











## Discover the patient-centric solutions from Orfit

For more than 30 years, Orfit has been providing solutions for immobilizing patients in radiation oncology.

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.

Orfit products and our market support are destined to 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, SBRT, 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 especially 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:

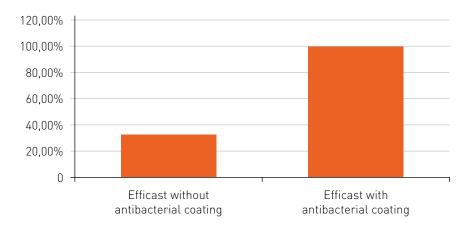
- > Methicillin-Resistant Staphylococcus aureus (MRSA)
- > Staphylococcus aureus
- > Escherichia colli
- > Vancomycin-Resistant Enterococci (VRE)

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 WHO considers the Escherichia colli 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



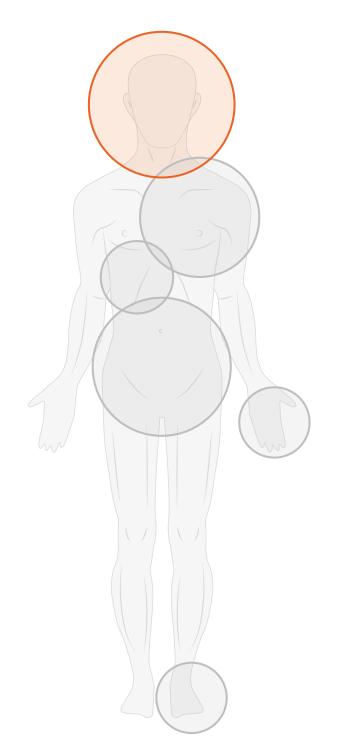
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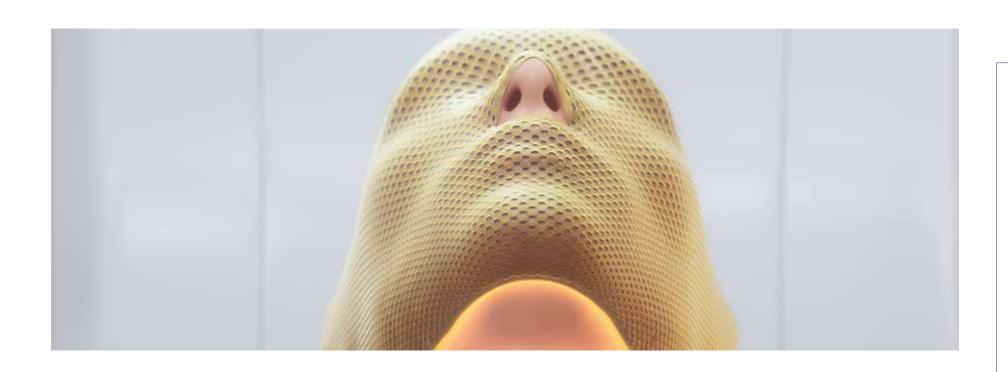
## HEAD, NECK AND SHOULDERS

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 insure 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 65°-70°C (149°F - 158°F).

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

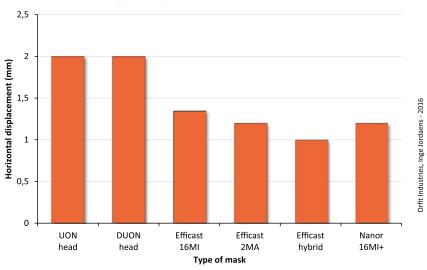
A unique combination of high precision immobilization, ease of molding, safety and patient comfort Our engineering and production capabilities with proprietary thermoplastic formulations result in the best mask materials available. Stretch and shrinkage properties are always the same and assure a reliable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

Orfit 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 DIFFERTENT IMMOBILIZATION MASKS FROM ORFIT INDUSTRIES



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

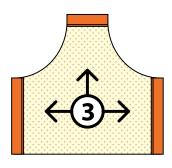
An extensive range of Orfit masks is available to meet specific patient requirements and your immobilization preferences.

- > 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.

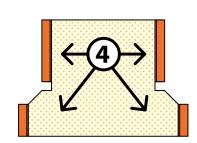
- > Nose only
- > Nose and mouth
- > Nose, eyes and mouth

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



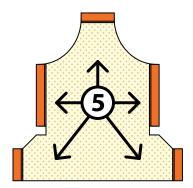
head

3-points



head, neck

4-points



head, neck

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

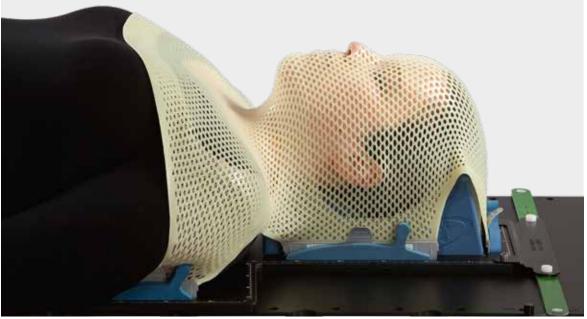
Linthout, N. (2006), Six dimensional analysis with daily stereoscopic x-ray imaging of intrafraction patient motion in head and neck treatments using five points fixation masks, Med. Phys., 33 (2), 504-513

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.

### 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



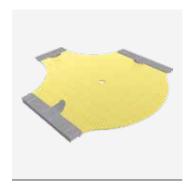
Art. N° 35763/2MA/M
3-points head mask
with nose and mouth hole



Art. N° 35763/2MA/EM\*

3-points head mask

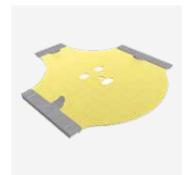
with nose, eyes and mouth hole



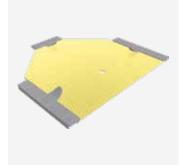
Art. N° 35779/2MA\*
3-points head mask
with nose hole
with neck flap



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

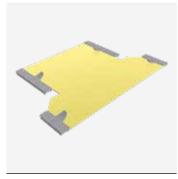


Art. N° 35760/EFF2MA\*
3-points head mask
with nose hole
with extra cranial flaps

### HEAD, NECK AND SHOULDERS | HIGH PRECISION

## HIGH PRECISION ANTIBACTERIAL MASKS

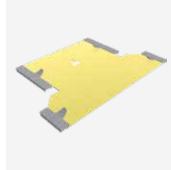
### SINGLE LAYER



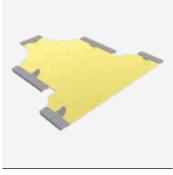
Art. N° 35764/2MA/NH 4-points head, neck and shoulders mask



