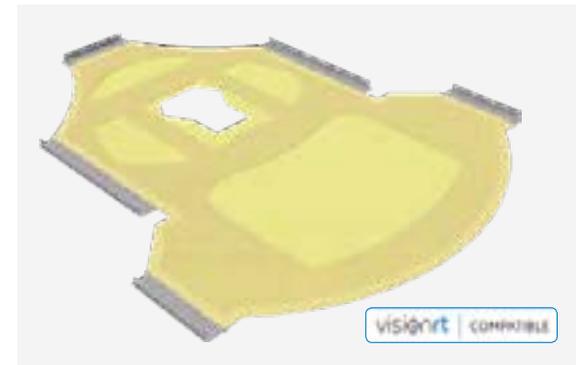
The 3-points Open Face Hybrid Head mask has been evaluated and confirmed by Vision RT as compatible for use with Vision RT products\*.

[www.visionrt.com](http://www.visionrt.com)



Art. N° 33759/16MI/12MI+N

3-points open face hybrid head mask



Art. N° 33733/16MI/12MI+N

5-points open face hybrid  
head, neck and shoulders mask

\* Vision RT compatible disclaimer available on  
[www.orfit.com/app/uploads/Disclaimer-Vision-RT-website.pdf](http://www.orfit.com/app/uploads/Disclaimer-Vision-RT-website.pdf)

# HIGH PRECISION BASE PLATES

Orfit's lightweight, professionally designed and precisely engineered hardware ensures outstanding patient immobilization results. The Orfit Base Plate design consists of a sandwich construction, with a foam core and ultra thin carbon fiber layers.

This results in a very low density with the highest possible radiation transmission during treatment. The use of your existing 2-pin lock bar, Orfit Loxon clamps or a similar device ensures that the Orfit High Precision Base Plate is securely mounted to the table top.

Positioning indicators on the base plate help to reduce patient setup time and ensure precise positioning and immobilization during each fraction.

An extensive range of Orfit High Precision Base Plates and Extensions are available and compatible for use with all treatment machines, CT and simulator table tops.

## LOW DENSITY



Art. N° 32130

High precision small base plate in CFL  
Head and neck



Art. N° 32130/MR

High precision small base plate in GFL  
Head and neck



Art. N° 32110/12

High precision base plate in CFL  
Extended version  
Head, neck and shoulders



Art. N° 32110/MR

High precision base plate in GFL  
Head, neck and shoulders



Art. N° 32150

High precision long base plate in CFL for IMRT/IGRT  
Head, neck and shoulders  
Treatments in overhang

Also available for Elekta HexaPOD™ evo RT System [Art. N° 32150/HX]

Also available as an extension base plate with pin interface [Art. N° 32150/3]

## LOW DENSITY



**Art. N° 32064**  
High precision tiltable base plate in CFL  
Head and neck



**Art. N° INT-1**  
Integra Couch Extension  
for Varian Exact™ Couch in CFL  
High precision masks only  
Head, neck and shoulders

## HIGH DENSITY



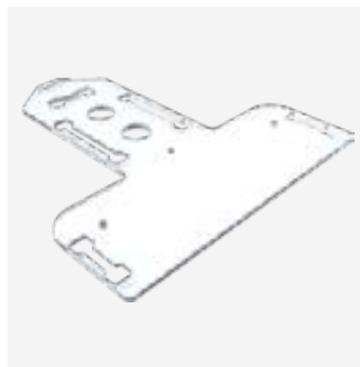
**Art. N° 35754/6N**  
High precision base plate in HPL  
Head and neck



**Art. N° 35751N**  
High precision base plate in HPL  
Head, neck and shoulders



**Art. N° 32113**  
High precision base plate in polycarbonate  
for Cyberknife  
Head and neck



**Art. N° 32117**  
High precision base plate in polycarbonate  
for Cyberknife  
Head, neck and shoulders



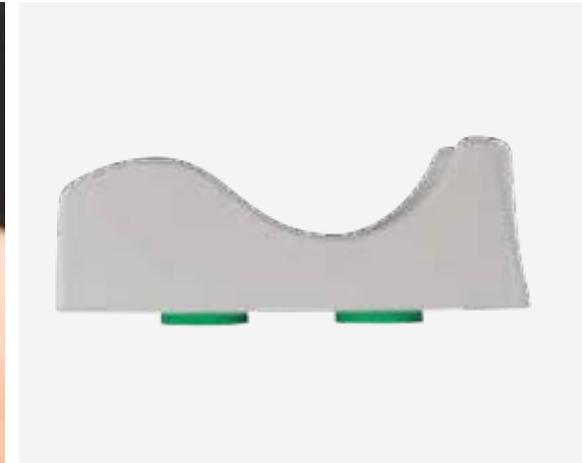
**Art. N° 32809**  
High precision extension in polycarbonate  
for TRILOGY  
Head and neck

# HIGH PRECISION HEAD SUPPORTS

An extremely important part of the Orfit High Precision Frameless Mask System is the innovative 3D Head Support with cranial stop.

The shape helps to comfortably cradle the patient's head while the cranial stop allows a correct and reproducible position within the head support. You can now be sure that the patient is in the exact same position within the head support each and every time. The base of the head support indexes precisely into the Orfit High Precision Base Plates.

Several sets with differently shaped and sized supine and prone head supports are available to meet virtually every patient and treatment need.



# HIGH PRECISION HEAD SUPPORTS

## LOW DENSITY

Art. N° 32704 (set)

Set of low density head supports (all sizes)



Art. N° 35755



Art. N° 35765



Art. N° 35753



Art. N° 35753ZF



Art. N° 35752



Art. N° 35752ZF

## REGULAR DENSITY

Art. N° 32702-MD (set)

Set of regular density head supports (all sizes)



Art. N° 35758-MD



Art. N° 35758ZF-MD



Art. N° 35713-MD



Art. N° 35713ZF-MD



Art. N° 35714-MD



Art. N° 35714ZF-MD

# HIGH PRECISION HEAD SUPPORTS

## REGULAR DENSITY - EXTRA SOFT

Art. N° 32433 (set)

Set of regular density head supports - Extra soft (all sizes)



Art. N° 32427



Art. N° 32428



Art. N° 32429



Art. N° 32430



Art. N° 32431



Art. N° 32432

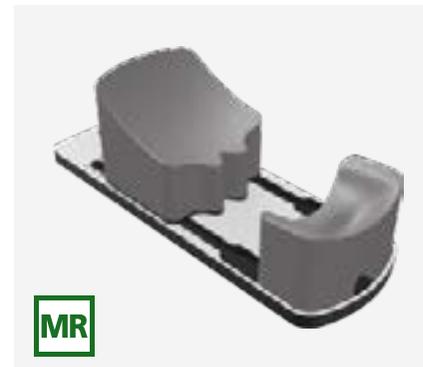
## REGULAR DENSITY



Art. N° 32399-MD

Regular density head support  
with lateral neck flaps for patients  
with a curved spine

## PRONE



Art. N° 32393

Prone head support adjustable in size  
Movable forehead cushion



Art. N° 32380

Prone head support adjustable in size  
Movable chin cushion

## THERMOFIT PERSONALISED HEAD SUPPORT

Thermofit is an innovative thermoplastic solution for the creation of a customized head support. Thermofit becomes soft and moldable after heating. It is placed in an Orfit Head Support before positioning the head of the patient. While Thermofit cools down and becomes rigid, it takes on the exact curvature of the head and neck of the patient.

In a second step a thermoplastic mask is molded over the patient. In combination with Thermofit it creates an immobilization device that is suitable for high precision treatment.

Thermofit comes in three different sizes.



# THERMOFIT PERSONALISED HEAD SUPPORT

Thermofit has a number of characteristics that make it easy to apply in a radiotherapy department:

Can be used on standard Orfit immobilization devices.  
No need for additional equipment.

Extremely comfortable for a patient thanks to the support it gives in the neck area.

Works fast. Heating a Thermofit only takes a few minutes and the hardening time is similar to the hardening time of a thermoplastic mask.

Extremely easy to use.

Excellent dosimetric properties with a low attenuation percentage.

Thermofit is odorless and has unlimited shelf life.



Art. N° 32390  
Thermofit  
13.5 x 30 cm



Art. N° 32391  
Thermofit  
23 x 30 cm



Art. N° 32392  
Thermofit  
30 x 35 cm



Art. N° 32405/10 (for Thermofit 32390 and 32391)  
Art. N° 32406/10 (for Thermofit 32392)  
Waterproof bags for Thermofit (package of 10 pieces)

# HIGH PRECISION BLOCKS AND WEDGES

Orfit Blocks and Wedges are used in conjunction with our Head Supports to increase high precision positioning. This combination provides you with unmatched flexibility and versatility in being able to quickly and easily achieve the specific patient position you require for treatment.

## FEATURES AND BENEFITS

You are able to comfortably position the patient in extreme flexion and extension.

Orfit High Precision 3D Head Supports with cranial stop and Blocks and Wedges are compatible for use with all High Precision Hardware.

All components index to each other for increased stability, reproducibility and precision of the immobilization.



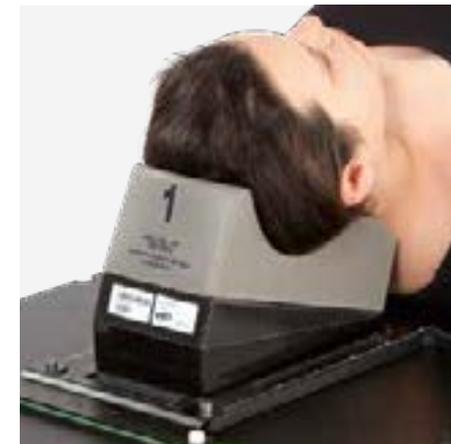
Art. N° 35703  
20 mm  
Carbon fiber block



Art. N° 35704  
9°  
Carbon fiber wedge



Art. N° 35706  
40 mm  
Carbon fiber block



Art. N° 35707  
18°  
Carbon fiber wedge

# HIGH PRECISION BLOCKS AND WEDGES

## LOW DENSITY



Art. N° 35703  
20 mm



Art. N° 35706  
40 mm



Art. N° 35704  
9°



Art. N° 32424  
13.5°



Art. N° 35707  
18°

Art. N° 32700 (set)

### Set of low density blocks and wedges - CFL

Art. N°	Description
35703	block 20 mm
35706	block 40 mm
35704	wedge 9°
35707	wedge 18°

Art. N° 32709 (set)

### Set of low density blocks and wedges - CFL

Art. N°	Description
35703	block 20 mm
35706	block 40 mm
35704	wedge 9°
32424	wedge 13.5°

# HIGH PRECISION BLOCKS AND WEDGES

## LOW DENSITY



Art. N° 35703/MR  
20 mm



Art. N° 35706/MR  
40 mm



Art. N° 35704/MR  
9°



Art. N° 32424/MR  
13.5°



Art. N° 35707/MR  
18°

Art. N° 32700/MR (set)

### Set of low density blocks and wedges - fiberglass



Art. N°	Description
35703/MR	block 20 mm
35706/MR	block 40 mm
35704/MR	wedge 9°
35707/MR	wedge 18°

Art. N° 32709/MR (set)

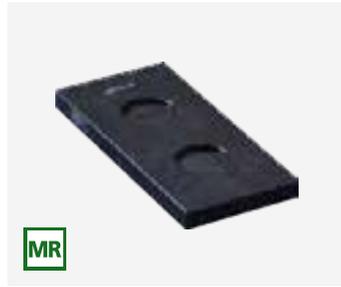
### Set of low density blocks and wedges - fiberglass



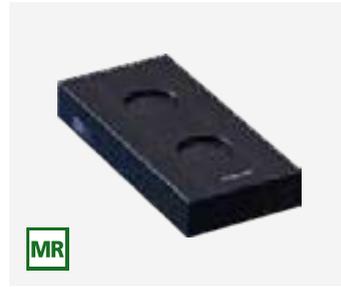
Art. N°	Description
35703/MR	block 20 mm
35706/MR	block 40 mm
35704/MR	wedge 9°
32424/MR	wedge 13.5°

# HIGH PRECISION BLOCKS AND WEDGES

## HIGH DENSITY



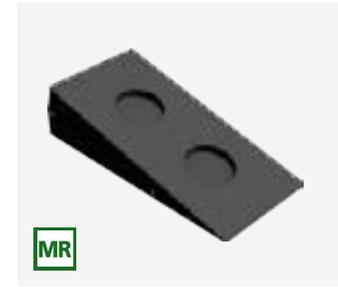
Art. N° 35754/1  
20 mm



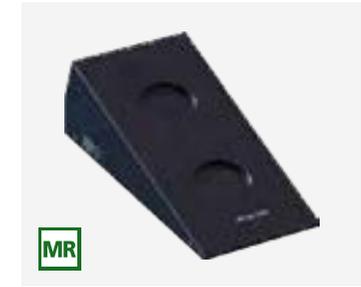
Art. N° 35754/2  
40 mm



Art. N° 35754/3  
9°



Art. N° 35754/5  
13.5°



Art. N° 35754/4  
18°

Art. N° 35754/8 (set)

### Set of high density blocks and wedges - rigid PE



Art. N°	Description
35754/1	block 20 mm
35754/2	block 40 mm
35754/3	wedge 9°
35754/4	wedge 18°

Art. N° 35754/9 (set)

### Set of high density blocks and wedges - rigid PE



Art. N°	Description
35754/1	block 20 mm
35754/2	block 40 mm
35754/3	wedge 9°
35754/5	wedge 13.5°

# HIGH PRECISION ACCESSORIES

The Orfit Arm Strap allows the patient to hold their arms in a comfortable position by the side of their body. It requires no effort from their side. It is the ideal solution for patients with paralysis, patients that cannot lie still, large patients that cannot position their arms on the table, etc. Increased comfort for the patient results in decreased motion, better image quality and a more accurate treatment result. The Arm Strap is one-size-fits all thanks to the velcro that allows you to adjust the strap to the patient's anatomy.



Art. N° 32107  
Arm strap

Another option for the arms is the Shoulder Positioning System, which allows pulling down the shoulders of the patient.

This is helpful when molding a 5-points head, neck and shoulders mask.



Art. N° 32042  
Shoulder positioning system



## HIGH PRECISION ACCESSORIES



The Base Plate Extension can be placed at the caudal edge of a head, neck and shoulders base plate to improve the comfort at the level of the shoulders. It bridges the gap between the table and the base plate.

Art. N° 29105

Base plate extension

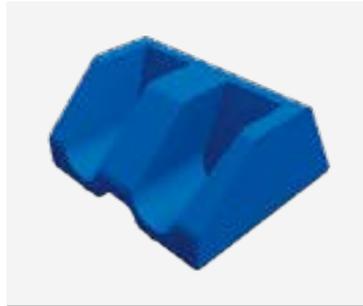


# HIGH PRECISION ACCESSORIES

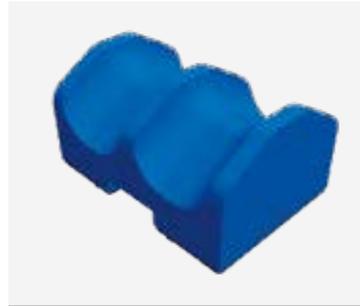
## KNEE AND FEET SUPPORT



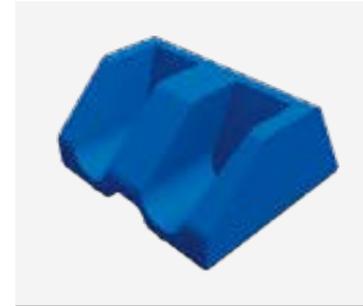
Art. N° 32317/4  
Knee support - indexed on 2-pin bar



Art. N° 32317/5  
Feet support - indexed on 2-pin bar



Art. N° 32317/4/1  
Knee support - non-indexed



Art. N° 32317/5/1  
Feet support - non-indexed



# HIGH PRECISION PEDIATRIC IMMOBILIZATION SYSTEMS

Orfit offers a full range of products dedicated to pediatric patients. It contains base plates, head supports and thermoplastic masks. The products are suitable for patients from 0 to 12 years old.

All the products adhere to the same standards as the immobilization devices for adults.



# HIGH PRECISION PEDIATRIC ANTIBACTERIAL MASKS

## SINGLE LAYER



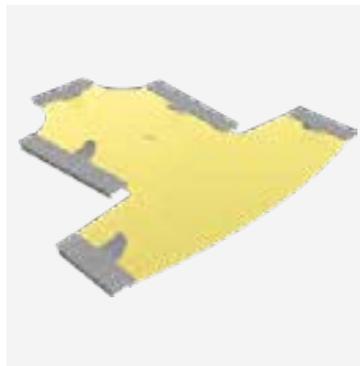
Art. N° 33710/2MA  
3-points head mask  
with nose hole  
small size



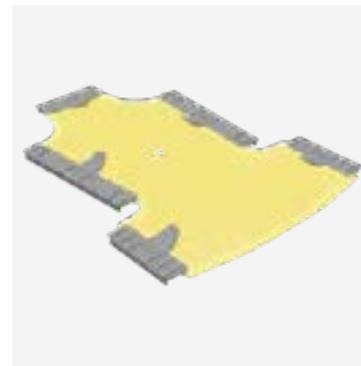
Art. N° 33710/2MA/NH  
3-points head mask  
small size



Art. N° 33688/2MA  
3-points head mask  
with nose hole  
medium size



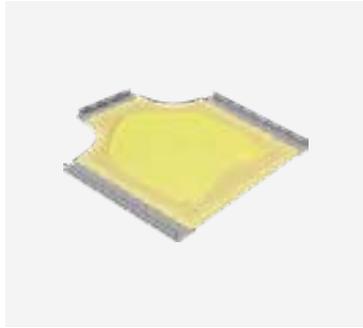
Art. N° 33705/2MA  
5-points head, neck and shoulders mask  
with nose hole  
small size



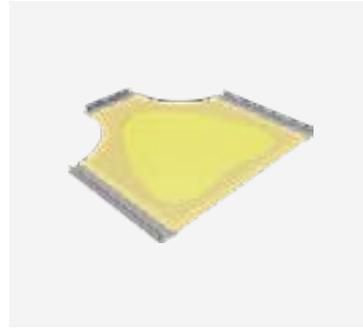
Art. N° 33702/2MA  
5-points head, neck and shoulders mask  
with narrow shoulder profiles  
small size

# HIGH PRECISION PEDIATRIC ANTIBACTERIAL MASKS

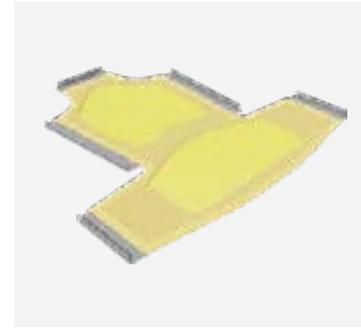
## HYBRID



Art. N° 33748/2MA/12MI+N/NH  
3-points hybrid head mask  
small size

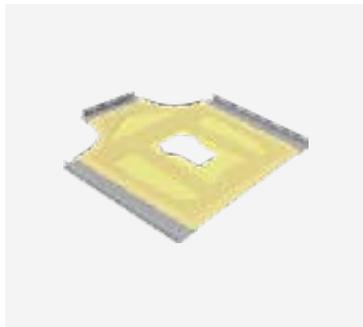


Art. N° 33749/2MA/12MI+N/NH  
3-points hybrid head mask  
medium size

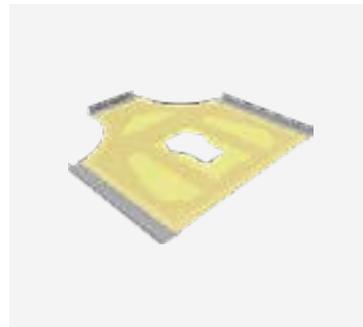


Art. N° 33750/2MA/12MI+N/NH  
5-points hybrid  
head, neck and shoulders mask  
small size

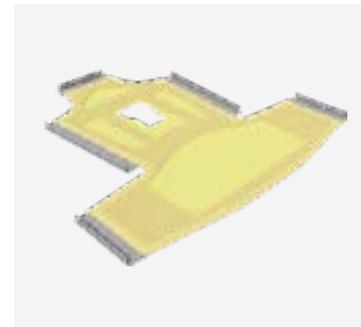
## OPEN FACE HYBRID



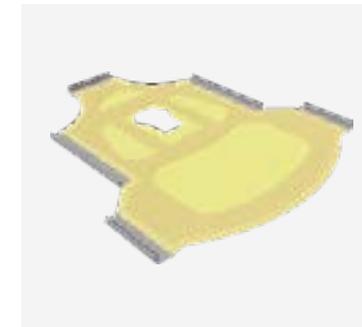
Art. N° 33782/16MI/12MI+N  
3-points open face hybrid head mask  
small size



Art. N° 33783/16MI/12MI+N  
3-points open face hybrid head mask  
medium size



Art. N° 33785/16MI/12MI+N  
5-points open face hybrid  
head, neck and shoulders mask  
small size



Art. N° 33787/16MI/12MI+N  
5-points open face hybrid  
head, neck and shoulders mask  
medium size

# HIGH PRECISION PEDIATRIC BASE PLATES

Orfit's lightweight and precisely engineered Pediatric Hardware ensures outstanding immobilization results. The Orfit Pediatric Base Plate design consists of a sandwich construction, with a foam core and ultra thin carbon fiber layer. This results in a very low density with the highest possible radiation transmission during treatment.