4-points head, neck and shoulders mask with nose hole



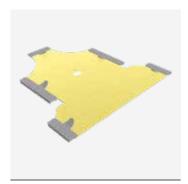
Art. N° 35764/2MA/M
4-points head, neck and shoulders mask with nose and mouth hole



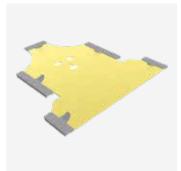
Art. N° 33700/2MA/NH
5-points head, neck and shoulders mask



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



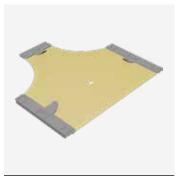
Art. N° 33730/4
5-points head, neck and shoulders mask with nose hole
large size

All masks are available in 2 mm thickness with maxi perforation [Art. N $^{\circ}$  with extension /2MA]

 $\label{lem:def:Additional} \mbox{Additional available thickness and perforation type:}$ 

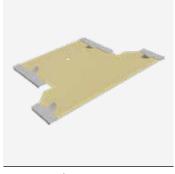
- \* 1.6 mm micro perforation (Art.  $N^{\circ}$  with extension/16MI)
- \*\* 3.2 mm maxi perforation (Art.N° with extension /32MA)

### 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

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



Art. N° 33700/2MI+N

5-points head, neck and shoulders mask with nose hole

A thin, yet strong mask

Fits around the patient like a surgical glove

Lower pressure on the patient's face

Adapts to minor patient swelling

www.orfit.com/nanor for more information.



### **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.

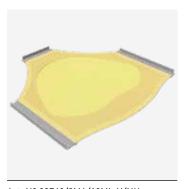
These reinforced thermoplastic masks offer the ease of use of a regular thermoplastic mask with an unparalleled horizontal stability and fixation force. In combination with the unique Orfit High Precision Head Supports, one is able to really achieve a good immobilization and positioning of the patient.

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.

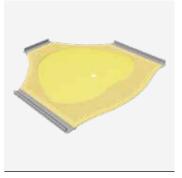
The reinforcement rim in the mask is made from Nanor thermoplastic material. This ultra-thin material (1.2 mm thick) improves the stability of the mask dramatically, while maintaining the comfort. The use of nanotechnology allows the production of a material that has a high bending modulus with a limited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

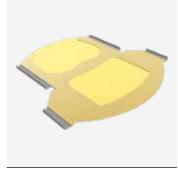
### **HYBRID**



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

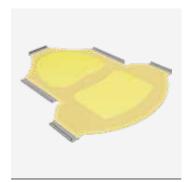


Art. N° 33740/2MA/12MI+N 3-points hybrid head mask with nose hole

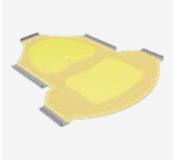


Art. N° 33737/2MA/12MI+N/NH 4-points hybrid head, neck and shoulders mask

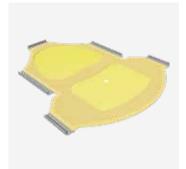
Nanor-reinforced thermoplastic masks are thinner and lighter with excellent stability and patient comfort.



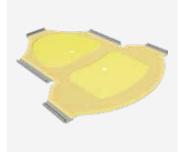
Art. N° 33730/2MA/12MI+N/NH 5-points hybrid head, neck and shoulders mask



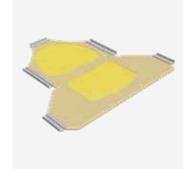
Art. N° 33730/2MA/12MI+N
5-points hybrid
head, neck and shoulders mask
with nose hole



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



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

### **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 warrants 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 nanotechnology, that allows to make 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.

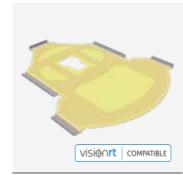
The 3-points Open Face Hybrid Head mask has been evaluated and confirmed by Vision RT as compatible for use with Vision RT products\*.

www.visionrt.com

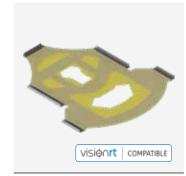


VİSİQOPT COMPATIBLE

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



Art. N° 33735/16MI/12MI+N
5-points open face and neck hybrid head, neck and shoulders mask

<sup>\*</sup> Vision RT compatible disclaimer available on 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° 32130/12 High precision small base plate in CFL Head and neck



Art. N° 32130/MR
High precision small base plate
Head and neck
MR Safe



Art. N° 32110/12 High precision base plate in CFL Head, neck and shoulders



Art. N° 32110/MR
High precision base plate
Head, neck and shoulders
MR Safe



Art. N° 32150/12

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)

## HIGH PRECISION BASE PLATES

### **LOW DENSITY**



Art. N° 32064

High precision tiltable base plate in CFL

Head and neck

### **HIGH DENSITY**



High precision base plate in HPL
Head and neck
MR Safe



Art. N° 32113

High precision base plate in polycarbonate for Cyberknife

Head and neck



Art. N° 35751N

High precision base plate in HPL

Head, neck and shoulders

MR Safe



Art. N° 32117

High precision base plate in polycarbonate for Cyberknife

Head, neck and shoulders

## HIGH PRECISION HEAD SUPPORTS

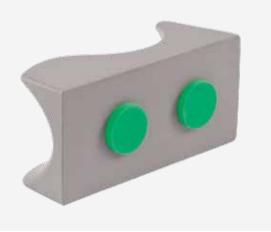
An extremely important part of the Orfit High Precision Frameless Mask System is the innovative 3D Head Support with cranial stop.

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° 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

### HEAD, NECK AND SHOULDERS | HIGH PRECISION

## HIGH PRECISION HEAD SUPPORTS

### **REGULAR DENSITY - EXTRA SOFT**

Art. Nº 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

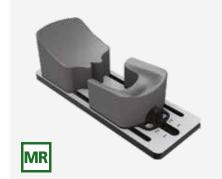
With lateral neck flaps for patients

with a curved spine

### **PRONE**







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

## THERMOFIT PERSONALIZED HEAD SUPPORT

Thermofit is an innovative thermoplastic solution for the creation of a personalized 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 PERSONALIZED 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 dosimetrical properties with a low attenuation percentage.

Thermofit is odorless and has a long shelf life.







Art. N° 32391
Thermofit
23 x 30 cm



Art. N° 32392
Thermofit
30 x 35 cm



Art. N° 32405/10 (for Thermofit 32390)
Art. N° 32406/10 (for Thermofit 32391 and 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. Nº 35704

90

Carbon fiber wedge



Art. N° 35706

40 mm

Carbon fiber block



Art. N° 35707

18°

Carbon fiber wedge

### HEAD, NECK AND SHOULDERS | HIGH PRECISION

## HIGH PRECISION BLOCKS AND WEDGES

### **LOW DENSITY**







**Art. N° 35706**40 mm



Art. N° 35704 9°



**Art. N° 32424** 13.5°



Art. N° 35707

### 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°

Art. N° 32712 (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°
32424	wedge 13.5°

## HIGH PRECISION BLOCKS AND WEDGES

### **LOW DENSITY**







**Art. N° 35706/MR**40 mm

MR



**Art. N° 35704/MR** 9°



Art. N°
35703/MR
35706/MR
35704/MR
35707/MR

32424/MR

Art. N° 32424/MR 13.5°

MR



Art. N° 35707/MR

## Art. N° 32700/MR (set) Set of low density blocks and wedges - MR Safe

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 - MR Safe

Description
block 20 mm
block 40 mm
wedge 9°
wedge 13.5°

## Art. N° 32712/MR (set) Set of low density blocks and wedges - MR Safe

Description	
block 20 mm	
block 40 mm	•
wedge 9°	

wedge 18°

wedge 13.5°



### HEAD, NECK AND SHOULDERS | HIGH PRECISION

## HIGH PRECISION BLOCKS AND WEDGES

### **HIGH DENSITY**



**Art. N° 35754/1** 20 mm

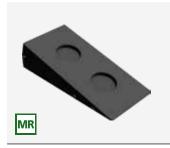


Art. N° 35754/2 40 mm

MR



Art. N° 35754/3



Art. N°

35754/1

35754/2

35754/3 .....35754/5

35754/4

Art. N° 35754/5 13.5°

MR



Art. N° 35754/4

## Art. N° 35754/8 (set) Set of high density blocks and wedges - rigid PE



## 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°

### Art. N° 35754/11 (set) Set of high density blocks and wedges - rigid PE



wedge 18°



## 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**

### KNEE AND FEET SUPPORT MR





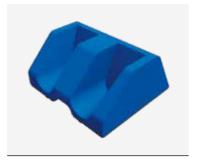
Art. N° 32317/4 Knee support - indexed on 2-pin bar



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



# PUSH-PIN IMMOBILIZATION SYSTEMS

At Orfit we are dedicated to provide the best possible solutions for patient positioning and immobilization in radiation oncology.

The most important component of patient immobilization is the thermoplastic mask. The superior properties of Orfit thermoplastic precuts assure an easy, comfortable and precise mask-making process.

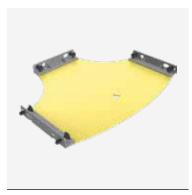
Our thermoplastic masks with push-pin type profiles fit seamlessly on existing hardware that you may have in your department.

Superior patient immobilization with Orfit thermoplastic masks

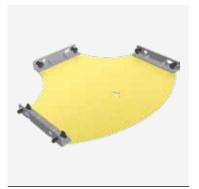


### PUSH-PIN ANTIBACTERIAL MASKS

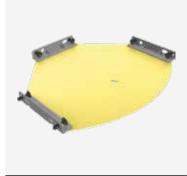
### SINGLE LAYER



Art. N° 35773/2MA\*/\*\*
3-points head mask
with nose hole



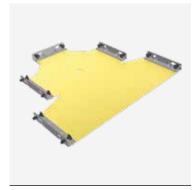
Art. N° 35768/2MA\*/\*\*
3-points head mask
with nose hole
with neck flap



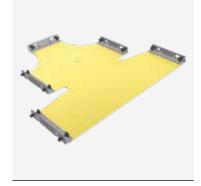
Art. N° 35776/2MA\*/\*\*
3-points head mask
with nose hole
with neck and extra cranial flaps



Art. N° 35774/2MA
4-points
head, neck and shoulders mask
with nose hole



Art. N° 33770/2MA\*\*
5-points
head, neck and shoulders mask
with nose hole
regular size



Art. N° 35791/2MA\*\*
5-points
head, neck and shoulders mask
with nose hole
large size

Masks with Art. N° with extension /2MA are available in 2 mm thickness with maxi perforation

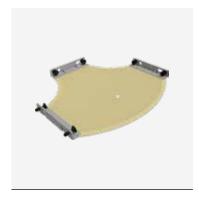
Additional available thicknesses and perforation types:

- \* 1.6 mm micro perforation (Art. N° with extension /16MI)
- \*\* 2.0 mm micro perforation (Art.  $N^{\circ}$  with extension /2MI)

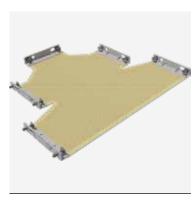
#### HEAD, NECK AND SHOULDERS | PUSH-PIN

### PUSH-PIN ANTIBACTERIAL MASKS

### NANOR® SINGLE LAYER



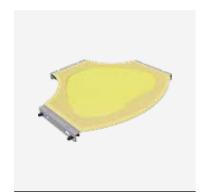
Art. N° 35768/16MI+N
3-points head mask with nose hole
with neck flap



Art. N° 33770/2MI+N
5-points head, neck and shoulders mask with nose hole

### PUSH-PIN ANTIBACTERIAL MASKS

### **HYBRID**



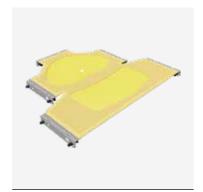
Art. N° 33747/2MA/12MI+N/NH
3-points
hybrid head mask



Art. N° 33747/2MA/12MI+N
3-points
hybrid head mask
with nose hole



Art. N° 33739/2MA/12MI+N/NH
5-points
hybrid head, neck and shoulders mask



Art. N° 33739/2MA/12MI+N
5-points
hybrid head, neck and shoulders mask
with nose hole



Art. N° 33755/2MA/12MI+N/NH 5-points hybrid head, neck and shoulders mask

large size



Art. N° 33755/2MA/12MI+N
5-points
hybrid head, neck and shoulders mask
with nose hole
large size

### HEAD, NECK AND SHOULDERS | PUSH-PIN

### PUSH-PIN ANTIBACTERIAL MASKS

### **OPEN FACE HYBRID**





Art. N° 33780/16MI/12MI+N

3-points open face hybrid head mask



Art. N° 33781/16MI/12MI+N

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

<sup>\*</sup> Vision RT compatible disclaimer available on www.orfit.com/app/uploads/Disclaimer-Vision-RT-website.pdf