The use of your existing 2-pin lock bar, Orfit Loxon clamps or a similar device ensures that the Orfit Pediatric High Precision Base Plate is securely mounted to the table top. Positioning indicators on the base plate help to reduce patient setup time and ensure precise positioning and immobilization during each fraction.

## LOW DENSITY



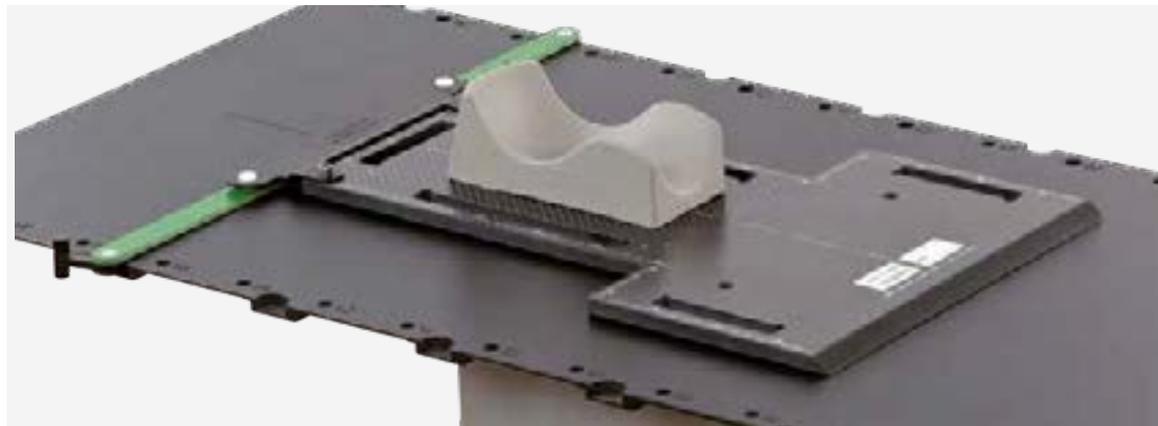
Art. N° 32111

HP pediatric base plate in CFL  
Head, neck and shoulders



Art. N° 32150-PED

HP pediatric long base plate in CFL for IMRT/IGRT  
Head, neck and shoulders



# HIGH PRECISION PEDIATRIC HEAD SUPPORTS

## Head supports with cranial stop

An extremely important part of the Orfit High Precision Frameless Mask System is the innovative 3D Head Support with cranial stop.

The shape helps to comfortably cradle the patient's head while the cranial stop allows a correct and reproducible position within the head support.

You can now be sure that the patient is in the exact same position within the head support each and every time. The base of the head support indexes precisely into the Orfit High Precision Base Plates.

Several sets with differently shaped and sized supine and prone head supports are available to meet virtually every patient and treatment need.

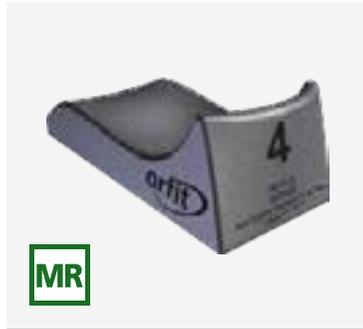


# HIGH PRECISION PEDIATRIC HEAD SUPPORTS

## LOW DENSITY



Art. N° 35753  
Pediatric head support  
with lateral neck flaps  
Age 6 to 12



Art. N° 35753ZF  
Pediatric head support  
without lateral neck flaps  
Age 6 to 12



Art. N° 35753-80  
Pediatric head support  
with lateral neck flaps  
Extra-small size  
Age 0 to 5

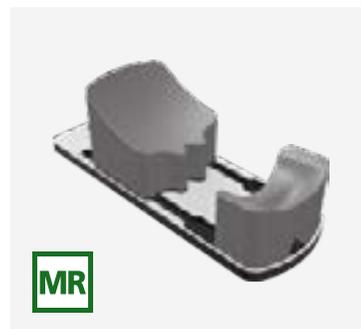
## REGULAR DENSITY



Art. N° 35713-MD  
Pediatric head support  
with lateral neck flaps  
Age 6 to 12



Art. N° 35713ZF-MD  
Pediatric head support  
without lateral neck flaps  
Age 6 to 12



Art. N° 32393  
Prone head support adjustable in size  
Movable forehead cushion



Art. N° 32380  
Prone head support adjustable in size  
Movable chin cushion

# UON<sup>®</sup> AND DUON<sup>®</sup>

## U/S-shaped frame

UON and DUON head and neck masks and DUON head, neck and shoulders masks combine the unique features of U-Plast thermoplastic material with a strong U and S-Shaped frame with an improved bending stiffness. This results in a more sturdy mask.

## T-shaped pins

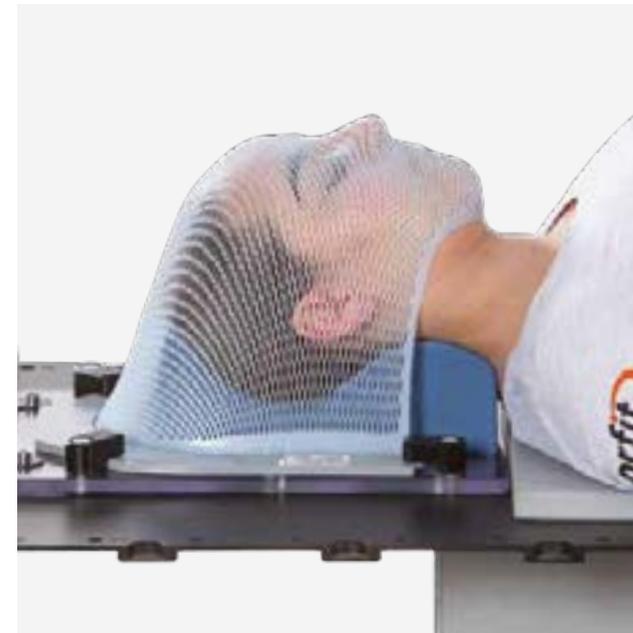
T-shaped pins in DUON masks are easy to attach to and release from a base plate. The T-shaped pins are available as a separate item and can easily be replaced when necessary.

## Antibacterial, non-stick coating

Each mask is treated with a unique water-based non-stick coating with antibacterial properties. The coating prevents sticking of the mask to skin, hair and hardware and its antibacterial properties prevent cross-contamination in a hospital environment.

## Thermoplastic properties

UON and DUON masks offer a high and reliable quality with controlled low shrinkage. This results in high accuracy, ease of use and increased patient throughput.

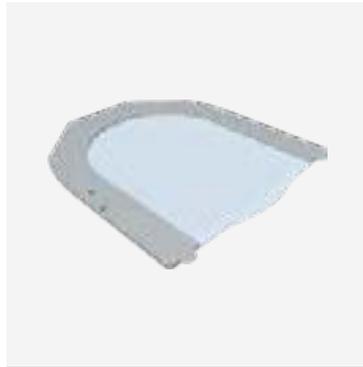


# UON® ANTIBACTERIAL MASKS

## HEAD AND NECK



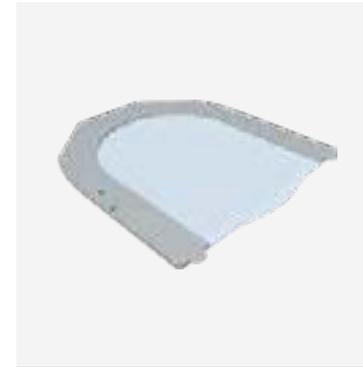
Art. N° 60110  
2.4 mm  
hybrid perforation



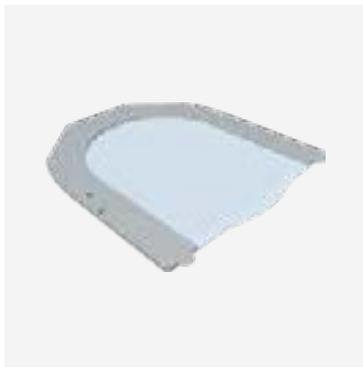
Art. N° 60112  
2.4 mm  
micro plus perforation



Art. N° 60117  
2.4 mm  
micro plus perforation  
with neck flap



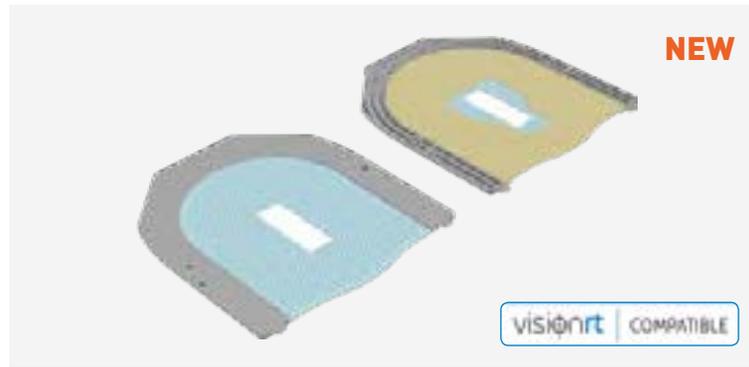
Art. N° 60114  
2.4 mm  
maxi perforation



Art. N° 60095  
3.2 mm  
maxi perforation



Art. N° 60097  
3.2 mm  
maxi perforation  
with neck flap



Art. N° 60098  
U-plast 2.4 mm maxi perforation + Nanor 1.2 mm micro plus perforation  
open face hybrid mask

\* Vision RT compatible disclaimer available on [www.orfit.com/app/uploads/Disclaimer-Vision-RT-website.pdf](http://www.orfit.com/app/uploads/Disclaimer-Vision-RT-website.pdf)

# DUON® ANTIBACTERIAL MASKS

## HEAD AND NECK



Art. N° 60120  
2.4 mm  
hybrid perforation



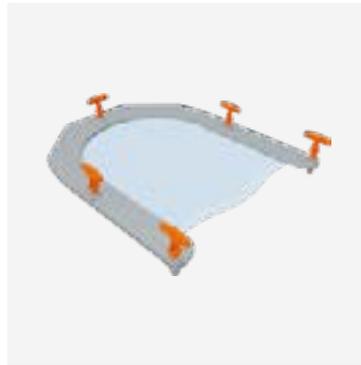
Art. N° 60119  
2.4 mm  
micro plus perforation



Art. N° 60122  
2.4 mm  
micro plus perforation  
with neck flap



Art. N° 60124  
2.4 mm  
maxi perforation



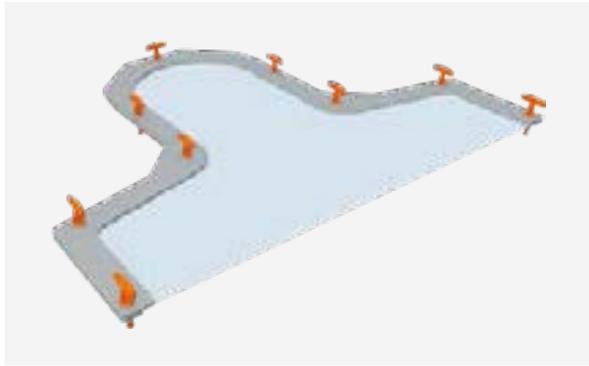
Art. N° 60121  
3.2 mm  
maxi perforation



Art. N° 60123  
3.2 mm  
maxi perforation  
with neck flap

# DUON® ANTIBACTERIAL MASKS

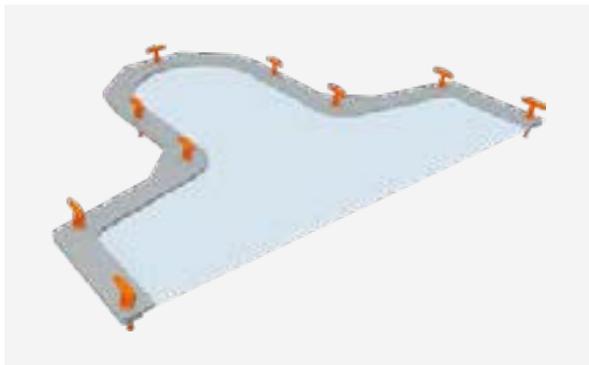
## HEAD, NECK AND SHOULDERS



Art. N° 60001

2.4 mm

micro plus perforation



Art. N° 60002

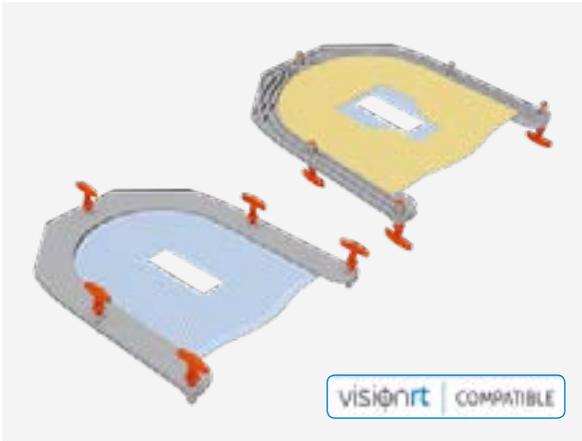
3.2 mm

maxi perforation



# DUON® ANTIBACTERIAL MASKS

## OPEN FACE HYBRID



Art. N° 60125

U-plast 2.4 mm maxi perforation +  
Nanor 1.2 mm micro plus perforation



\* Vision RT compatible disclaimer available on  
[www.orfit.com/app/uploads/Disclaimer-Vision-RT-website.pdf](http://www.orfit.com/app/uploads/Disclaimer-Vision-RT-website.pdf)

# UON® AND DUON® BASE PLATES

## DUON-HP BASE PLATE



Art. N° INT-3

Integra head, neck and shoulders board - CFL  
HP and DUON masks



Art. N° 32095

Base plate for head and neck in CFL  
DUON masks

## DUON-HP EXTENSION



Art. N° INT-1D

Integra Table Top Extension for a Varian Exact™ couch  
HP and DUON masks

## UON BASE PLATE



Art. N° 32097

Base plate for head and neck - Acrylic  
UON masks

# UON® AND DUON® HEAD SUPPORT ADAPTER PLATES

## Head supports with cranial back stop

An extremely important part of the UON and DUON Mask System is the innovative 3D shaped Head Support with cranial stop.

The shape helps to comfortably cradle the patient's head while the cranial stop allows correct and reproducible positioning within the head support. You can now be sure that the patient is in the exact same position within the head support each and every time.

The base of the head support indexes precisely into the UON and DUON Base Plate.



## UON and DUON head supports for use with your base plate

Now you can quickly and easily use UON and DUON head supports with your existing U-Shaped or S-Shaped base plate.

Orfit Head Support Adapter Plates 32046 for U-Shaped base plates and 32047 and 32047-CFL for S-Shaped base plates enable you to quickly convert your base plate so it's compatible for use with all Orfit Head Supports.



Art. N° 32046

For use with U-shaped base plates  
Acrylic



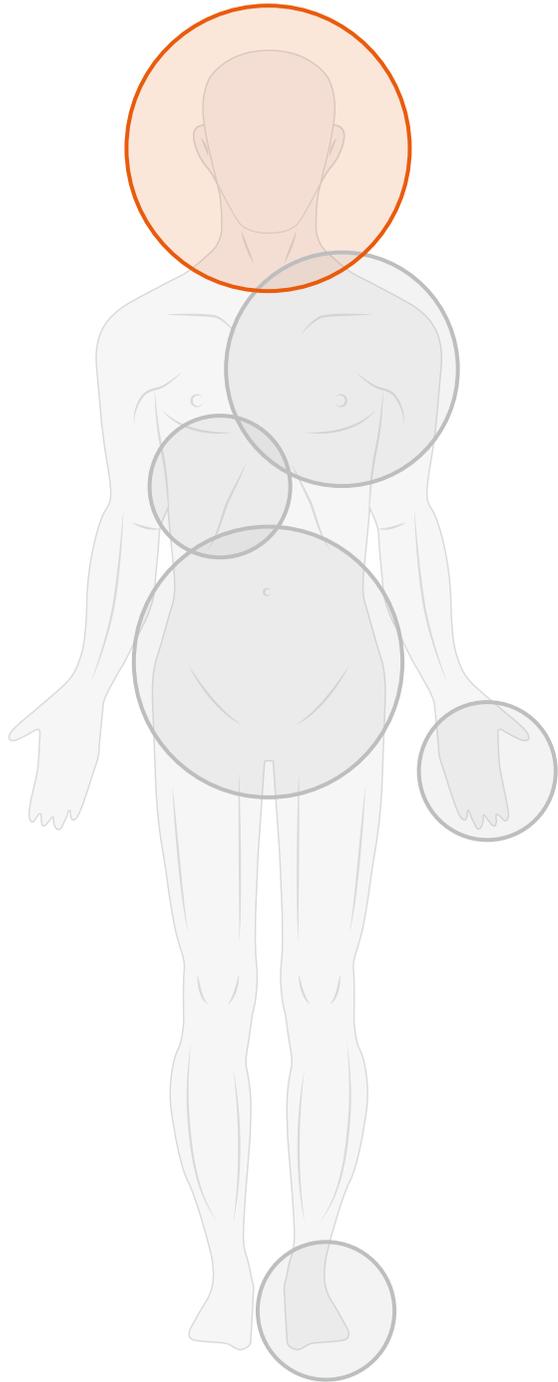
Art. N° 32047

For use with S-shaped base plates  
Acrylic



Art. N° 32047-CFL

For use with S-shaped base plates  
Carbon fiber



# HP PRO<sup>®</sup> SOLUTION

## A PROTON FRIENDLY IMMOBILIZATION DEVICE

[www.orfit.com/proton](http://www.orfit.com/proton)

Orfit's HP PRO Solution achieves a new level in patient immobilization.

This immobilization device is designed for brain, head and neck treatments for both photon and proton therapy. It is the first immobilization device in the market that makes use of ultra-thin Nanor masks.

The Orfit HP PRO Solution has been designed to meet the specific standards proton therapy demands. It includes a homogeneous low density immobilization device with a narrow carbon fiber base plate in the head and neck area, allowing for close range positions of the treatment device. The base plate is lightweight with good dosimetric properties.

**Designed to meet  
the specific standards  
proton therapy  
demands.**

# HP PRO® ANTIBACTERIAL NANOR MASKS

Orfit provides thermoplastic head masks and head, neck and shoulder masks that are molded over the patient and securely and easily fastened to the base plate.

The thermoplastic masks result in a high precision immobilization. Comfort and stability are guaranteed by the use of Orfit's Nanor thermoplastic material. Nanor is a thin thermoplastic material that makes use of nanotechnology to improve the mechanical properties of the thermoplastic material.

The masks are unique thanks to their patented locking mechanism.

The mask profile slides over a locking pin and then swivels towards the base plate until it clicks securely into the base plate. It is easily unlocked so that the mask can be removed quickly.



# HP PRO® ANTIBACTERIAL NANOR MASKS



Art. N° 25100/16MI+N/NH  
3-points head mask  
Nanor 1.6 mm micro+



Art. N° 25100/16MI+N  
3-points head mask  
Nanor 1.6 mm micro+  
with nose hole



Art. N° 25101/16MI+N/NH  
3-points paediatric head mask  
Nanor 1.6 mm micro+



Art. N° 25101/16MI+N  
3-points paediatric head mask  
Nanor 1.6 mm micro+  
with nose hole



Art. N° 25105/2MI+N/NH  
5-points head, neck and shoulders mask  
Nanor 2 mm micro+



Art. N° 25105/2MI+N  
5-points head, neck and shoulders mask  
Nanor 2 mm micro+  
with nose hole



Art. N° 45204/32MA/EFF  
HP PRO pelvic mask  
Efficast 3.2mm maxi with push-pins  
with nose hole

# HP PRO® BASE PLATES



Art. N° 25000/1  
Extension and overlay  
Pin interface



Art. N° 25000/1/MR  
Overlay  
MRI compatible



Art. N° 25000/18  
Overlay



Art. N° 25000/20  
Extension  
Clamp interface



Art. N° 25000/22  
Extension base plate and overlay  
Pin interface - for Mevion



Art. N° 25000/26  
Overlay  
Compatible with Elekta HexaPOD™ evo RT System



Art. N° 25000/16  
Extension  
Pin interface  
Pediatric 8-16 years old

# HP PRO® HEAD SUPPORTS

## MOLDCARE\*



Art. N° 18090  
Moldcare cushion  
150 x 200 mm

## HEAD REST INDEXING PLATE



Art. N° 25000/7/20  
Head rest indexing plate  
(Package of 20 pieces)

## FLEXIBLE SHIM



Art. N° 25070  
Flexible shim - 1 mm

\* Moldcare is a trademark from ALCARE

# HP PRO® ACCESSOIRES

To ensure that the head of the patient is correctly positioned, and prior to the molding of the mask, a cranial back-stop is attached to the cup-like head rest part of the base plate.



Art. N° 25000/6  
Cranial back-stop

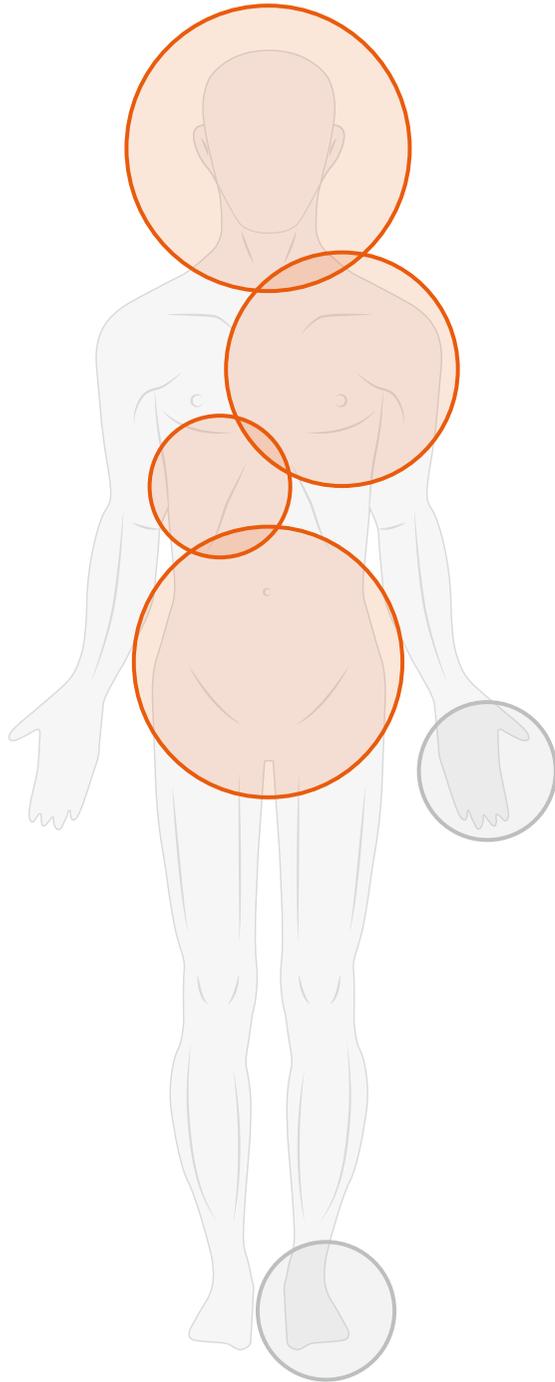
A set of hand holds are available to comfortably position the hands, arms and shoulders of the patient.



Art. N° 25000/17/A  
Art. N° 25000/17/B  
Hand holds



# MRI COMPATIBLE PRODUCTS

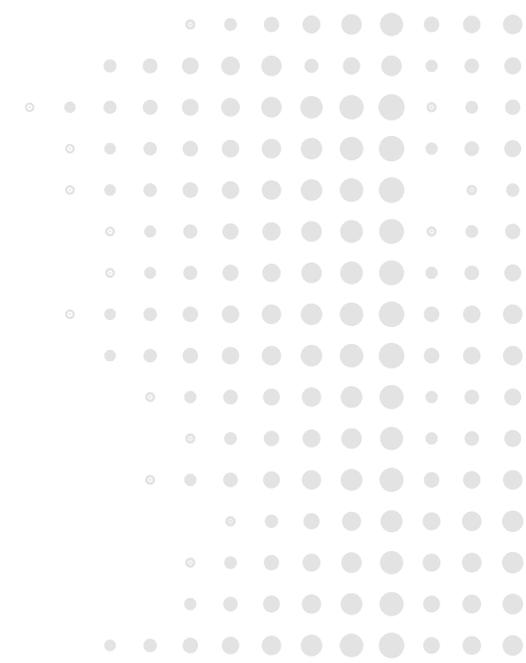


Orfit's range of MRI compatible immobilization devices allows a reproducible setup for each patient, both during simulation and treatment. The devices can be used in the MRI scanner and on the MRI Linac.

The product range contains high density head and neck base plates for the most common MRI scanners in the market: Siemens, Philips and GE. They allow the setup of the coils in the most optimal position to obtain a good image quality. For the MRI Linac, there are low density versions of the head and neck base plates available.

The Orfit SBRT Solution is also entirely MRI compatible. It consists out of a fiberglass base plate, which is low density, and non-metallic accessories.

All Orfit thermoplastic masks are MR safe.





Head and neck base plates  
Read more on p. 17-18



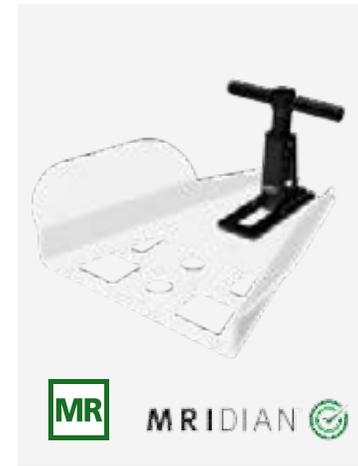
Head supports  
Read more on p. 19-21



Blocks and wedges  
Read more on p. 26-27



Pelvicast base plate  
Read more on p. 59



High precision lung board  
Read more on p. 62-63



The SBRT Solution  
Read more on p. 85



HP PRO base plate  
Read more on p. 47



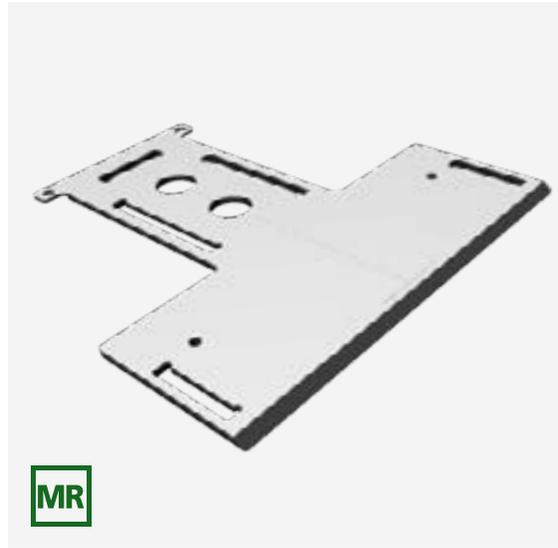
MammoRx breast board  
Read more on p. 66

# ORFIT MRI-P AND ORFIT MRI-G SOLUTION FOR BRAIN, HEAD AND NECK

The Orfit MRI-P Solution is designed for Philips MRI Scanners and the Orfit MRI-G Solution for GE MRI Scanners.

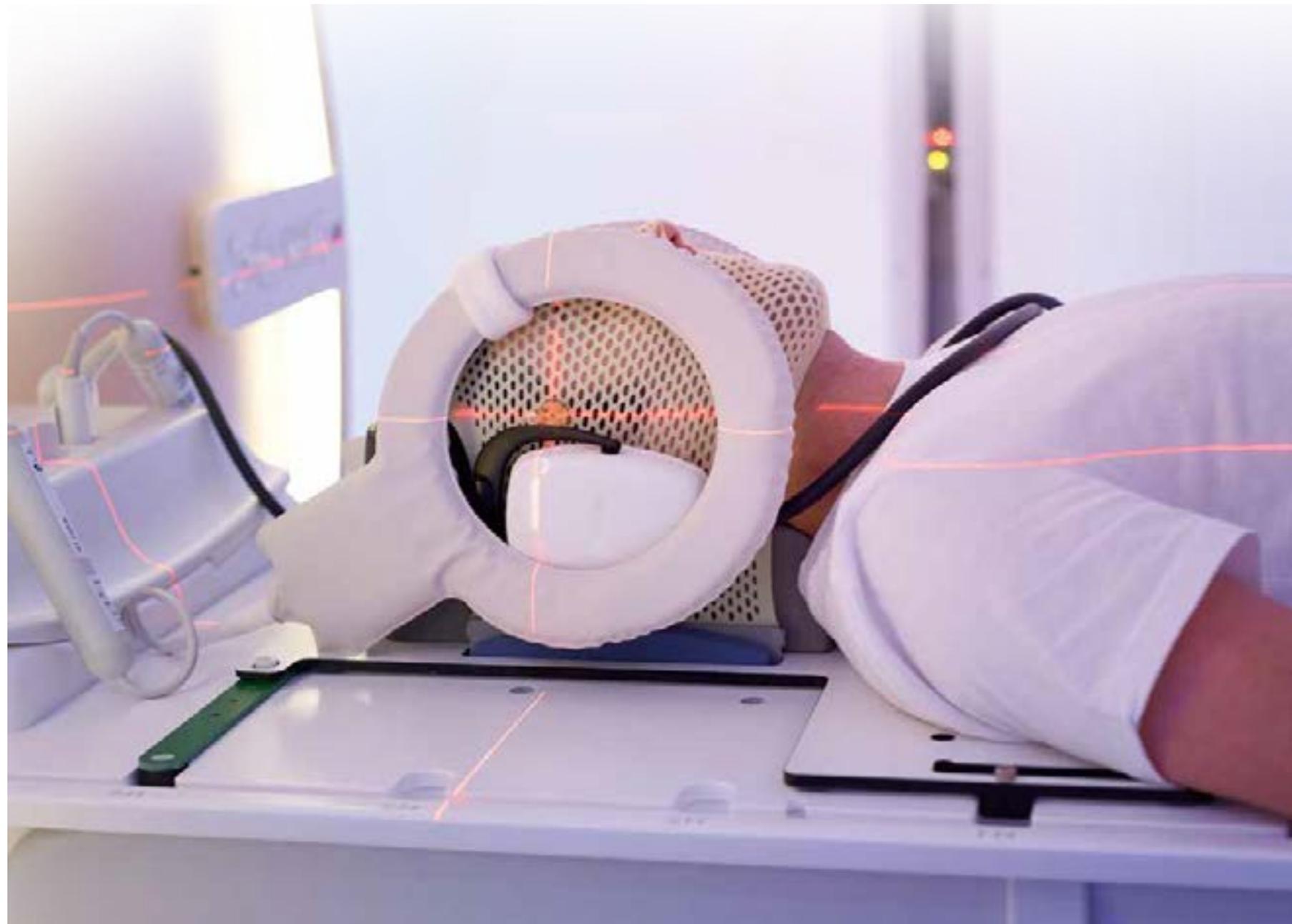
Both solutions can be combined with the flexible coils of the respective MRI scanners. The base plates allow the use of a thermoplastic mask, head supports and blocks and wedges in order to scan the patient in the exact treatment position.

The solution includes a High Precision (HP) Base Plate, a set of six HP Low Density Head Supports and a set of Couch Top Fixations.



**Art. N° 29111-P:** MRI-P Solution

**Art. N° 29111-G:** MRI-G Solution



MRI

# ORFIT MRI-S SOLUTION FOR BRAIN, HEAD AND NECK

The Orfit MRI-S Solution for brain, head and neck provides patient immobilization on the Siemens MAGNETOM family of MRI scanners. It allows for fusion of images with the patient in exactly the same position as during simulation and treatment.

The solution includes a High Precision (HP) Base Plate, a Bi-lateral Antenna Holder, a set of six HP Head Supports, and a set of Couch Top Fixations. Patients are immobilized with an Efficast thermoplastic 3-points or 5-points mask.

All components and thermoplastic masks are MRI-compatible and meet the standards of Siemens AG Healthcare with respect to functioning on the following Magnetic Resonance Systems.

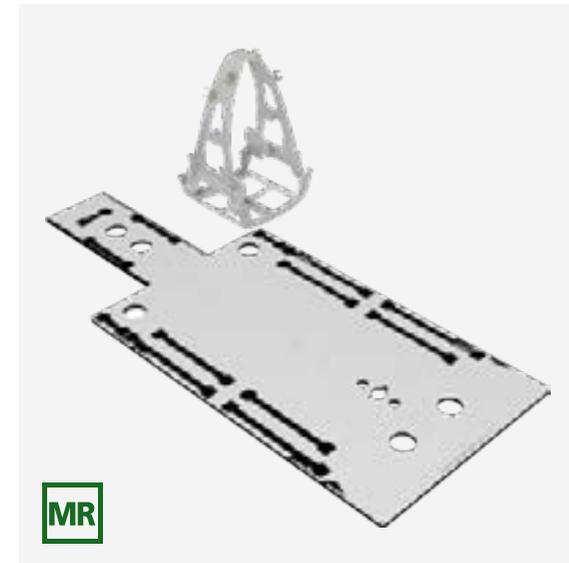
## ORFIT MRI-S SOLUTION FOR BRAIN, HEAD AND NECK

	1.5 Tesla	3 Tesla
Tim System	<ul style="list-style-type: none"> <li>&gt; Avanto</li> <li>&gt; Espree</li> <li>&gt; Symphony a Tim System</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Verio</li> <li>&gt; Trio a Tim System</li> </ul>
Tim 4G System	<ul style="list-style-type: none"> <li>&gt; Aera</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Skyra</li> <li>&gt; Spectra</li> </ul>

### HP base plate

The HP base plate comes with different sets of dedicated indexing fixations so that it can be mounted on top of the different couch tops of the Siemens MAGNETOM family of MRI scanners.

Slots are provided in the base plate to attach Orfit high precision thermoplastic head and neck masks. All Orfit HP Head Supports, Blocks and Wedges can also be positioned on the base plate. This allows the patient to be immobilized in exactly the same position as for simulation and treatment.



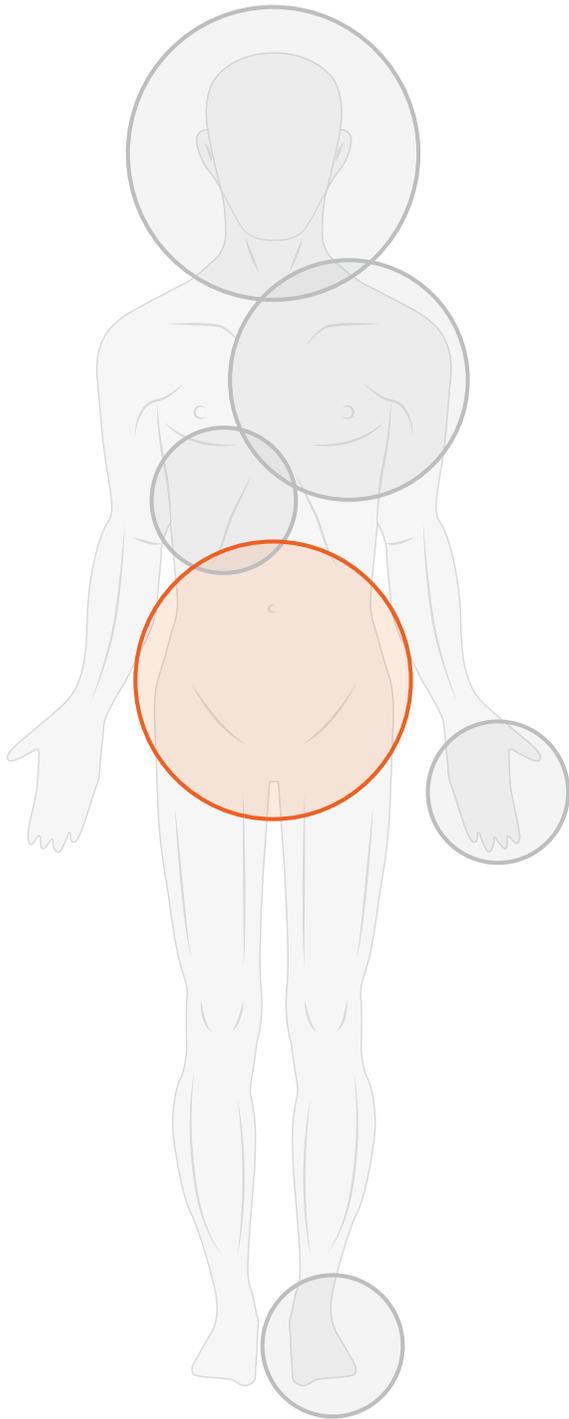
Art. N° 29102  
MRI-S Solution

### Bi-lateral antenna holder

The antenna holder slides over the cranial end of the base plate. It can be opened for easy mounting of the antennas and for patient set-up with a mask. In a closed position the antennas are very close to the head of the patient for optimal image quality. The levers of the holder accept the large flex coils of the Siemens MRI system.