### HEAD, NECK AND SHOULDERS | PUSH-PIN

### PUSH-PIN ANTIBACTERIAL MASKS

### MASKS WITHOUT PROFILES



Art. N° 35773/2MA/NP\*/\*\*
3-points head mask
with nose hole



Art. N° 35768/2MA/NP
3-points head mask
with nose hole
with neck flap



Art. N° 33770/2MA/NP
5-points
head, neck and shoulders mask
with nose hole
regular size



35791/16MI/NP
5-points
head, neck and shoulders mask
with nose hole
large size

Masks with Art. N° with extension /2MA are available in 2 mm thickness with maxi perforation

Additional available thicknesses and perforation types:

- \* 1.6 mm micro perforation (Art. N° with extension /16MI)
- \*\* 2.0 mm micro perforation (Art. N° with extension /2MI)

### PUSH-PIN ANTIBACTERIAL MASKS

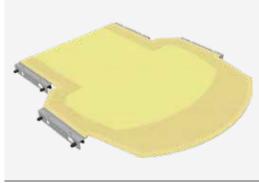
### MASK FOR LUNG TREATMENT



Precision in lung treatment is highly increased by immobilizing the chin and thorax of the patient.

Orfit has designed a hybrid 4-points mask that assures a correct repositioning of the chin, the arms and the chest.

The reinforced part of the mask over the armpit and over the lower ribs prevents rotation of the thorax.



Art. N° 33788/2MI/12MI+N

4-points hybrid lung mask for push-pin hardware

#### PUSH-PIN BASE PLATE

#### **BASE PLATE**



Art. N° 32148

Base plate in CFL for push-pin masks

Head, neck and shoulders



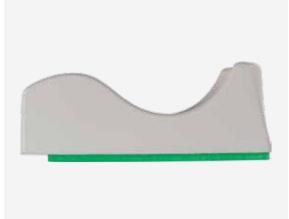
#### PUSH-PIN HEAD SUPPORTS

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 Push-Pin Base Plates.

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







#### PUSH-PIN HEAD SUPPORTS

#### **LOW DENSITY**

Art. N° 32409 (set)

Set of 6 low density head supports (all sizes)









Art. N° 32415



Art. N° 32412



Art. N° 32413



Art. N° 32410



Art. N° 32411

#### **REGULAR DENSITY**

Art. N° 32708-MD (set)

Set of 6 regular density head supports (all sizes)





Art. N° 32423-MD



Art. N° 32423ZF-MD



Art. N° 32421-MD



Art. N° 32421ZF-MD



Art. N° 32422-MD



Art. N° 32422ZF-MD

#### HEAD, NECK AND SHOULDERS | PUSH-PIN

#### **PUSH-PIN HEAD SUPPORTS**

#### REGULAR DENSITY - EXTRA SOFT MR



Art. N° 32450 (set)

Set of 6 regular density head supports - Extra soft (all sizes)













Art. N° 32444

Art. N° 32445

Art. N° 32446

Art. N° 32447

Art. N° 32448

Art. N° 32449

#### **REGULAR DENSITY**



Art. N° 32426-MD Regular density head support

With lateral neck flaps for patients with a curved spine

#### **PRONE**

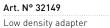


Art. N° 32379 Prone head support rectangular interface Movable forehead cushion

## PUSH-PIN ACCESSORIES

### ADAPTERS FOR HP HEAD SUPPORTS AND BLOCKS AND WEDGES







Regular density adapter

#### **PROFILES IN CARBON FIBER**



Art. N° 35675 Large



Art. N° 35674 Small



Art. N° 35664/20
Push-pin
[set of 20 pieces]



Art. N° 35664/1/20
Push-pins nut
(set of 20 pieces)



Art. N° 35664/2/20
Push-pins pin
(set of 20 pieces)

# 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.

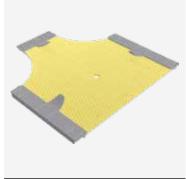


## HIGH PRECISION PEDIATRIC ANTIBACTERIAL MASKS

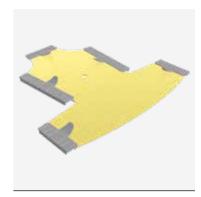
#### SINGLE LAYER



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



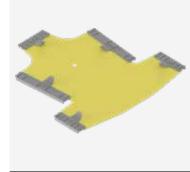
Art. N° 33688/2MA
3-points head mask
with nose hole
medium size



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

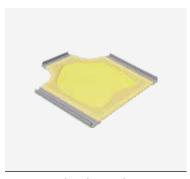


Art. N° 33794/2MA
5-points head, neck and shoulders mask with nose hole
medium size

#### HEAD, NECK AND SHOULDERS | PEDIATRIC

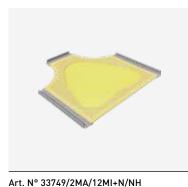
### HIGH PRECISION PEDIATRIC ANTIBACTERIAL MASKS

#### **HYBRID**

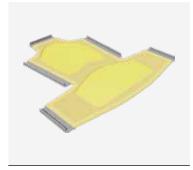


Art. N° 33748/2MA/12MI+N/NH 3-points hybrid head mask

small size

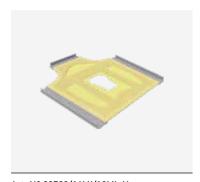


3-points hybrid head mask medium size

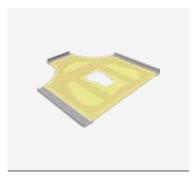


Art. N° 33750/2MA/12MI+N/NH 5-points hybrid head, neck and shoulders mask small size

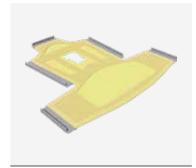
#### **OPEN FACE HYBRID**



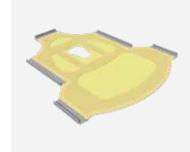
Art. N° 33782/16MI/12MI+N
3-points open face hybrid head mask
small size



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



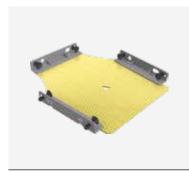
Art. N° 33785/16MI/12MI+N
5-points open face hybrid
head, neck and shoulders mask
small size



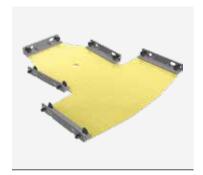
Art. N° 33787/16MI/12MI+N
5-points open face hybrid
head, neck and shoulders mask
medium size