Images courtesy of Siemens Healthineers



# PELVICAST HIGH PRECISION PELVIS AND ABDOMEN FRAMELESS IMMOBILIZATION SYSTEM

The Pelvicast High Precision Frameless Mask System for pelvis and abdomen immobilization consists of a unique combination of three carefully designed and engineered components.

1. Raycast carbon fiber low density hardware.
2. Pelvicast frameless thermoplastic masks.
3. Easy to insert and remove L-shaped profiles as interface between mask and base plate.

When integrated they result in the most accurate, reproducible and comfortable patient immobilization and positioning system.

Orfit has developed a pelvis and abdomen frameless, multi-point masking system that offers the precision in patient immobilization needed with today's technology to perform IMRT, IGRT, SRS, and SRT.

## CLINICAL STUDY

Lec, J.A. (2014), Interfractional variability in intensity-modulated radiotherapy of prostate cancer with or without thermoplastic pelvic immobilization, *Strahlenther. Onkol.* 190, 94-99



## FEATURES AND BENEFITS

Thermoplastic with engineered limited shrinkage that results in a high but comfortable degree of patient immobilization.

Very stable mask limits patient movement and rotation.

Memory effect allows the user to re-mold a finished mask as needed. This provides significant flexibility for modification during a patient treatment or simply to save on waste.

Quick release system allows fast and safe removal with high risk patients.

Innovative integrated L-Profiles enable you to quickly and easily secure the mask to the Pelvicast Base Plate for a precise immobilization.

# PELVICAST BASE PLATES

Orfit's lightweight, professionally designed and precisely engineered hardware ensures outstanding patient immobilization results.

The Orfit Base Plate design consists of a sandwich construction, with a foam core and ultra thin carbon fiber layer.

This results in very low density with the highest possible radiation transmission during treatment.

The use of your existing 2-pin lock bar, Orfit Loxon clamps or a similar device ensures that the Orfit High Precision Base Plate is securely mounted to the table top.

Positioning indicators on the base plate help to reduce patient setup time and ensure precise positioning and immobilization during each fraction.

Orfit High Precision Base Plates are available and compatible for use with all treatment machines, CT and Simulator table tops.



# PELVICAST BASE PLATES



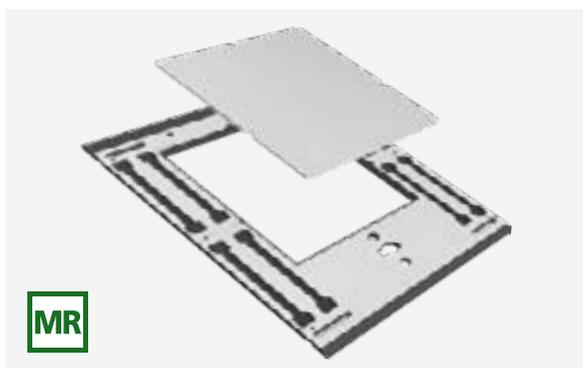
Art. N° 32122  
High precision CFL base plate  
For non-indexed couches



Art. N° 32124  
High precision CFL base plate  
For Exact\* or iBEAM\* couches



Art. N° 32124/MR  
High precision fiberglass base plate  
For Exact\* or iBEAM\* couches

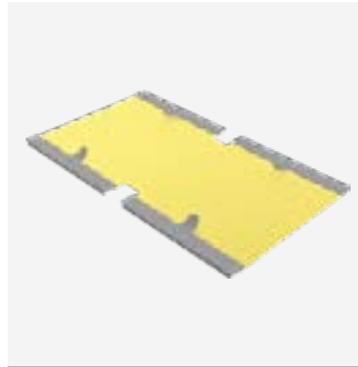


Art. N° 32123  
High precision HPL base plate  
For non-indexed couches  
With central panel for added patient comfort

\*Exact is a trademark of VARIAN Medical Systems Inc. / \*iBEAM is a trademark of Medical Intelligence

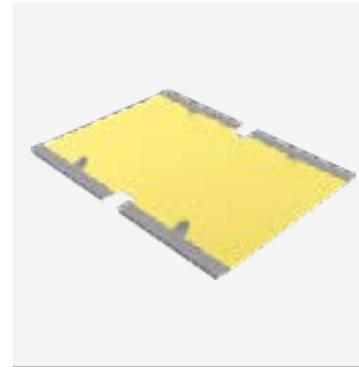
# ANTIBACTERIAL PELVIC MASKS

Pelvicast thermoplastic masks reduce the translational and rotational movements of the patients. A specially designed Leg Separator can be inserted into the base plate after the patient has mounted the cushion, to fix a 6-points Pelvicast mask. This type of mask will increase the reproducibility and precision of the immobilization. An extensive range of Pelvicast masks are available to meet specific patient requirements and your immobilization preferences.



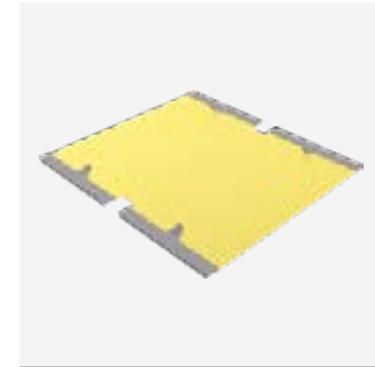
**Art. N° 35788/32MA**

4-points pelvic mask - small  
prone and supine



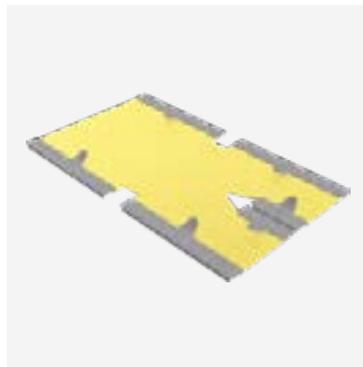
**Art. N° 35787/32MA**

4-points pelvic mask - medium  
prone and supine



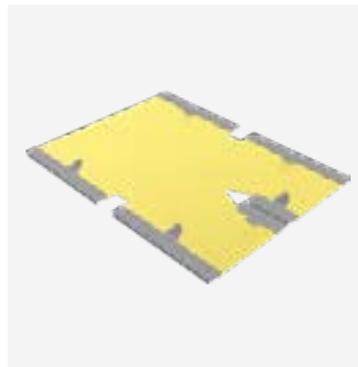
**Art. N° 35784/32MA**

4-points pelvic mask - large  
prone and supine



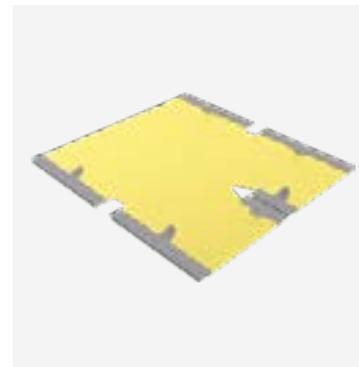
**Art. N° 35710/32MA**

6-points pelvic mask - small  
for use with leg separator  
prone and supine



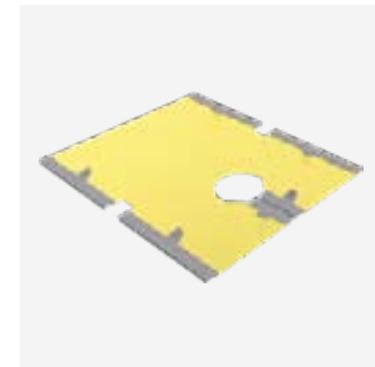
**Art. N° 35711/32MA**

6-points pelvic mask - medium  
for use with leg separator  
prone and supine



**Art. N° 35712/32MA**

6-points pelvic mask - large  
for use with leg separator  
prone and supine



**Art. N° 35780/32MA**

6-points pelvic mask - large  
for use with leg separator  
supine

## ACCESSORIES

### LEG SEPARATORS



Art. N° 32037

Leg separator

Contains slots for 6-points Pelvicast masks

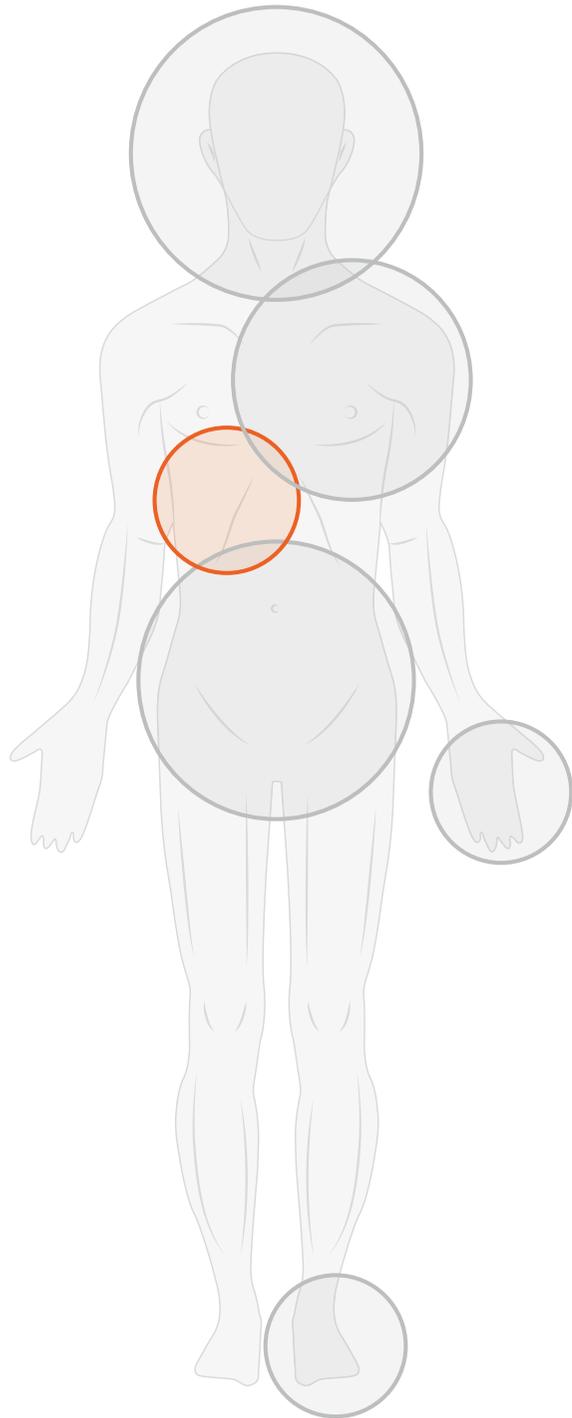
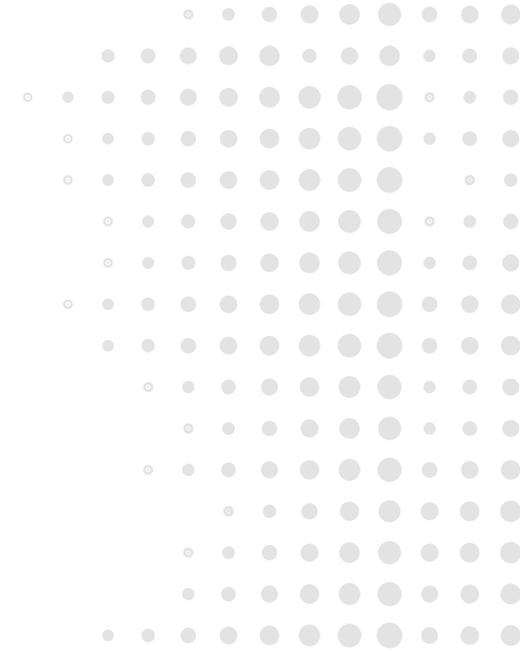


Art. N° 32008

Low leg separator for less voluminous patients

Contains slots for 6-points Pelvicast masks

# HIGH PRECISION LUNG BOARD



The Orfit Lung Board has a unique and innovative feature with its T-shaped hand grip that is adjustable in height. This feature increases patient comfort and positioning reproducibility.

The arms can be easily extended above the head for treatments in the thorax and lung area. The hand grip can also be moved in inferior and superior direction and locks once in place.



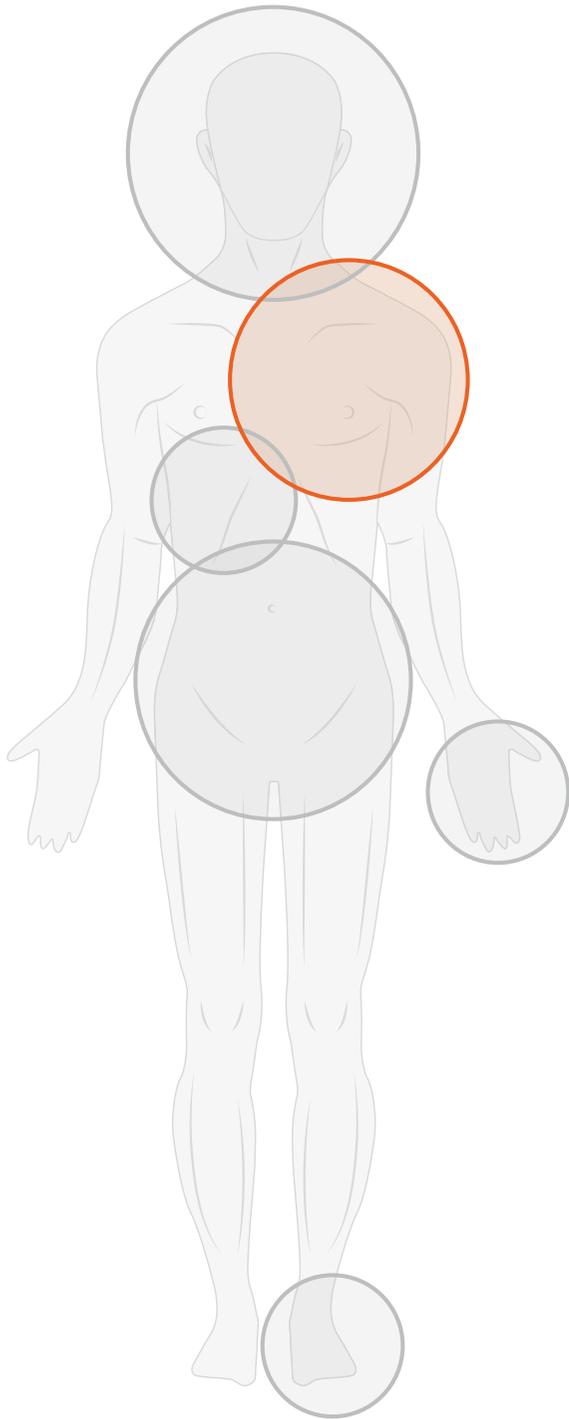
# HIGH PRECISION LUNG BOARD

The lung board can be combined with the standard Orfit High Precision Head Supports with cranial stop, Silverman Head Supports and Timo Head Supports (with the use of an adapter).



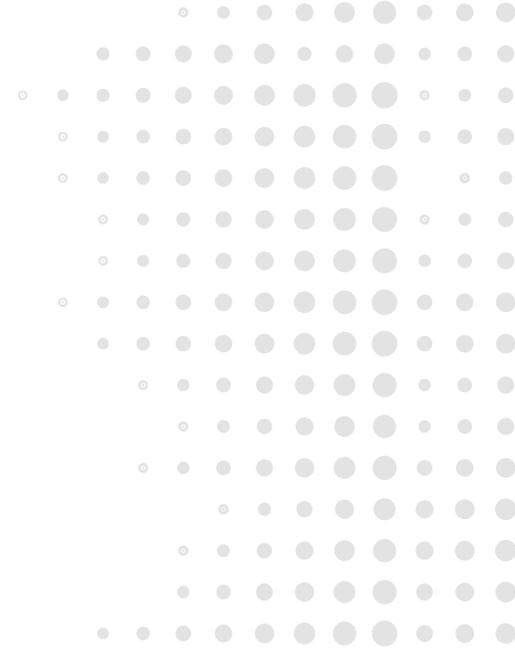
Art. N° 29115





# MAMMORX<sup>®</sup>

## BREAST BOARD



For patients receiving multiple radiation therapy treatments, position reproducibility is critical. MammoRx patient positioning products help you to quickly set up patients during simulation and to easily reproduce settings during subsequent treatments.

**Accurately establish and reproduce patient positions in radiation therapy.**

# MAMMORX® BREAST BOARD

The MammoRx Carbon Fiber Breast Board provides a solution that meets and exceeds the changing needs of radiation therapists.

The system delivers precise immobilization for IMRT, enhanced setup reproducibility and is compatible with Orfit thermoplastic masks.

## FEATURES AND BENEFITS

Provide easy and effective reproduction of patient setup.

Enhance patient comfort through next-generation design improvements.

Thin, strong and light system.

Feature low attenuation levels.



# MAMMORX® BREAST BOARD

## MAMMORX CARBON FIBER BREAST BOARD

The MammoRx Carbon Fiber Breast Board is specifically designed for narrow-bore CT SIM environments. As one of the most lightweight boards on the market, the MammoRx Breast Board is easy to lift and replace on the treatment table - a key benefit when you consider how often therapists remove patient positioning boards each day.

Built-in supports allow you to quickly achieve standard treatment angles of 0, 5, 7.5, 10, 12.5, 15, 20 and 22.5 degrees.

### FEATURES AND BENEFITS

Fits through most small-bore CT units.

No metal components in CT scan areas.

Enables single-side and bilateral patient immobilization.

Single-handed trigger action enables quick and easy movement of the upper-arm support between four standard settings, providing faster setup times for patients.

The hand support can be indexed in ten indexing holes. It allows a more comfortable and stable positioning.

A plunger locks the angle support ladder in place. This prevents dislocking of the angle support and eliminates the risk of tilt-board collapse.

Can be combined with Orfit thermoplastic masks for increased precision.



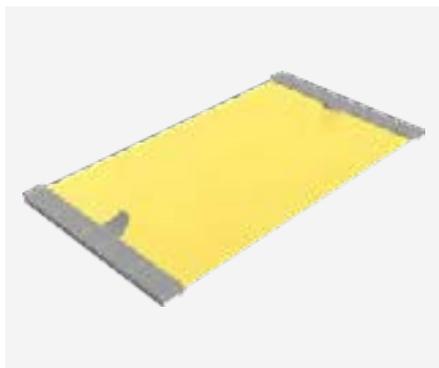
Art. N° CFB-001  
MammoRx carbon fiber breast board



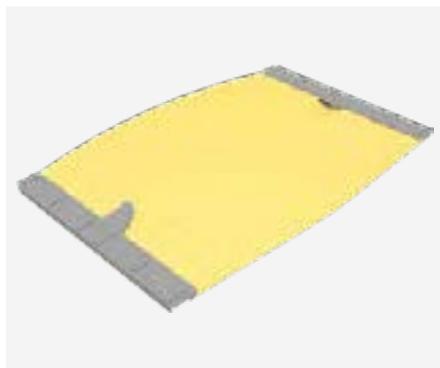
Art. N° CFB-001/MR  
MammoRx fiberglass breast board  
MRI safe

# MAMMORX® ANTIBACTERIAL MASKS

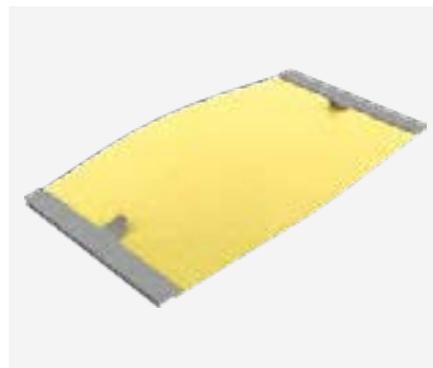
## BREAST HIGH PRECISION PRECUTS



Art. N° 35790/2MA  
2-points breast mask  
rectangular design



Art. N° 35727/32MA  
2-points breast mask  
medium size



Art. N° 35728/32MA  
2-points breast mask  
large size



# MAMMORX® ACCESSORIES



The Adjustable Arm Support allows positioning of the arms of the patient extended above the head. For maximal patient comfort the arm support can be adjusted in height. The cup swivels to obtain a comfortable position for each patient. The support is constructed from MRI compatible materials.