## PUSH-PIN PEDIATRIC ANTIBACTERIAL MASKS

#### SINGLE LAYER



## Art. N° 33690/2MA 3-points head mask with nose hole small size

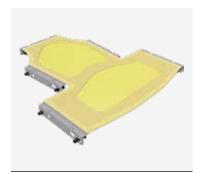


Art. N° 33691/2MA
5-points head, neck and shoulders mask
with nose hole
small size

#### **HYBRID**

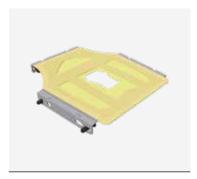


Art. N° 33766/2MA/12MI+N/NH 3-points hybrid head mask small size

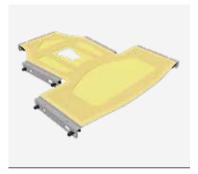


Art. N° 33777/2MA/12MI+N/NH
5-points hybrid
head, neck and shoulders mask
small size

#### **OPEN FACE HYBRID**



Art. N° 33784/16MI/12MI+N
3-points open face hybrid head mask
small size



Art. N° 33786/16MI/12MI+N
5-points open face hybrid
head, neck and shoulders mask
small 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**



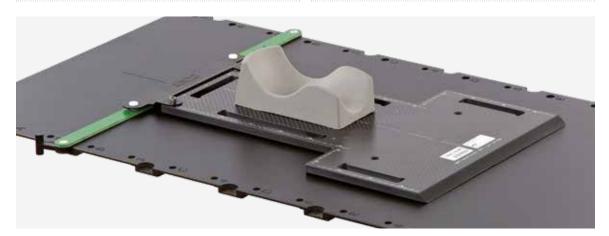
Art. N° 32111

High precision pediatric base plate in CFL

Head. neck and shoulders



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



#### HEAD, NECK AND SHOULDERS | PEDIATRIC

## HIGH PRECISION PEDIATRIC 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.





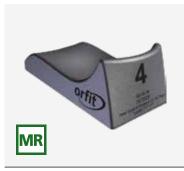
### HIGH PRECISION PEDIATRIC HEAD SUPPORTS

#### **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

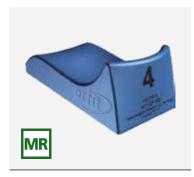
Pediatric head support with lateral neck flaps Extra-small size Age 0 to 5

#### **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

#### **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

#### UON® AND DUON®

#### 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 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.

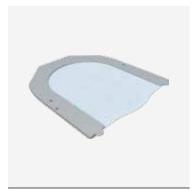
#### Thermoplastic properties

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.

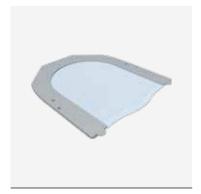


#### **UON® ANTIBACTERIAL MASKS**

#### **HEAD AND NECK**



Art. N° 60110 2.4 mm hybrid perforation



Art. N° 60112
2.4 mm
micro plus perforation

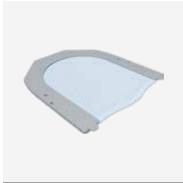


Art. N° 60117

2.4 mm

micro plus perforation

with neck flap



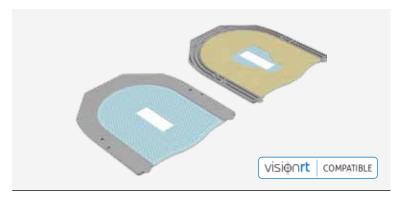
Art. N° 60114 2.4 mm maxi perforation



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

<sup>\*</sup> Vision RT compatible disclaimer available on 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



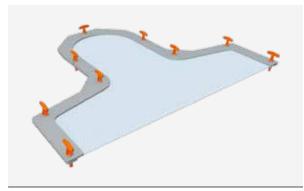
Art. N° 60121
3.2 mm
maxi perforation



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

#### **DUON® ANTIBACTERIAL MASKS**

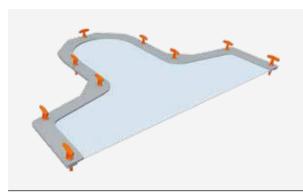
#### **HEAD, NECK AND SHOULDERS**



Art. N° 60001

2.4 mm

micro plus perforation



Art. N° 60002

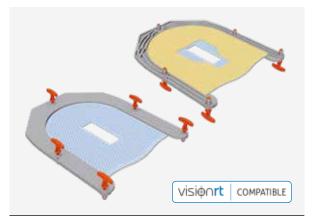
3.2 mm

maxi perforation



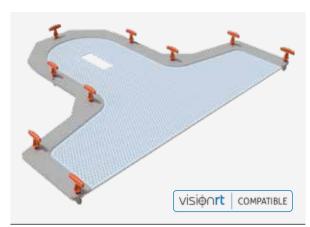
#### **DUON® ANTIBACTERIAL MASKS**

#### **OPEN FACE HYBRID**



Art. N° 60125

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



Art. N° 60009

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

## UON® AND DUON® BASE PLATES

#### **DUON-HP BASE PLATE**



Art. Nº INT-3

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



Art. N° 32095

Base plate for head and neck in CFL 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 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 High Precision 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 is compatible for use with all Orfit Head Supports.





Art. N° 32046
For use with U-shaped base plates
Acrylic



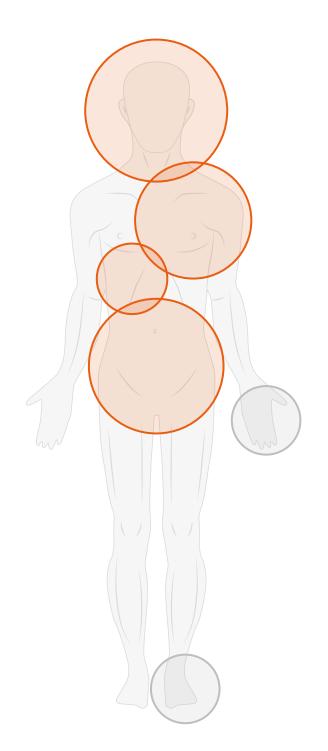
Art. N° 32047

For use with S-shaped base plates

Acrylic



Art. N° 32047-CFL
For use with S-shaped base plates
CFI



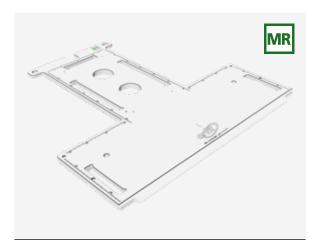
## MRI COMPATIBLE PRODUCTS

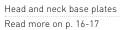
Orfit's range of MRI compatible immobilization devices allows a reproducible setup for each patient, both during simulation and treatment. The devices can be used in the MRI scanner and on the MRI Linac.