Art. N° 33170  
Adjustable arm support



The fixed grip pole is designed to be combined with the Adjustable Arm Support. When adjusting the height of the arm support, the hands of the patient can easily slide over the grip pole to find the most comfortable position for the patient.

Art. N° 33176  
Fixed grip pole for MammoRx



Used with the MammoRx Breast Board, the bottom stop eliminates patient slippage during treatment. The bottom stop is attached to a 2-pin indexing bar on the treatment couch. There are eight different positions for the 2-pin bar.

Art. N° CBS-2  
MammoRx bottom stop



The adjustable hand support allows adjusting the position of the patient's wrists and hands in a vertical direction. The cup swivels to obtain a comfortable position for each patient. This product is an alternative to the fixed grip pole.

Art. N° 33178  
Adjustable hand support

## MAMMORX® ACCESSORIES

Constructed from resilient ABS material, the BASS Board provides strength and integrity in a lightweight package. Ideal for supporting the patient's arms during treatment and diagnostic procedures of the breast, thorax and upper abdomen. The BASS Board also provides indexing capabilities for our standard head support options.



Art. N° CBA-1

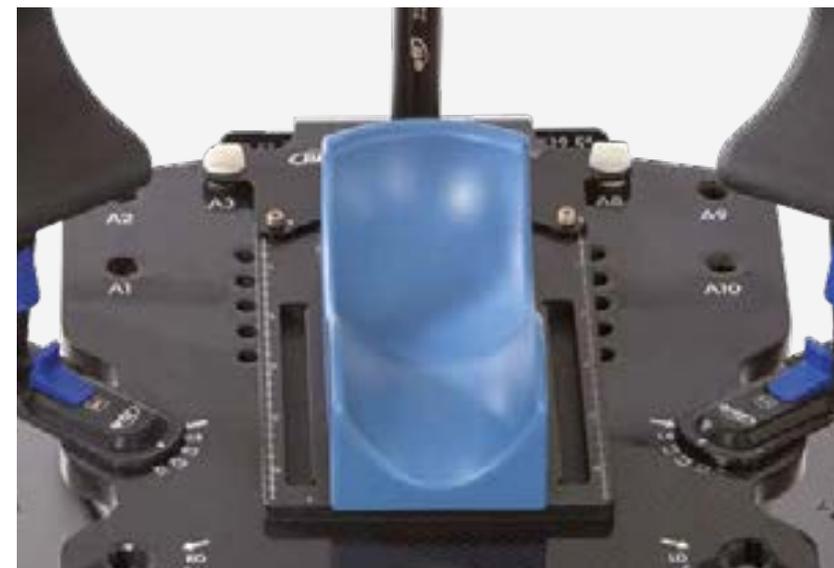
Bilateral arm support system (BASS Board)

The knobs allow the attachment of a head base plate to the MammoRx Breast Board. The knobs have to be combined with an adapter plate 32063 that is attached to a small head base plate 32130.



Art. N° 39320

High precision brain, head and neck interface for MammoRx breast board



# MAMMORX® ACCESSORIES

A blue gel ring head support or a round head cup can be attached directly to the MammoRx.

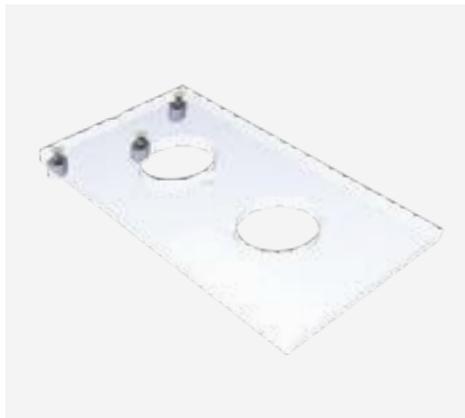


Art. N° CHB-1  
Head support interface



Art. N° CHD-1  
Head support interface

Interfaces are available for the Orfit High Precision Head Supports, Silverman and Timo Head Supports.



Art. N° CHO-1  
Head support interface



Art. N° CHS-1  
Head support interface



Art. N° CHT-1  
Head support interface

# MAMMORX®

## SOLUTION BUNDLES

### MAMMORX CARBON FIBER BREAST BOARD - SOLUTION BUNDLES

Standard Configuration	Art. N°	Description	
Breast board	CFB-001	MammoRx carbon fiber breast board	1 pc.

### CFB-003 - BILATERAL ARM CONFIGURATION

Breast board	CFB-001	MammoRx carbon fiber breast board	1 pc.
Head support	CHB-1	Blue gel ring head holder	1 pc.
Arm support	33170	Adjustable arm support	2 pcs.
Grip pole	33176	Fixed grip pole	2 pcs.
Bottom stop	CBS-2	MammoRx bottom stop	1 pc.

### CFB-004 - BILATERAL ARM SUPPORT CONFIGURATION

Breast board	CFB-001	MammoRx carbon fiber breast board	1 pc.
Head support	CHB-1	Blue gel ring head holder	1 pc.
Arm support	CBA-1	Bilateral arm support board	1 pc.
Grip pole	33176	Fixed grip pole	2 pcs.
Bottom stop	CBS-2	MammoRx bottom stop	1 pc.

### CFB-005 - COMBINATION

Breast board	CFB-001	MammoRx carbon fiber breast board	1 pc.
Head support	CHB-1	Blue gel ring head holder	1 pc.
Arm support	33170	Adjustable arm support	2 pcs.
Arm support	CBA-1	Bilateral arm support board	1 pc.
Grip pole	33176	Fixed grip pole	2 pcs.
Bottom stop	CBS-2	MammoRx bottom stop	1 pc.



Art. N° CFB-001



Art. N° CFB-003



Art. N° CFB-004



Art. N° CFB-005



## MAMMORX® - MR COMPATIBLE SOLUTION BUNDELS



### MAMMORX BREAST BOARD

Standard Configuration	Art. N°	Description	
Breast board	CFB-001/MR	MammoRx breast board	1 pc.

### CFB-003/MR - BILATERAL ARM CONFIGURATION

Breast board	CFB-001/MR	MammoRx breast board	1 pc.
Head support	CHB-1	Blue gel ring head holder	1 pc.
Arm support	33170	Adjustable arm support	2 pcs.
Grip pole	33176	Fixed grip pole	2 pcs.
Bottom stop	CBS-2	MammoRx bottom stop	1 pc.

### CFB-004/MR - BILATERAL ARM SUPPORT CONFIGURATION

Breast board	CFB-001/MR	MammoRx breast board	1 pc.
Head support	CHB-1	Blue gel ring head holder	1 pc.
Arm support	CBA-1	Bilateral arm support board	1 pc.
Grip pole	33176	Fixed grip pole	2 pcs.
Bottom stop	CBS-2	MammoRx bottom stop	1 pc.

### CFB-005/MR - COMBINATION

Breast board	CFB-001/MR	MammoRx breast board	1 pc.
Head support	CHB-1	Blue gel ring head holder	1 pc.
Arm support	33170	Adjustable arm support	2 pcs.
Arm support	CBA-1	Bilateral arm support board	1 pc.
Grip pole	33176	Fixed grip pole	2 pcs.
Bottom stop	CBS-2	MammoRx bottom stop	1 pc.



Art. N° CFB-001/MR



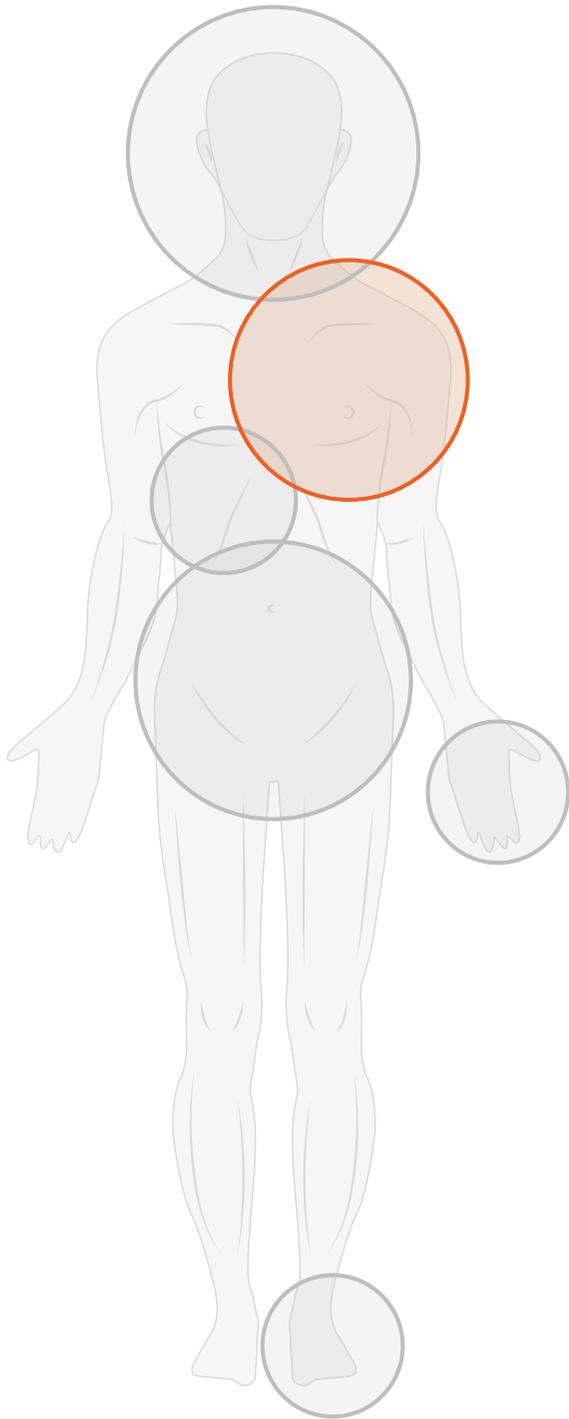
Art. N° CFB-003/MR



Art. N° CFB-004/MR

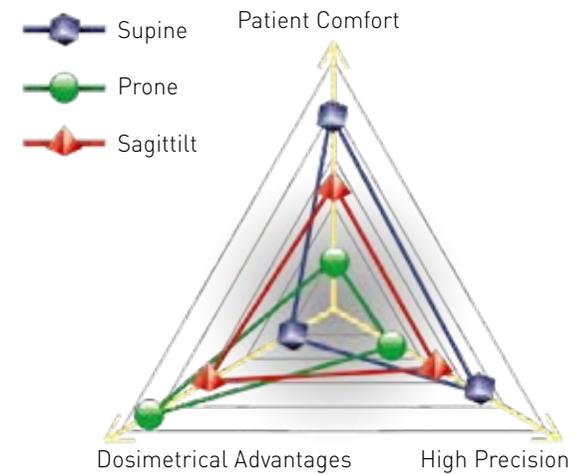


Art. N° CFB-005/MR



# SAGITTILT® PRONE BREAST SOLUTION

Radiation therapy of breast cancer in prone position is an increasingly used treatment technique. Several publications prove the dosimetrical advantage of this technique. When treating a patient in the prone position the heart and lung tissue and the contra-lateral breast will be less affected.



*Developed in collaboration with the University Hospital of Liège, Belgium (Prof. P. Coucke)*

## CLINICAL STUDIES

Mulliez, T. et al. (2013), Hypofractionated whole breast irradiation for patients with large breasts: A randomized trial comparing prone and supine positions, *Radiotherapy and Oncology*, vol. 108, issue 2, p. 203-208

*"Prone treatment resulted in: improved dose coverage, better homogeneity, less volumes of over-dosage, reduced acute skin desquamation, a 3-fold decrease of moist desquamation, lower incidence of dermatitis, edema, pruritus, and pain. 2- to 4-fold reduction of grades 2-3 toxicity, lower ipsilateral lung and mean LAD dose."*

Stegman, L.D. et al. (2007), Long-Term Clinical outcomes of whole-breast irradiation delivered in the prone position, *Int. J. Radiation Oncology Biol. Phys.*, Vol. 68, No 1, p. 73-81

*"Prone position breast radiation results in similar long-term disease control with a favourable toxicity profile compared with standard supine tangents. The anatomic advantages of prone positioning may contribute to improving the therapeutic ratio of post-lumpectomy radiation by improving dose homogeneity and minimizing incidental cardiac and lung dose."*

De Wyngaert J.K et al. (2007), Accelerated Intensity- Modulated Radiotherapy to Breast in Prone Position: Dosimetric Results, *Int. J. Radiation Oncology Biol. Phys.*, Vol. 68, No. 4, p. 1251-1259

*"This technique for whole breast radiotherapy is feasible and enables an accelerated regimen in the prone position while sparing the lung and heart."*

Merchant, T.E. et al. (1994), Prone position breast irradiation, *Int. J. Radiation Oncology Biol. Phys.*, Vol. 30, No. 1, p. 197-203

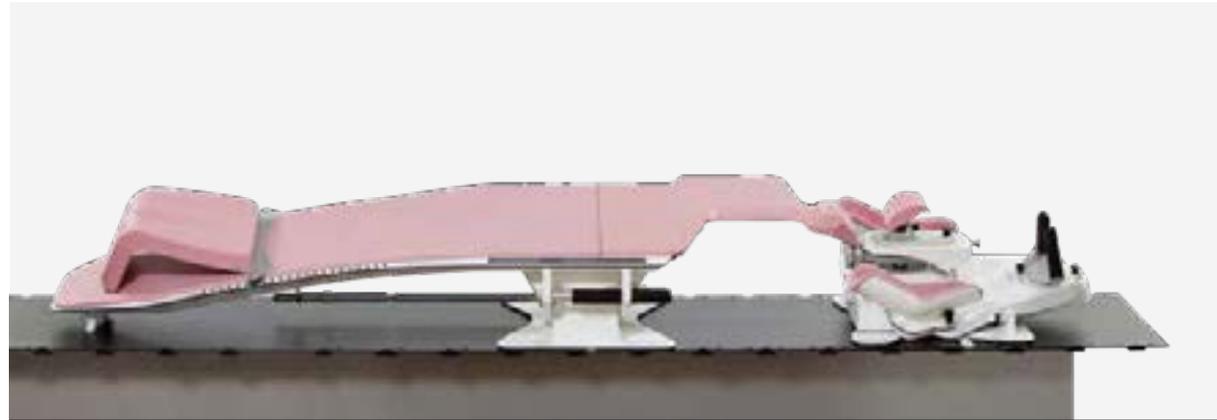
*"Irradiation of the heart, lungs, chest wall and contralateral breast are minimized with this technique. Prone position breast irradiation appears to be a simple and effective alternative to irradiation of the breast in the conventional supine position when the supine position is likely to result in unacceptable dose inhomogeneity or significant doses to normal tissue."*

Olson, K.N. (2014), Improving treatment outcomes of breast radiation therapy: the prone position, *Radiation therapist*, Vol. 23, No. 1, p. 21-26

*"The prone position has been shown to reduce skin reactions by eliminating skin folds." "This position can reduce late toxicities by greatly reducing the amount of dose to critical organs." "Dose homogeneity can be improved up to 1.2%." "The prone position also has shown reduced intrafractional motion while having interfractional motion within tolerance."*

Treatment of the breast with the patient in prone position is perceived by many to be less comfortable and also less reproducible than the supine position. The Sagittilt Prone Breast Solution solves these issues.

When developing the Sagittilt we looked at those aspects that make the supine breast position comfortable and translated that into a prone immobilization device.



Art. N° 32070



# SAGITTILT®

## FEATURES AND BENEFITS

### TILTING OF THE PATIENT

Sagittilt has a mechanism that allows the rotation of a patient along the sagittal axis in a reproducible and safe way. This rotation makes the breast hang further away from heart and lung and at the same time it decreases pressure on the ribs and the contralateral breast to improve the comfort.

The advantage of tilting the entire length of the body along the sagittal axis is that it remains flat on the device. The patient can be tilted from 0° to 10° with increments of 1 degree. One person can easily perform the tilt.



## SAGITTILT® FEATURES AND BENEFITS

### HIGH REPRODUCIBILITY OF PATIENT POSITION

Sagittilt allows for an optimal reproducibility of the position of a patient by means of supports for the arms, hands, elbows, head and feet that are individually adjustable and indexed, which creates a comfortable, stable and reproducible position for the patient.

The patient's elbows are positioned in a cup shaped support structure, similar to that in supine breast boards. Once the elbows are positioned on the Sagittilt, the position of the shoulders will also be reproducible for each session and the upper body will remain still during treatment.



Head



Elbows



Hands



Arms



Feet

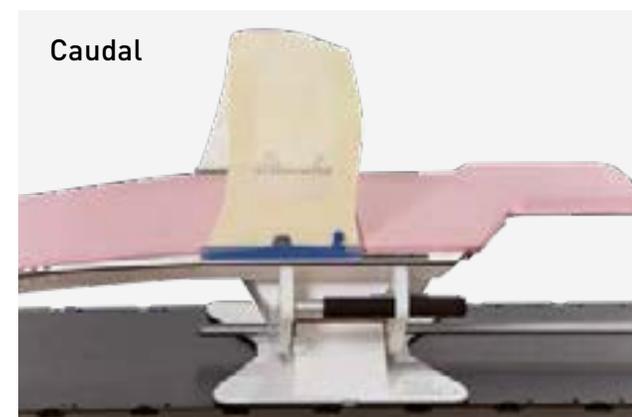
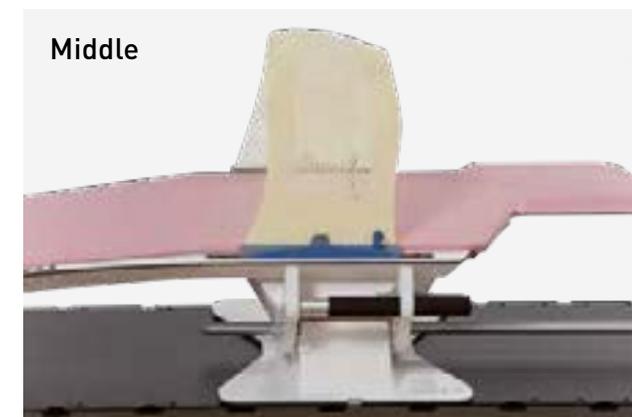
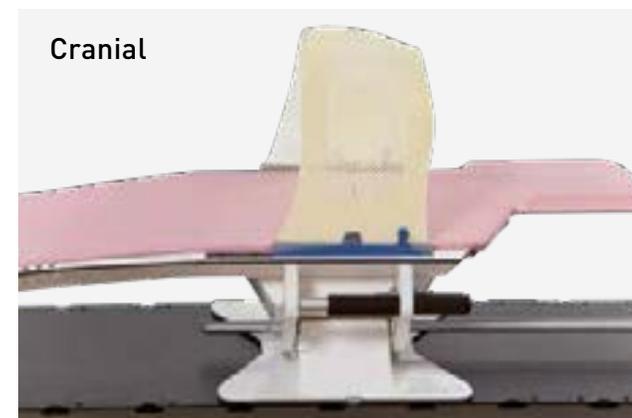
## SAGITTILT® FEATURES AND BENEFITS

### IMMOBILIZATION WITH A THERMOPLASTIC MASK

A dedicated thermoplastic mask (Art. N° 33774/2MA/12MI+N) for the Sagittilt immobilizes the hips of the patient and keeps the patient securely in place when tilting the system.

Both the thermoplastic mask and the elbow support prevent the patient from sliding sideways when using the tilt function. There are three different positions for the thermoplastic mask: cranial, middle and caudal.

The mask is locked into the board by using two High Precision profiles, which is a patented technology by Orfit.



## SAGITTILT® FEATURES AND BENEFITS

### EASY STORAGE

A smartly designed storage cart comes with each Sagittilt so that the system can be moved around effortlessly and placed on the treatment couch without performing heavy lifting.



### COUCH INDEXATION

The Sagittilt Prone Breast Solution is attached to the simulation and treatment couch by means of two dedicated 2-pin indexing bars, allowing to place it in a reproducible and safe way on most of the couch tops that are in use.

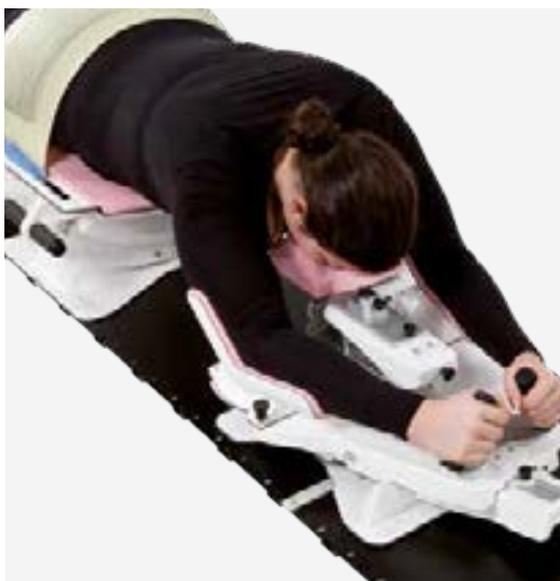


## SAGITTILT® FEATURES AND BENEFITS

### HIGH-TECH DESIGN PRODUCT

Sagittilt is the result of an innovative development process and a high-tech production method involving carbon fiber techniques from the aviation industry.

Special attention was given to the design of the product with the purpose of making it patient and user friendly while taking up a minimum amount of space in a treatment or simulation room.



#### CLINICAL PUBLICATIONS ABOUT THE SAGITTILT PRONE BREAST SOLUTION

Cucchiaro, S. et al. (2014), Clinical Introduction of an all-in class solution for prone breast hypofractionated SIB with multibeam IMRT, *Radiotherapy & Oncology*, Vol. 111, Supplement 1, p. 47

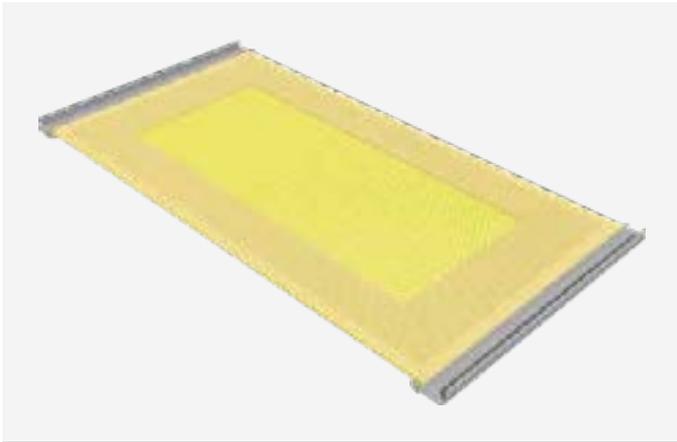
Lakosi, F. et al. (2014), Hypofractionated whole prone breast RT using Sagittilt system: patient comfort, setup accuracy and acute toxicity, *Radiotherapy & Oncology*, Vol. 111, Supplement 1, p. 477

Lakosi, F. et al. (2013), Introduction of Sagittilt prone breastboard into daily practice: from pre-clinical to first clinical experience, *Radiotherapy & Oncology*, Vol. 106, Supplement 2, p. 487

Lakosi, F. et al. (2016), Feasibility evaluation of prone breast irradiation with the Sagittilt system including residual-intrafractional error assessment, *Radiothérapie Cancer*, 20(8), p. 776-782

SAGITTILT®

# SAGITTILT® ANTIBACTERIAL MASK



Art. N° 33774/2MA/12MI+N  
2-points hybrid hip mask



# SAGITTILT® ACCESSORIES



Art. N° 32070/16

Comfort cushion with aluminium post for Sagittilt



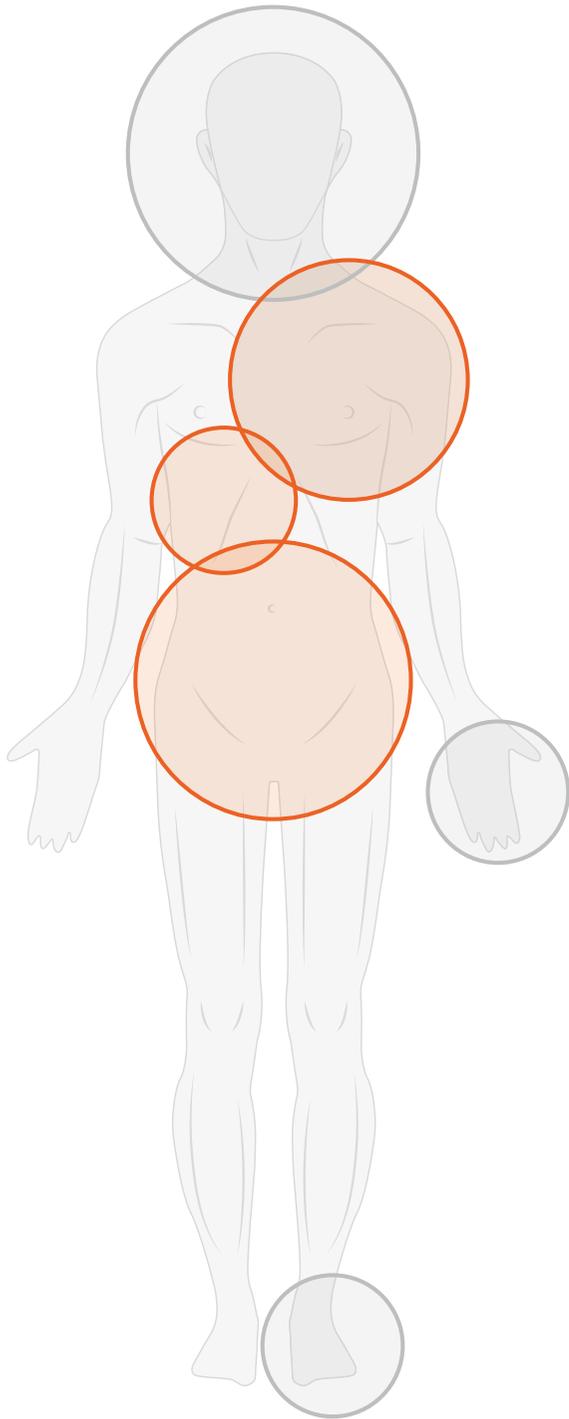
Art. N° 32070/21

Sagittilt sanitary cover for comfort cushion (package of 50 pieces)

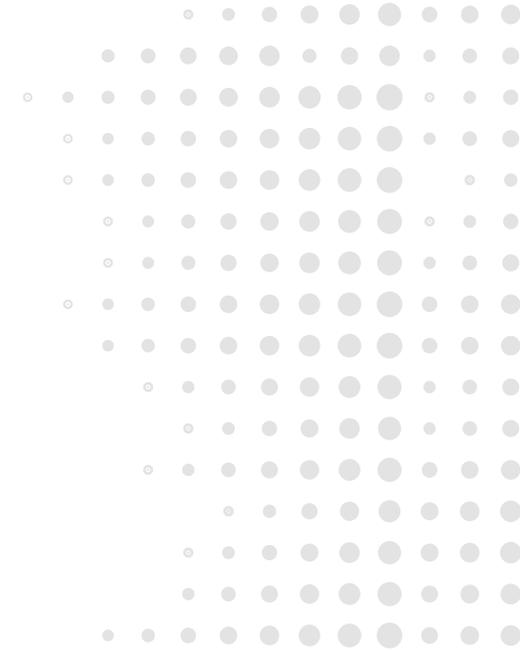


Art. N° 32070/14

Sanitary cover (package of 50 pieces)



# THE SBRT SOLUTION



The SBRT Solution is developed in collaboration with users worldwide based on existing SBRT studies, products available on the market and on-site testing to provide a system which combines high technology, ease of use and precision to meet current and future demands.

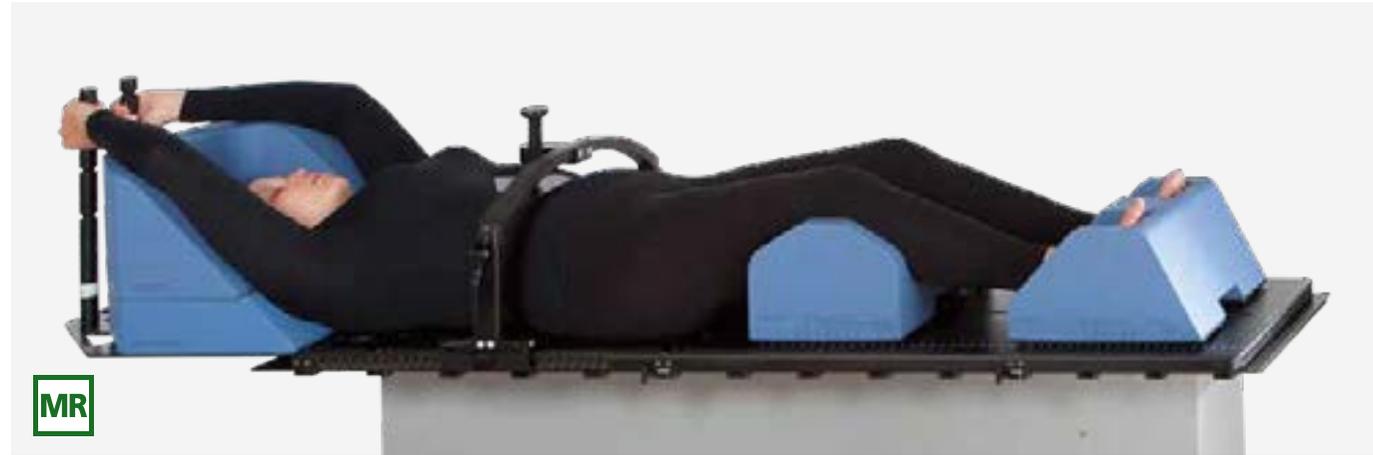
The SBRT Solution provides a precise, stable and easy to use setup that enables you to apply the most effective radiation treatment method for thoracic and abdominal tumors. The SBRT Solution is MR safe.

**Developed in collaboration with users worldwide.**

# SBRT SOLUTION FEATURES AND BENEFITS

Various configurations of the product are available to adapt it to your needs.

- > SBRT Long Base Plate vs SBRT Short Base Plate
- > Arm setup with cushions vs MammoRx arm supports
- > Mechanical vs pneumatic abdominal compression system



Art. N° 32317

SBRT long base plate



Art. N° 32331

SBRT short base plate

## SBRT SOLUTION FEATURES AND BENEFITS

### POSITIONING OF THE ARMS

#### MammoRx arm setup

The MammoRx arm supports and hand grips are compatible with the SBRT Solution.



## SBRT SOLUTION FEATURES AND BENEFITS

### POSITIONING OF THE ARMS

#### Support cushion arm setup

Another option to position the arms is the use of a cushion. The arm rest cushion can be lifted with the use of an elevation cushion. There is a cranial and a caudal position for these cushions. Various indexed positions are available for the hand grips for optimal comfort and reproducibility.



# SBRT SOLUTION FEATURES AND BENEFITS

## POSITIONING OF KNEES AND FEET



The knee and feet supports are indexed on top of the long base plate.



When using the short base plate, the knee and feet supports are attached to the treatment couch with a 2-pin indexing bar.



Longitudinal indexing of the knee support cushion.

Longitudinal indexing of the feet support cushion.

## SBRT SOLUTION FEATURES AND BENEFITS

### ABDOMINAL COMPRESSION SYSTEMS

#### Mechanical pressure system

The mechanical pressure system consists of a bridge with a pressure plate and a screw. There is a low and a high version of the bridge.



## SBRT SOLUTION FEATURES AND BENEFITS

### ABDOMINAL COMPRESSION SYSTEMS

#### Pneumatic pressure belt system

Abdominal compression can also be created with a pressure belt with inflatable air bladder. The pressure belt is available in two different sizes: 120 cm (Art. N° 32317/9) and 130 cm (Art. N° 32317/18) long.



Art. N° 32317/9, 32317/18  
Pressure belt 120 cm, 130 cm



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## SBRT SOLUTION FEATURES AND BENEFITS

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### VACUUM BAG

Various sizes of vacuum bags can be indexed both on the SBRT Long and the Short Base Plate.

Note: when using a vacuum bag, blocks will need to be placed underneath the head support to elevate the head of the patient.



## SBRT SOLUTION FEATURES AND BENEFITS

### COMPATIBILITY WITH THE AIO SOLUTION

The long SBRT base plate can be combined with two sets of The AIO Solution:

- > The Breast- and Lung Board Solution
- > The Belly- and Pelvic Board Solution (except the Leg Separator)



# SBRT ANTIBACTERIAL MASKS



Art. N° 35784/32MA



Art. N° 33683/32MA

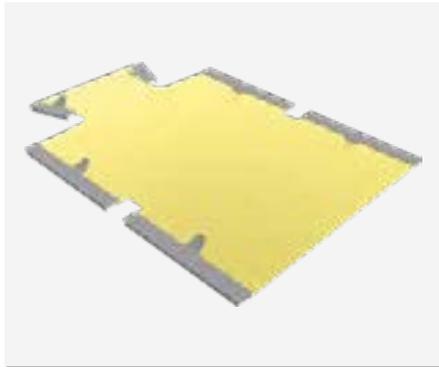
Slots are provided over the entire length of the long base plate to allow the use of different thermoplastic masks.



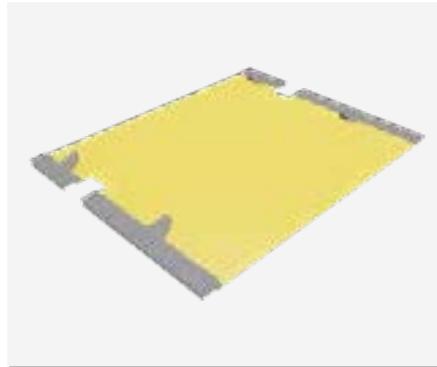
Art. N° 33724/32MA

SBRT

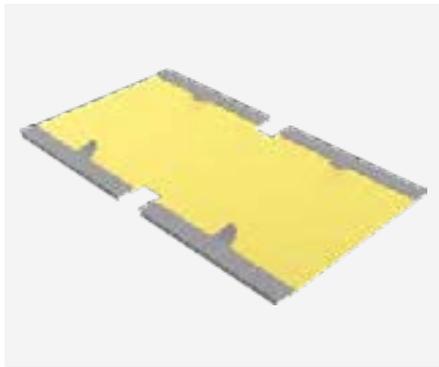
# SBRT ANTIBACTERIAL MASKS



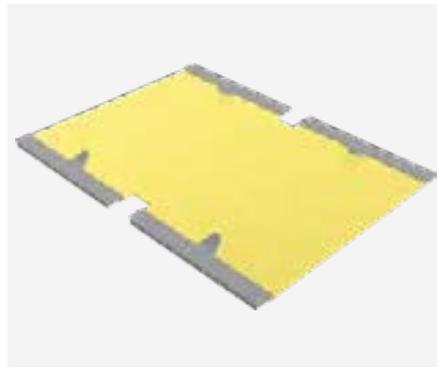
Art. N° 33724/32MA  
6-points thorax and abdomen supine mask



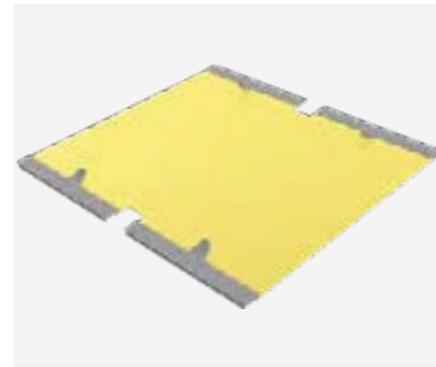
Art. N° 33683/32MA  
4-points shoulders and thorax mask for SBRT



Art. N° 35788/32MA  
4-points pelvic mask  
small size



Art. N° 35787/32MA  
4-points pelvic mask  
medium size



Art. N° 35784/32MA  
4-points pelvic mask  
large size

# SBRT BASE PLATES



Art. N° 32317/1

SBRT long base plate - fiberglass

Also available for Elekta HexaPOD™ evo RT System (Art. N° 32317/1/HX)



Art. N° 32317/14

SBRT short base plate - fiberglass



Art. N° 32317/19

SBRT long base plate with extra lung slots - fiberglass

# SBRT SOLUTION BUNDLES

## PACKAGE 1: SBRT LONG BASE PLATE



**MECHANICAL PRESSURE SYSTEM + CUSHION ARM SETUP**

Art. N° 32317

Art. N°	Description
32317/1	Long SBRT Base Plate
32317/2	Pressure system bridge - low - variable height
32317/10	Pressure system bridge - high - variable height
32317/4	Knee support - indexed
32317/5	Feet support - indexed
32317/6	Arm rest support plate
32317/8	Arm rest cushion
32317/11	Arm rest elevation cushion
32015/9/2	Grip pole long - 2 pcs.
32015/9/3	Grip pole short - 2 pcs.
35758-MD	Head support in PU foam - model 1 - with lateral neck flaps



## PACKAGE 2: SBRT LONG BASE PLATE



**PNEUMATIC PRESSURE BELT SYSTEM + CUSHION ARM SETUP**

Art. N° 32327

Art. N°	Description
32317/1	Long SBRT Base Plate
32317/9	Pressure belt 120 cm - with manual pump
32317/4	Knee support - indexed
32317/5	Feet support - indexed
32317/6	Arm rest support plate
32317/8	Arm rest cushion
32317/11	Arm rest elevation cushion
32015/9/2	Grip pole long - 2 pcs.
32015/9/3	Grip pole short - 2 pcs.
35758-MD	Head support in PU foam - model 1 - with lateral neck flaps



## SBRT SOLUTION BUNDLES

### PACKAGE 3: SBRT LONG BASE PLATE



**MECHANICAL PRESSURE SYSTEM + MAMMORX ARM SETUP**

Art. N° 32336

Art. N°	Description
32317/1	Long SBRT base plate
32317/2	Pressure system bridge - low - variable height
32317/10	Pressure system bridge - high - variable height
32317/4	Knee support - indexed
32317/5	Feet support - indexed
32317/15	Arm rest support plate for upper arm supports and wrist supports
33170	Adjustable arm support
33170	Adjustable arm support
33176	Fixed grip pole
33176	Fixed grip pole
35758-MD	Head support in PU foam - model 1 - with lateral neck flaps