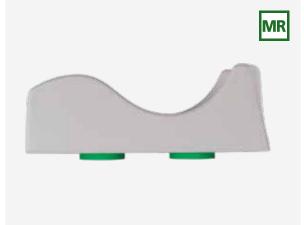
The product range contains high density head and neck base plates for the most common MRI scanners in the market: Siemens, Philips and GE. They allow the setup of the coils in the most optimal position to obtain a good image quality. For the MRI Linac, there are low density versions of the head and neck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

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

All Orfit thermoplastic masks are MR Safe.



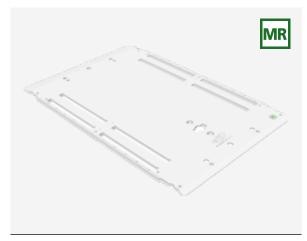




Head supports
Read more on p. 18-20



Blocks and wedges Read more on p. 25-26

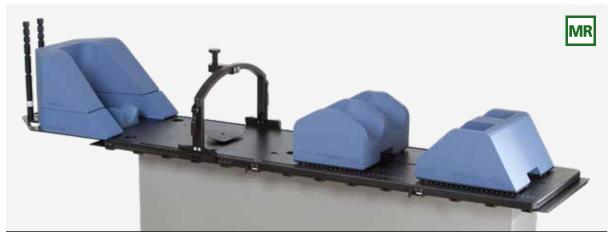


Pelvicast base plate Read more on p. 85



High precision lung board Read more on p. 88-89

#### MRI COMPATIBLE PRODUCTS



The SBRT Solution

Read more on p. 119



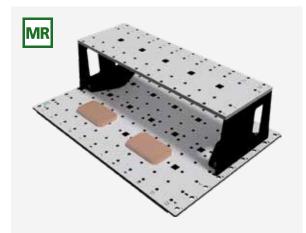
HP PRO base plate

Read more on p. 140



MammoRx

Read more on p. 92, 102-103



Extremities Solution

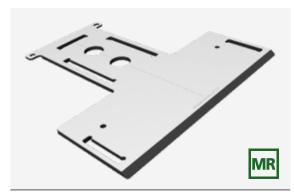
Read more on p.136

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

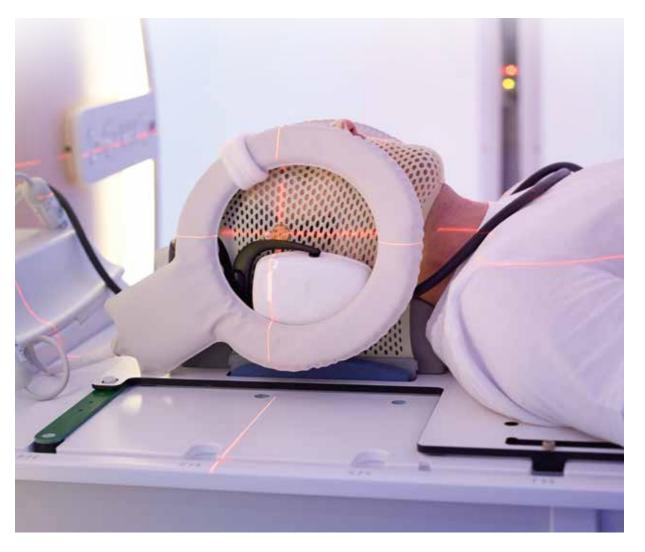
The Orfit MRI-P Solution is designed for Philips MRI Scanners and the Orfit MRI-G Solution for GE MRI Scanners.

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



## 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.

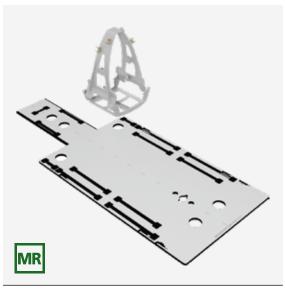
#### ORFIT MRI-S SOLUTION FOR BRAIN, HEAD AND NECK

	1.5 Tesla	3 Tesla
Tim System	> Avanto > Espree > Symphony a Tim System	> Verio > Trio a Tim System
Tim 4G System	> Aera > Sola	> Skyra > Spectra > Vida

#### 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 setup 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.

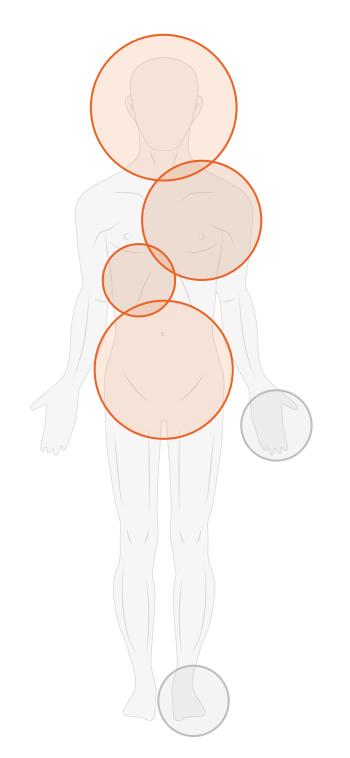
#### MRI COMPATIBLE PRODUCTS







M



#### THE AIO SOLUTION® 3.0

## ALL-IN-ONE PATIENT POSITIONING SYSTEM

#### CREATED BY DR. KATI HIDEGHÉTY

#### **NEW FUNDAMENTALLY REDESIGNED**

The AIO Solution facilitates and refines treatments by limiting potential changes in the patient position to a minimum. With one base plate and different sets of cushions and thermoplastic masks, all parts of the body are positioned and immobilized in a comfortable, exact and reproducible way.

Its different modules turn The AIO Solution 3.0 into a modular system that upgrades or downsizes to meet your specific requirements for patient positioning and immobilization, allowing you to treat patients with lesions in brain, head and neck, thorax, lung and pelvis.

#### Why choose the AIO Solution?

- **Create an ergonomic workplace:** lightweight for RTT and easy to manipulate with one hand only.
- Easy to use: all products index easily together and on the couch.
- **Fast setup:** fast build-up and build-down for maximum patient throughput and a limited amount of accessories.
- **Optimal reproducibility:** every product is indexed reproducibly.
- High durability: durable coating on the cushions that is easy to clean.
- MR Safe: all products exist in an MR Safe version.
- **Compact:** fits a small-bore CT (minimum 65 cm 25.59") and has a limited height to be close to the MR coil for optimal image quality.
- **Comfort for patient:** patients are positioned on top of a cushion.



All information on www.orfit.com/aio

#### Birth of the All-In-One Solution

"My motivation for developing the AIO solution was to enable the use of thermoplastic mask fixation on a large base plate for all imaging modalities for RT planning and for all body regions, while ensuring the best possible healthy tissue protection with intelligent positioning. I intended to define an optimum patient position for radiation delivery - for each tumour type - while providing maximum comfort to the patient. I believe that a complex immobilization system is easy to handle with a reasonable number of adjustments to the individual anatomy, as high repositioning accuracy is provided by the customized thermoplastic mask. In collaboration with Orfit Industries we have developed the AIO system with professional design for traditional, novel and emerging RT techniques requiring high inter- and intrafraction positioning accuracy".

Prof. Dr. Katalin Hideghéty



The AIO Solution contains a cushion set for each anatomical region.

- > Brain, head and neck
- > Thorax and abdomen in supine position
- > Belly and pelvis in supine and in prone position
- > Prone breast position (under development)

All cushions are easily positioned on the base plate in an indexed way. Color codeing enable easy recognition and fast setup of the system:

- > Knee & leg cushions are in grey
- > Thorax/abdomen cushions for supine are in blue
- > Belly/pelvis cushions are in green

Each patient position is reproduced and immobilized by means of a thermoplastic mask that limits movement of the anatomical area of concern.

The AIO Solution is truly an All-In-One system with a head and neck immobilization system, lung board, breast board, abdominal system and belly- and pelvic board in one single product.

AIO prone breast board is under development



#### Daily patient setup made easy

Position of the cushions is easily reproduced during each fraction.

Comprehensive color coding facilitates the use of the cushion combinations.

#### Make patient comfort a priority

Minimal pressure points and soft, ergonomically designed cushions.

#### Made to last

A busy radiation therapy department requires high durability devices to withstand rough handling conditions.



#### Maximize clearance, minimize collision



#### AIO CUSHION SETS

#### BREAST AND LUNG BOARD

The blue cushion set is designed to achieve a comfortable and reproducible supine position of the patient. This position is primarily used for the treatment of malignancies in the thorax and the abdomen. The set consists of wedges, with different angles to increase patient comfort, and arm rests to allow for a comfortable, but reproducible positioning of the arms above the head and out of the treatment fields. Hand grips and head supports will further help in increasing the precision and in finding the correct patient position.

#### **FEATURES AND BENEFITS**

Cushions and wedge lift the upper body of the patients and thereby facilitate breathing. Wedges can be used to adjust the treatment angle.

The coating of the cushions prevents the patient from sliding down.

The armrests have a flat top to support the total upper arm.

This increases the patient's comfort.

Specially developed Efficast masks are used in combination with this set to increase the precision of the treatment. They effectively immobilize the patient in the treated areas by reducing translational and rotational movements.

The indexed head supports position the head in a reproducible way and function as an outstanding reference point for the exact position of the rest of the body.



#### AIO 3.0 MODULES

#### STAND-ALONE BREAST AND LUNG MODULE

Positioning and immobilization solution for

- Lung
- Breast
- Lung and Breast combined



#### ADVANCED BREAST AND LUNG MODULE

Positioning and immobilization solution for

- Lung
- Breast
- Lung and Breast combined
- Including leg immobilization and possibility to add a foot support





#### COMPLETE HEAD AND NECK, BREAST AND LUNG MODULE

Positioning and immobilization solution for

- Brain
- Head and Neck
- Lung
- Breast
- Lung and Breast combined
- Including leg immobilization and possibility to add a foot support
- Use of thermoplastic masks





### AIO FOOT SUPPORT FOR EXTRA COMFORT AND INDEXING



Art. N° 38206 Indexable Foot Support



#### STEREOTACTIC BODY RADIATION THERAPY (SBRT)

The SBRT option for AIO provides a precise, stable and easy to use setup that allows to apply the most effective radiation treatment method for thoracic and abdominal tumors.



#### AIO CUSHION SETS

#### **BELLY AND PELVIC BOARD**

The purpose of the belly board is to keep the intestines of the patient out of the radiation fields for treating malignancies in the pelvis area. The opening in the cushion is meant to accommodate the belly of the patient and thereby effectively separate the small bowels from the area to be treated.



The opening in the belly board can be fitted with a belly insert for patients with little abdominal tissue. The insert is made of a soft foam to increase comfort in the rib cage area.

The head part of the cushion is designed to drop the shoulders of the patient and reduce stress.



The head can be positioned by means of two types of head supports:

- A soft head support in the form of a ring that allows for a comfortable positioning of the head in prone position or sideways.
- A support that fixes the head rigidly in prone position. This support can be adjusted to fit the anatomy of the patient's face.

Pelvicast thermoplastic masks are used to reduce the translational and rotational movements of the patients. A specially designed Leg Separator can be inserted after the patient has mounted the cushion, to fix a 6-points Pelvicast mask. This type of mask will further increase the reproducibility and precision of the treatment.

#### **CLINICAL STUDIES**

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

Tekkendra Singh, T. (2015), Treatment setup errors in pelvic patient comparing Orfit-AIO Solution and Vaclocks immobilization devices, Radiotherapy and Oncology, 115 (S1), S584

#### AIO 3.0 BASE PLATES

The AIO "long board" base plates ensure a reproducible positioning of all body regions. The base plates remain on the treatment couch - irrespective of the type of radiation treatment - or simulation couch throughout the day.

The AIO carbon fiber laminate base plate is made of a low density carbon fiber laminate sandwich structure with excellent dosimetric properties.