### PACKAGE 4: SBRT LONG BASE PLATE



**PNEUMATIC PRESSURE BELT SYSTEM + MAMMORX ARM SETUP**

Art. N° 32337

Art. N°	Description
32317/1	Long SBRT base plate
32317/9	Pressure belt 120 cm - with manual pump
32317/4	Knee support - indexed
32317/5	Feet support - indexed
32317/15	Arm rest support plate for upper arm supports and wrist supports
33170	Adjustable arm support
33170	Adjustable arm support
33176	Fixed grip pole
33176	Fixed grip pole
35758-MD	Head support in PU foam - model 1 - with lateral neck flaps



# SBRT SOLUTION BUNDLES

## PACKAGE 1: SBRT SHORT BASE PLATE



**MECHANICAL PRESSURE SYSTEM + CUSHION ARM SETUP**

Art. N° 32333

Art. N°	Description
32317/14	Short SBRT base plate
32317/2	Pressure system bridge - low - variable height
32317/4	Knee support - indexed
32317/5	Feet support - indexed
32317/6	Arm rest support plate
32317/8	Arm rest cushion
32317/11	Arm rest elevation cushion
32015/9/2	Grip pole long - 2 pcs.
32015/9/3	Grip pole short - 2 pcs.
35758-MD	Head support in PU foam - model 1 - with lateral neck flaps



## PACKAGE 2: SBRT SHORT BASE PLATE



**PNEUMATIC PRESSURE BELT SYSTEM + CUSHION ARM SETUP**

Art. N° 32334

Art. N°	Description
32317/14	Short SBRT base plate
32317/9	Pressure belt 120 cm - with manual pump
32317/4	Knee support - indexed
32317/5	Feet support - indexed
32317/6	Arm rest support plate
32317/8	Arm rest cushion
32317/11	Arm rest elevation cushion
32015/9/2	Grip pole long - 2 pcs.
32015/9/3	Grip pole short - 2 pcs.
35758-MD	Head support in PU foam - model 1 - with lateral neck flaps



## SBRT SOLUTION BUNDLES

### PACKAGE 3: SBRT SHORT BASE PLATE



**MECHANICAL PRESSURE SYSTEM + MAMMORX ARM SETUP**

Art. N° 32331

Art. N°	Description
32317/14	Short SBRT base plate
32317/2	Pressure system bridge - low - variable height
32317/4	Knee support - indexed
32317/5	Feet support - indexed
32317/15	Arm rest support plate for upper arm supports and wrist supports
33170	Adjustable arm support
33170	Adjustable arm support
33176	Fixed grip pole
33176	Fixed grip pole
35758-MD	Head support in PU foam - model 1 - with lateral neck flaps



### PACKAGE 4: SBRT SHORT BASE PLATE



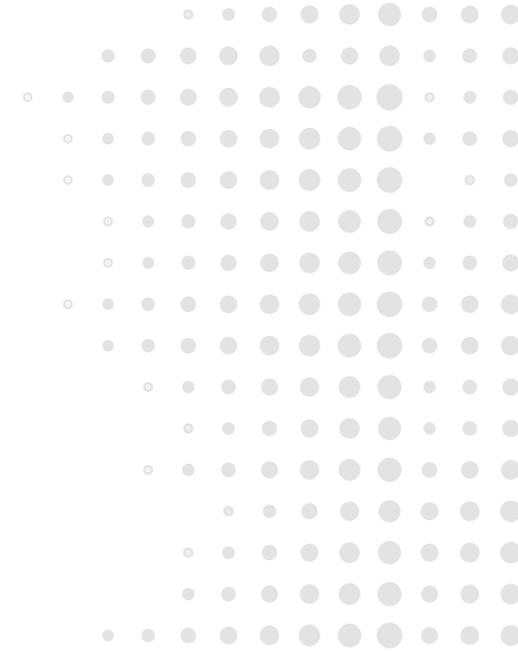
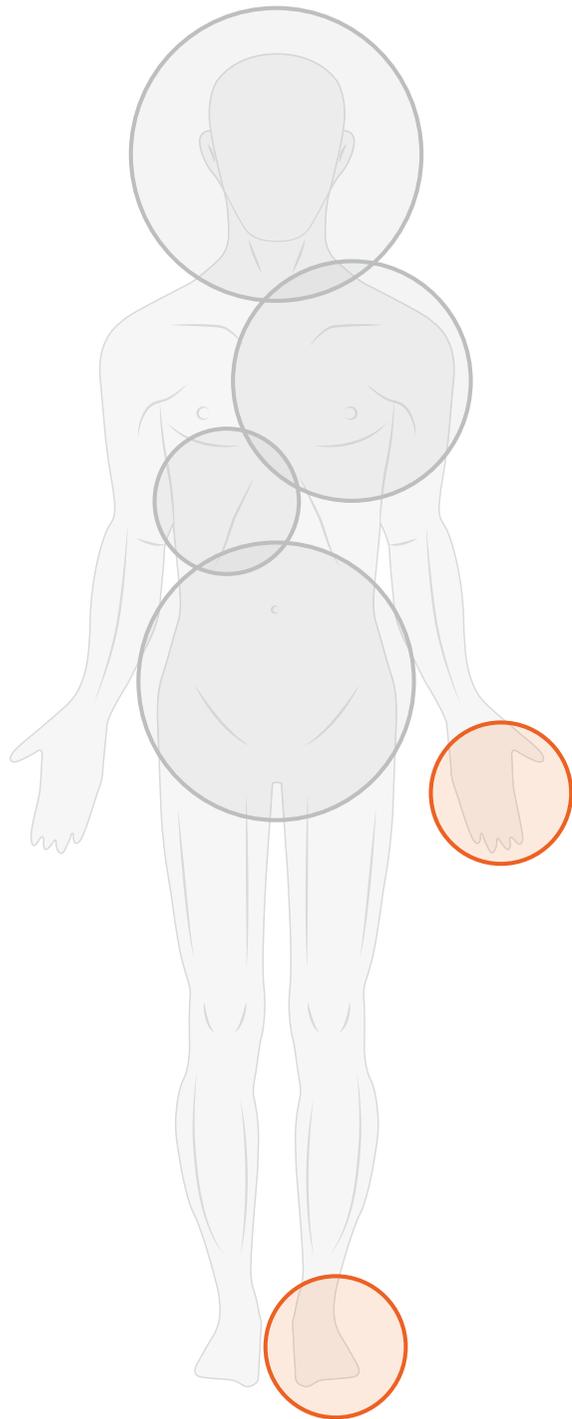
**PNEUMATIC PRESSURE BELT SYSTEM + MAMMORX ARM SETUP**

Art. N° 32332

Art. N°	Description
32317/14	Short SBRT base plate
32317/9	Pressure belt 120 cm - with manual pump
32317/4	Knee support - indexed
32317/5	Feet support - indexed
32317/15	Arm rest support plate for upper arm supports and wrist supports
33170	Adjustable arm support
33170	Adjustable arm support
33176	Fixed grip pole
33176	Fixed grip pole
35758-MD	Head support in PU foam - model 1 - with lateral neck flaps



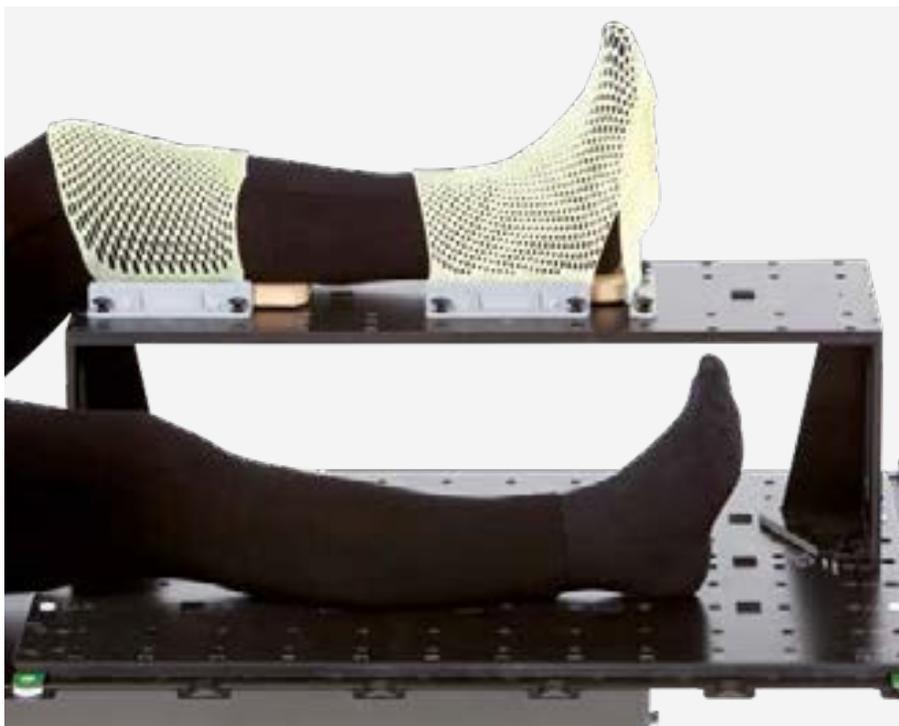
# THE EXTREMITIES SOLUTION



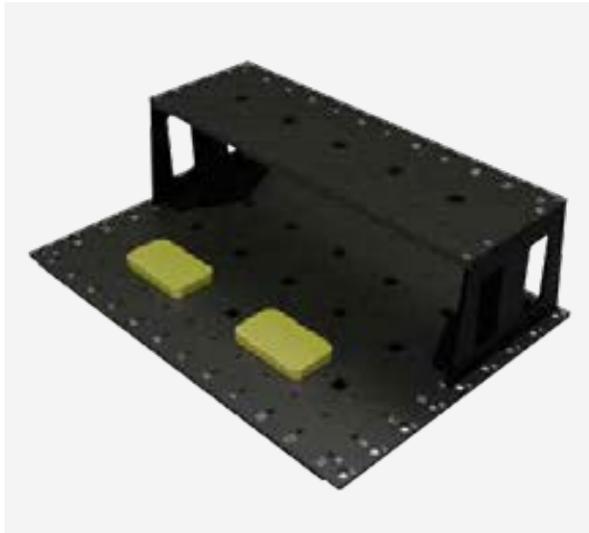
Orfit offers a complete immobilization solution, specifically designed for fixation of extremities in a reproducible way.

The system consists of a low density carbon fiber base plate with a leg support, two comfort cushions and five dedicated masks. The base plate can be indexed to any couch top on 2-pin bars and has multiple holes to offer a maximum versatility for positioning and immobilizing both upper and lower extremities.

When using the leg support, one leg can be lifted and placed out of the treatment field. Masks can be made on the leg support as well as on the base plate itself. Foam cushions are placed under the knee and heel to provide patient comfort. Upper extremities can be immobilized while the patient is lying on the couch, or sitting next to it. In both cases, masks are made over the elbow and hand to obtain an immobilization with excellent reproducibility. Comfort cushions are used under the elbow and the hand for patient comfort.



# EXTREMITIES BASE PLATES



Art. N° 32103  
Set - CFL

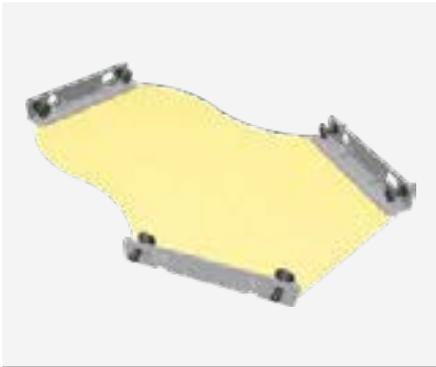


Art. N° 32103/1  
Base plate - CFL

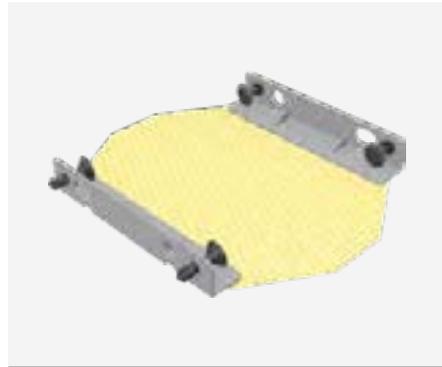


Art. N° 32103/3  
Leg support - CFL

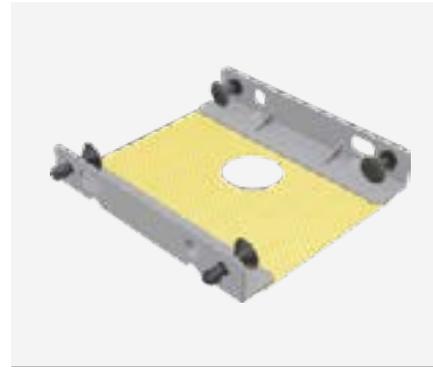
# ANTIBACTERIAL MASKS FOR EXTREMITIES



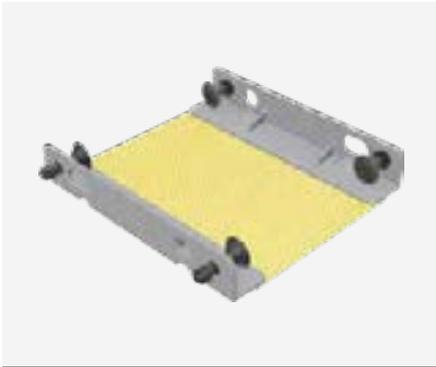
Art. N° 35792/32MA  
3-points foot mask



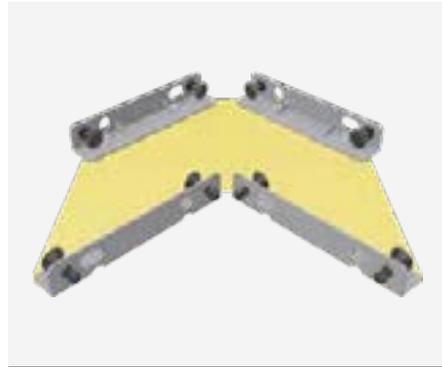
Art. N° 35793/32MA  
2-points knee mask



Art. N° 35794/2MI  
2-points hand mask



Art. N° 35795/2MI  
2-points elbow mask - straight



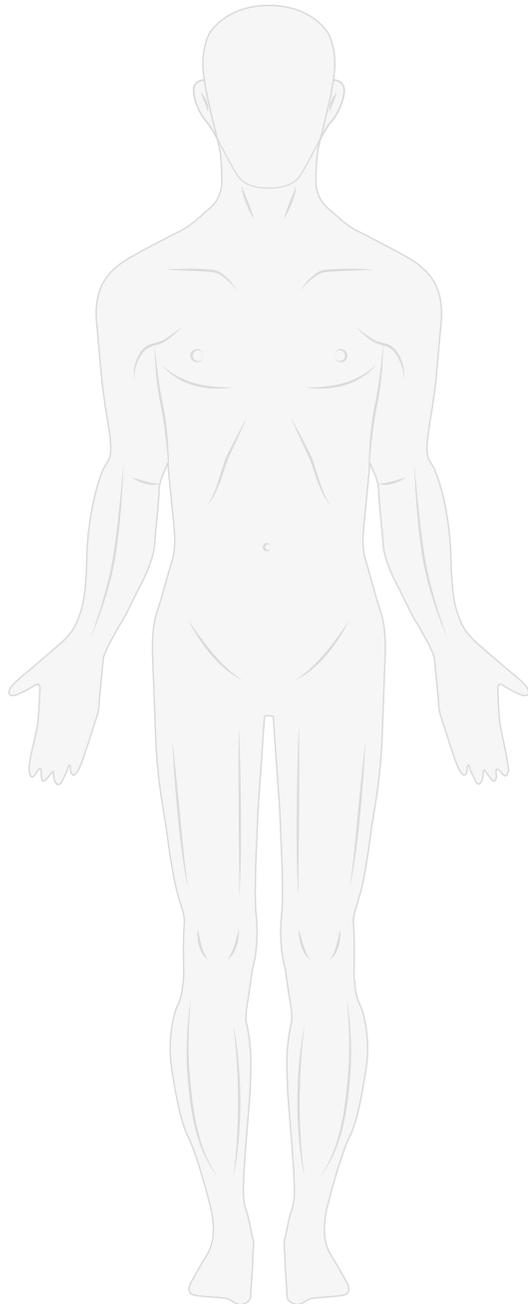
Art. N° 35796/2MI  
4-points elbow mask - curved



Art. N° 35799/2MI/R  
5-points shoulder mask (right shoulder)

Art. N° 35799/2MI/L  
5-points shoulder mask (left shoulder)

# ACCESSORIES



Orfit offers an extensive range of accessories to increase the precision and comfort of your treatment.

Vacuum bags

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Moldcare

---

Bolus material

---

Cyberknife full body cushion

---

Comfort cushions

---

Water bath

---

Digital dry-heat convection oven

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Cleaning products

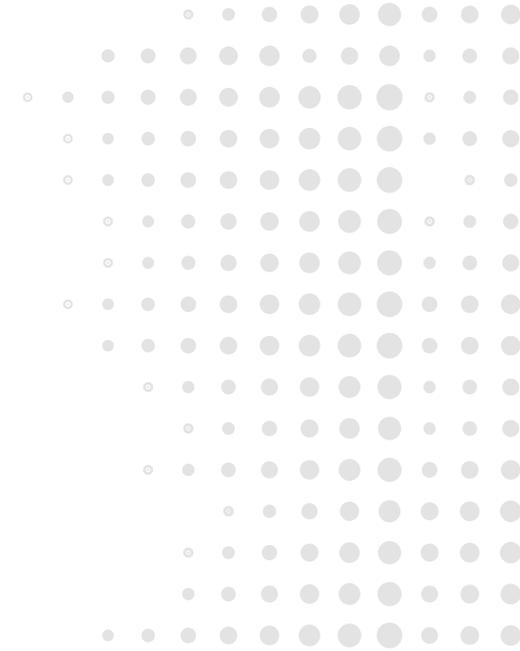
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Storage solutions

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Fixation devices

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## VACUUM BAGS

The combination of Orfit Vacuum Bag Cushions and Efficast High Precision Frameless masks enables you to achieve a highly customized immobilization of your patient with high precision, excellent reproducibility and great comfort for the patient.

The Orfit Vacuum Bags are more narrow and longer than conventional vacuum bags. This ensures a much more intimate contouring to the patient's anatomy. The head and neck bags are designed for specific use in combination with the Orfit 3D shaped Head Supports and the Orfit Hybrid masks to offer an unsurpassed high precision immobilization that limits patient movement to 1.5 mm and less.

The half body bags for adults and the pediatric bags have a narrow shape to easily fit on the All-in-One and SBRT base plate in combination with an Efficast thermoplastic mask.

The Orfit Vacuum Bags are made from radio-translucent materials that will provide artefact free image clarity with minimal beam attenuation.

A special coated nylon bag material in combination with the thin fill helps to ensure intimate mold definition.

The bags are easy to clean and are designed to withstand the rough handling conditions of a busy radiation oncology department.

A molded Orfit Vacuum Bag will maintain its integrity during the course of treatment (up to six weeks), which ensures precise and reproducible patient positioning from imaging through the entire treatment process.

The Orfit vac bags are compatible for use with CT, MRI (when used with Orfit MRI compatible base plates), PET/CT, SPECT and Ultrasound imaging modalities.

The Orfit Vacuum Bag Cushion (VBC) System includes the following immobilization/positioning applications:

- > Custom individual patient head support: The small size Orfit bag (Art. N° 18055) when used in combination with the Orfit 3D Head Support enables you to create a custom head support mold that eliminates all gaps in the neck area while providing unmatched patient comfort.
- > Custom thoracic immobilization/positioning: The half-body Orfit bag (Art. N° 18056) is perfect when you need to create a customized thoracic immobilization. The half-body bag is compatible for use with the Orfit All-in-One Base Plate and SBRT Base Plates.
- > Custom pediatric CNS immobilization/positioning: The pediatric full body Orfit bag (Art. N° 18057) is designed specifically for CNS treatment.

## VACUUM BAGS

### CUSTOM TYPES

A broad range of accessories is available to increase the versatility of the Orfit VBC System:

- > Indexing Bar (Art. N° 18059):  
You can easily index the vac bags directly to the couch top using a 2-pin bar.
- > Arm Rest Adapter Cushion (Art. N° 29036):  
Provides increased comfort and support by ensuring a smooth transition from thorax to shoulders and arms.
- > Vacuum Pump:  
For quick and easy use with Orfit Vacuum Bags.



Art. N° 18209

AIO vacuum bag half body - adult

19" (w) x 35.5" (l)

16 liter



Art. N° 18210

AIO vacuum bag full body - pediatric

13.5" (w) x 49" (l)

16 liter

## VACUUM BAGS

### CUSTOM TYPES



Art. N° 18208

Individual head support vacuum bag

8" (w) x 18" (l)

0.9 liter

### ADDITIONAL VACUUM BAGS

Art. N°

18200	Vacuum bag 700 x 1825 mm / 50 liter
18201	Vacuum bag 1130 x 1375 mm / 51 liter / T-shape
18202	Vacuum bag 850 x 1825 mm / 75 liter
18203	Vacuum bag 900 x 2325 mm / 117 liter
18204	Vacuum bag 700 x 1625 mm / 45 liter
18205	Vacuum bag 750 x 1025 mm / 35 liter
18206	Vacuum bag 700 x 1625 mm / 58 liter
18207	Vacuum bag 850 x 1540 mm / 53 liter
18200/INDEX	Vacuum bag 700 x 1825 mm / 50 liter - indexed
18201/INDEX	Vacuum bag 1130 x 1375 mm / 51 liter / T-shape - indexed
18202/INDEX	Vacuum bag 850 x 1825 mm / 75 liter - indexed
18203/INDEX	Vacuum bag 900 x 2325 mm / 117 liter - indexed
18204/INDEX	Vacuum bag 700 x 1625 mm / 45 liter - indexed
18205/INDEX	Vacuum bag 750 x 1025 mm / 35 liter - indexed
18206/INDEX	Vacuum bag 700 x 1625 mm / 58 liter - indexed
18207/INDEX	Vacuum bag 850 x 1540 mm / 53 liter - indexed

## VACUUM BAG ACCESSORIES

### HOSES AND CONNECTORS



**Art. N° 18097**  
Hose connector for hose ID4 + 5/32



**Art. N° 18054**  
Transparent hose ID4 (2 meters)

### SIDE PANELS FOR MOLDING



**Art. N° 32030**  
Side panels for individual cushions (4 pcs.)

### PUMPS



**Art. N° 18058**  
Vacuum pump with hose,  
hose connector and cable



**Art. N° 18076**  
High capacity vacuum pump with hose,  
hose connector and cable

Art. N°	Voltage	Country
18058/230EU	230	EU
18058/230UK	230	UK
18058/230CH	230	CH
18058/100J	100	J
18058/115	115	US
18076/230EU	230	EU
18076/230UK	230	UK
18076/230CH	230	CH
18076/100J	100	J
18076/115	115	US

## VACUUM BAG ACCESSORIES

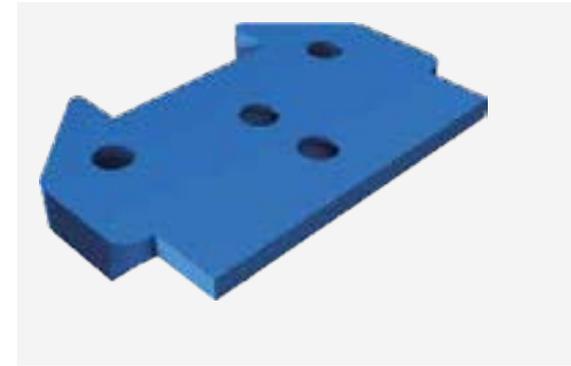
### INDEXING DEVICES

You can easily index the vacuum bags directly to the couch top using a 2-pin bar.



Art. N° 18059  
Indexing bar (1pc.)

The arm rest adapter provides increased comfort and support by ensuring a smooth transition from thorax to shoulders and arms.



Art. N° 29036  
AIO arm rest adapter for use with vacuum bag



The indexing bar can be used in combination with a 2-pin bar or an Orfit base plate

# MOLDCARE\*



Art. N° 18090  
15 cm x 20 cm



Art. N° 18091  
20 cm x 25 cm



Art. N° 18092  
20 cm x 45 cm



Art. N° 18094  
Moldcare cushion type S



\* Moldcare is a trademark from ALCARE

# BOLUS MATERIAL

The thermoplastic bolus material, which is available in sheets and pellets, is a specially formulated, rigid thermoplastic with a low melting temperature. It is very easy to mold and can be placed on thermoplastic masks. After heating, it also sticks to itself, which makes it possible to make thicker bolus sheets if needed.

## SHEETS BEIGE



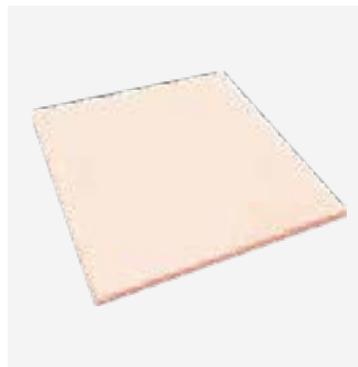
Art. N° 8336.S01/R/53  
10 cm x 10 cm x 5 mm



Art. N° 8336.S01/R/58  
15 cm x 15 cm x 5 mm



Art. N° 8336.S01/R/59  
20 cm x 20 cm x 5 mm



Art. N° 8336.S01/R/60  
30 cm x 30 cm x 5 mm



Art. N° 8333.S01/R  
45 cm x 60 cm x 2 mm

## BOLUS MATERIAL

### SHEETS BEIGE



Art. N° 8336.S01/R/53 - 1 CM  
10 cm x 10 cm x 10 mm



Art. N° 8336.S01/R/58 - 1 CM  
15 cm x 15 cm x 10 mm



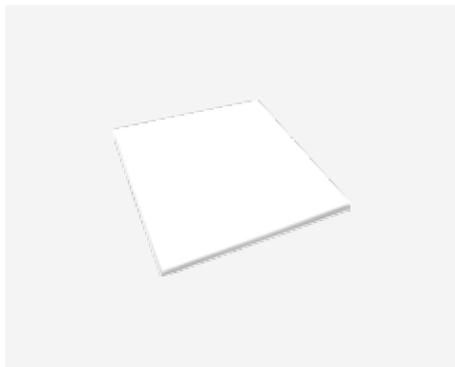
Art. N° 8336.S01/R/59 - 1 CM  
20 cm x 20 cm x 10 mm



Art. N° 8336.S01/R/60 - 1 CM  
30 cm x 30 cm x 10 mm

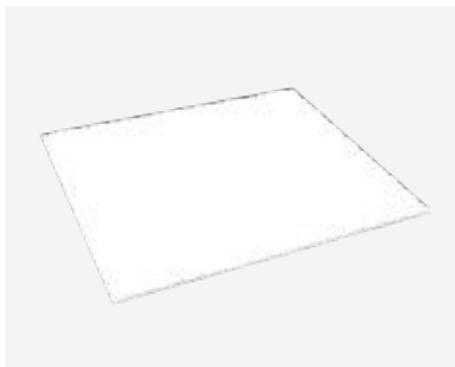
## BOLUS MATERIAL

### SHEETS WHITE



Art. N° 8313N.S01/R

22.5 cm x 20 cm x 2 mm



Art. N° 8333N.S01/R

45 cm x 60 cm x 2 mm

### PELLETS



Art. N° 703011/1

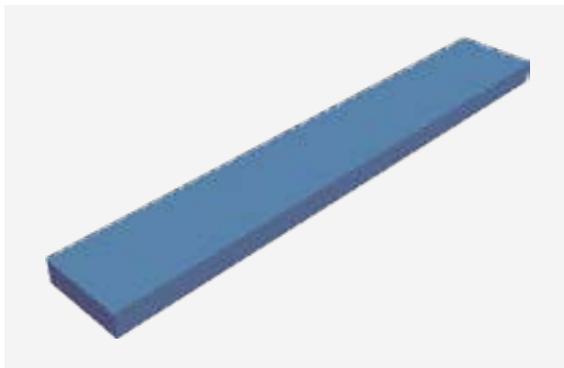
Bag of 500g

## CYBERKNIFE FULL BODY CUSHION

The full body cushion for the Cyberknife Couch Top is designed for spinal and thorax treatment. The patient is positioned supine on the cushion with the arms along the side of the body.

Due to the narrow width of the cushion, the arms will be positioned next to the cushion on the treatment table, instead of on top of the cushion.

This allows the use of lateral fields to radiate the spine and thorax without the arms being located in the treatment field.

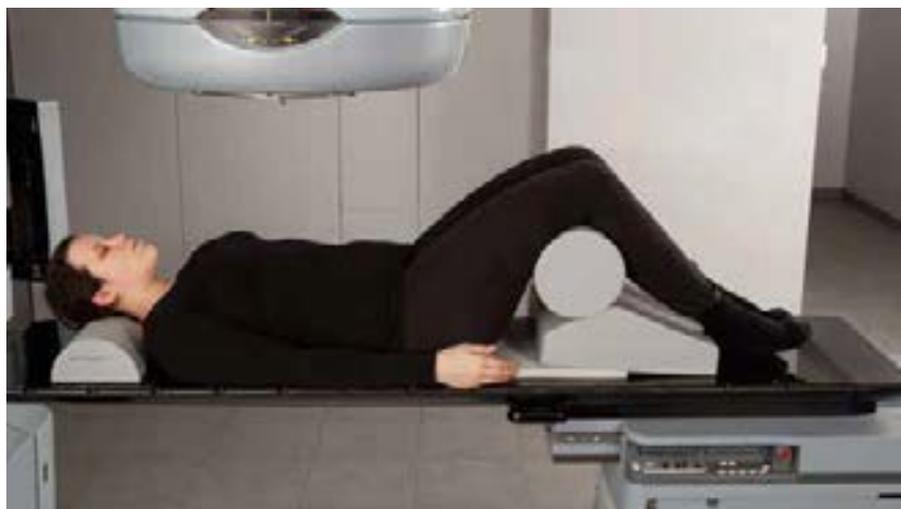


Art. N° 32118

Cyberknife full body cushion



# COMFORT CUSHIONS



## COMFORT CUSHIONS

### PATIENT SUPPORT CUSHIONS



Art. N° 32005/2-V2  
Trunkal cushion  
800 x 400 x 20 mm



Art. N° 32005/4-V2  
Small block  
200 x 200 x 40 mm



Art. N° 32005/5-V2  
Medium block  
200 x 200 x 60 mm



Art. N° 32005/6-V2  
Large block  
200 x 200 x 100 mm



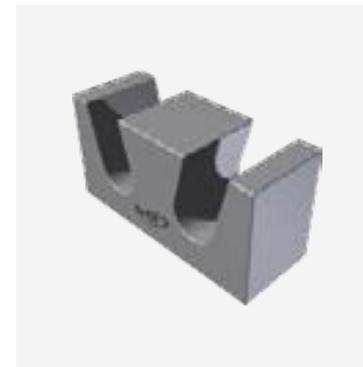
Art. N° 32005/8-V2  
Wide wedge  
400 x 250 x 100 mm  
19.8°



Art. N° 32005/8A-V2  
Small wedge  
200 x 250 x 100 mm  
19.8°



Art. N° 32005/10-V2  
Leg support  
400 x 400 mm



Art. N° 32005/11-V2  
Foot support  
400 x 150 x 200 mm

## COMFORT CUSHIONS

### PATIENT SUPPORT CUSHIONS



Art. N° 32005/14-V2

Cylindrical

knee support

544 x D200 mm



Art. N° 32005/15-V2

Half cylindrical

knee support

544 x R100/50 mm



Art. N° 32006-V2

Set of 10 comfort cushions

Use in combination  
with our standard  
products to increase  
patient comfort.

# WATER BATHS

## FEATURES AND BENEFITS

### Art. No. 35098/L

#### Digital stainless steel water bath - extra large

- > Interior dimensions: 26" (L) x 22" (W) x 5" (H).
- > Extra large tank handles the largest size thermoplastic masks and sheets.
- > Overall dimensions: 33"(L) x 26"(W) x 8" (H).
- > Digital control ensures precise water bath temperatures within  $\pm 1$  degree.
- > Hinged lid opening in four positions.
- > Bright LED display - easy to use.



Art. N° 35098/L

### Art. No. 35098

#### Stainless steel water bath - large: analog controls

- > Interior dimensions: 24 1/2" (L) x 18 1/2" (W) x 5" (H).
- > Accommodates large size thermoplastic masks and sheets.
- > Overall dimensions: 28 1/2" (L) x 21" (W) x 7" (H).
- > Hinged stainless steel split-lid is designed to open completely or to one side with one hand leaving the other hand free.
- > Dual high/low thermostatic temperature controls.



Art. N° 35098



Art. N° 35097/RE

Cleaning product for water bath  
500 ml

# DIGITAL DRY-HEAT CONVECTION OVEN

## FEATURES AND BENEFITS

The Dry Oven is ready for use within a few minutes of starting the heating cycle.

The Dry Oven uses a highly accurate Digital temperature controller. The controller incorporates set point and process temperature displays. The temperature can be adjusted between 150°F and 180°F.

The drawer incorporates a non-stick support rack sized to accept 5-points head, neck and shoulder masks.

Art. N°	Voltage	Region/Country
35121/120US	120	US



# CLEANING PRODUCTS



Art. N° 32836

Aniospray Quick  
(3 bottles and 1 atomizer)



Art. N° 32837

Wip'Anios Excel package (100 wipes)

These spray and wet wipes cleaning products are suitable for cleaning of Orfit immobilization devices.

# STORAGE SOLUTIONS



Art. N° 32044

Storage stand for base plates



Art. N° 29099

Wall mount storage stand for base plates

# FIXATION DEVICES

Other fixation devices can be found on [www.orfit.com](http://www.orfit.com)



Art. N° 32154  
2-pin indexing bar for Exact\* couches



Art. N° 32166  
2-pin indexing bar for Exact\* couches



Art. N° 32191  
2-pin indexing bar for iBEAM\* couches



Art. N° 32165  
2-pin indexing bar for Prodigy couches - 53 cm



Art. N° 32208  
2-pin indexing bar for Prodigy 2 couch - 53 cm



Art. N° 32190  
2-pin bar for Pinpoint couches - 50 cm

\*Exact is a trademark of VARIAN Medical Systems Inc. / \*iBEAM is a trademark of Medical Intelligence

# PRODUCT INFORMATION AND EDUCATION

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Orfit offers a variety of tools to help improve the experience with the Orfit immobilization devices. These tools include technical data sheets, patient setup forms, instructions for use, instructional movies, etc.

## WEBSITE

[www.orfit.com](http://www.orfit.com)

The Orfit website is a rich source of valuable and useful information. It contains information on all products and accessories, as well as instructions for use.

## ORFIT BLOG

[www.orfit.com/radiation-oncology/blog](http://www.orfit.com/radiation-oncology/blog)

New products, press releases and relevant industry news can be found on the Orfit blog.

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## INSTRUCTIONAL VIDEOS

[www.youtube.com/OrfitIndustries](http://www.youtube.com/OrfitIndustries)

- > How to mold a 3-points mask
- > How to mold a 5-points mask
- > How to mold a 3-points open face hybrid mask
- > How to mold a 5-points open face hybrid mask
- > The AIO Solution
- > Sagittilt Prone Breast Solution
- > The SBRT Solution

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## SOCIAL MEDIA

 [www.facebook.com/OrfitIndustries](http://www.facebook.com/OrfitIndustries)

 [www.linkedin.com/company/orfit-industries](http://www.linkedin.com/company/orfit-industries)

 [www.twitter.com/orfit](http://www.twitter.com/orfit)

# DOSIMETRIC CHART

## THERMOPLASTIC MASK MATERIALS

Product reference	Measured values			
	Density (g/cm <sup>3</sup> )	Absorption Factor (AF%) ( $\pm 0,15\%$ )		Skin build-up (mm H <sub>2</sub> O equiv.) ( $\pm 0,1$ mm)
		6MV (%)	15 MV (%)	
Efficast 1.6 mm micro	1,13	0,40	0,20	1,70
Efficast 2 mm maxi	1,13	0,40	0,20	1,70
Efficast 2 mm micro	1,13	0,45	0,25	2,20
Efficast 2.4 mm maxi	1,13	0,50	0,35	2,30
Efficast 3.2 mm maxi	1,13	0,70	0,45	2,90
Nanor 1.2 mm micro+	1,17	0,32	0,25	1,20
Nanor 1.6 mm micro+	1,17	0,46	0,32	1,60
U-Plast 1.6 mm micro	1,13	0,40	0,20	1,70
U-Plast 2 mm maxi	1,13	0,40	0,20	1,70
U-Plast 2.4 mm maxi	1,13	0,50	0,35	2,30
U-Plast 3.2 mm maxi	1,13	0,70	0,45	2,90
Hybrid (Efficast 2MA, Orfilight 16MI)	NA	0,65	0,45	3,00
Hybrid (Efficast 16MI, Nanor 12MI+)	NA	0,54	0,34	2,10
Bolus (per mm of material)	1,13	0,28	0,20	1,30
HP L-Shaped profiles (ABS)	1,13	0,73	0,53	2,40

Note: Use these numbers as a guidance only. Perform the measurements again in your department to verify these results.

# DOSIMETRIC CHART

## POSITIONING HARDWARE

Product reference	Measured values			
	Density (g/cm <sup>3</sup> )	Absorption Factor (AF%) (± 0,15%) 6MV (%)	15 MV (%)	Skin build-up (mm H <sub>2</sub> O equiv.) (± 0,1 mm)
<b>Base plates</b>				
12 mm thick in carbon fiber laminate - 32110, 32130, 32140, 32111, 32122, 32124	NA	0,50	0,40	2,10
12 mm thick in high pressure laminate - 35751N, 35754/6N	1,40	4,90	4,00	17,00
30 mm thick in carbon fiber laminate or glass fiber - 32301, 32150 (also the NOLS and PED versions), 32317/1, 32317/14, 32317/19	NA	1,40	1,20	4,00
30 mm thick AIO in high pressure laminate - 32204	1,40	4,90	4,00	17,00
12 mm thick in polycarbonate - 32113, 32117, 32097, 32809	1,20	4,20	3,40	14,60
<b>Head Supports</b>				
Low density range (in %/cm foam)	0,03	0,48	0,25	0,95
Regular density range (in %/cm foam)	0,22	0,57	0,46	1,38
<b>Blocks and wedges</b>				
Blocks and wedges in carbon fiber laminate	NA	0,60	0,50	2,20
Blocks and wedges in rigid PE	0,95	4-17	3-13,5	-
<b>AIO Cushions</b>				
Per cm of foam	0,03	0,12	0,09	0,20
<b>Vacuum Bags</b>				
10 mm thickness (deflated)	NA	0,20	0,20	0,58
100 mm thickness (deflated)	NA	3,20	2,00	8,73

Note: Use these numbers as a guidance only. Perform the measurements again in your department to verify these results.



The  
precision  
expert

[www.orfit.com](http://www.orfit.com)



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