#### **AIO 3.0 BASE PLATES**

	Product description	
38001	AIO 3.0 base plate in carbon fiber laminate	
38002	AIO 3.0 base plate in fiber glass - MR Safe	
38005	AIO 3.0 base plate in carbon fiber laminate - without leg separator	
38006	AIO 3.0 base plate in carbon fiber laminate - Hexapod compatible	
38008	AIO 3.0 base plate in carbon fiber laminate - without leg separator - Hexapod compatible	
38009	AIO 3.0 base plate in carbon fiber laminate - Halcyon™ and Ethos™ Radiotherapy System compatibl	
38011	AIO 3.0 Base plate in carbon fiber laminate - without leg separator - Pediatric shoulder slots	
38012	AIO 3.0 Base plate in fiber glass - without leg separator - Pediatric shoulder slots - MR Safe	
38013	AIO 3.0 Base Plate in carbon fiber - SBRT Compatible	
38014	AIO 3.0 - Base plate CFL for Varian Halcyon & Ethos systems - without leg separator	



#### **AIO 3.0 STORAGE SOLUTION**

#### STORAGE SOLUTION

A dedicated storage solution maximizes efficiency while promoting a neat and tidy treatment environment. The AIO 3.0 Storage Cabinet is ideal for storing the AIO 3.0 base plates, head supports, cushions, and accessories. All components have their own dedicated slot. This reduces patient setup time and makes inventory control easy in the event of misplaced parts.

The wheeled cabinet is easy to move and maneuver when needed.

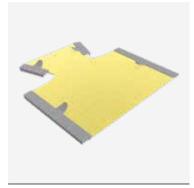


### **AIO MASKS**

### LUNG, BREAST, THORAX AND ABDOMEN



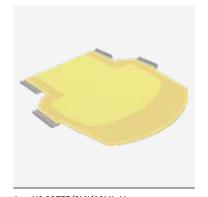
Art. N° 33715/2MA 4-points thorax supine mask small size



Art. N° 33716/2MA 4-points thorax supine mask medium size



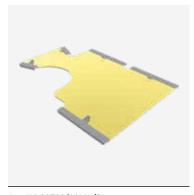
Art. N° 33717/2MA 4-points thorax supine mask large size



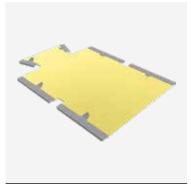
Art. N° 33775/2MI/12MI+N 4-points hybrid lung mask



Art. N° 33723/32MA/L
5-points assymetric breast supine mask
left side



Art. N° 33723/32MA/R
5-points assymetric breast supine mask right side



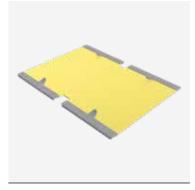
Art. N° 33724/32MA 6-points thorax and abdomen supine mask

### **AIO MASKS**

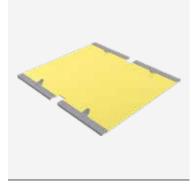
#### **PELVIS**



Art. N° 35788/32MA 4-points pelvic mask - small prone and supine



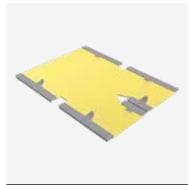
Art. N° 35787/32MA 4-points pelvic mask - medium prone and supine



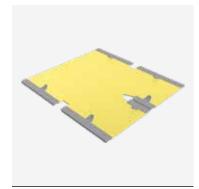
Art. N° 35784/32MA 4-points pelvic mask - large prone and supine



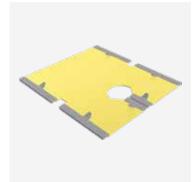
Art. N° 35710/32MA
6-points pelvic mask - small
for use with leg separator
prone and supine



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

### AIO HEAD SUPPORTS, BLOCKS AND WEDGES

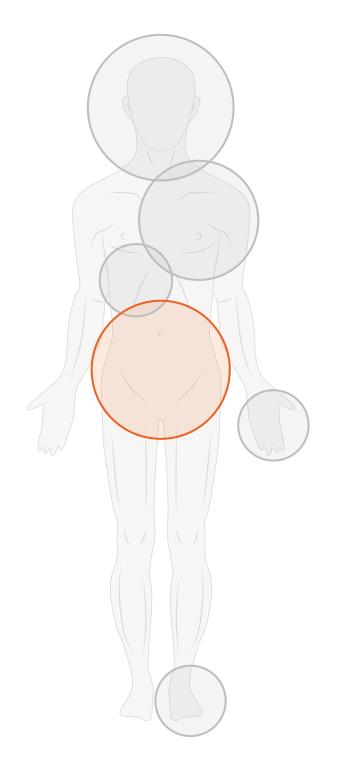
The main goal in the positioning of patients with head and neck tumors is a very precise and reproducible positioning and immobilization of the head and upper torso of the patient. To achieve this, a combination of the AIO hardware and High Precision thermoplastic masks provides an ideal solution.

The AIO base plate allows for a reproducible and comfortable positioning of the patient, reducing stress and anxiety.

Efficast High Precision 3-points masks assure a precise immobilization of the head and 5-points masks of the head, neck and shoulders.

Please see pages 19 & 20 for our range of head supports, and pages 23-26 for blocks and wedges.





### **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**

### 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



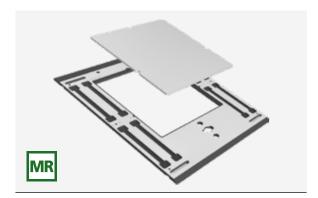
Art. N° 32122 High precision CFL base plate For non-indexed couches



Art. N° 32124
High precision CFL base plate
2-pin bar compatible



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



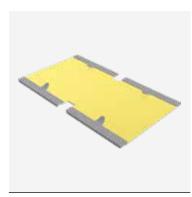
Art. N° 32123
High precision HPL base plate
For non-indexed couches
With central panel

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

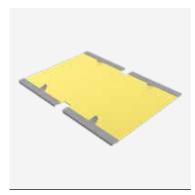
#### **PELVICAST**

# ANTIBACTERIAL PELVIC MASKS

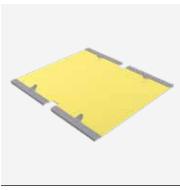
Pelvicast thermoplastic masks reduce the translational and rotational movements of the patients. A specially designed Leg Separator can be inserted into the base plate after the patient has mounted the cushion, to fix a 6-points Pelvicast mask. This type of mask will increase the reproducibility and 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



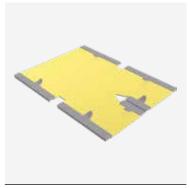
Art. N° 35787/32MA
4-points pelvic mask - medium
prone and supine



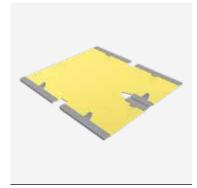
Art. N° 35784/32MA 4-points pelvic mask - large prone and supine



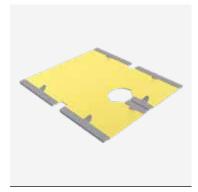
Art. N° 35710/32MA
6-points pelvic mask - small
for use with leg separator
prone and supine



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



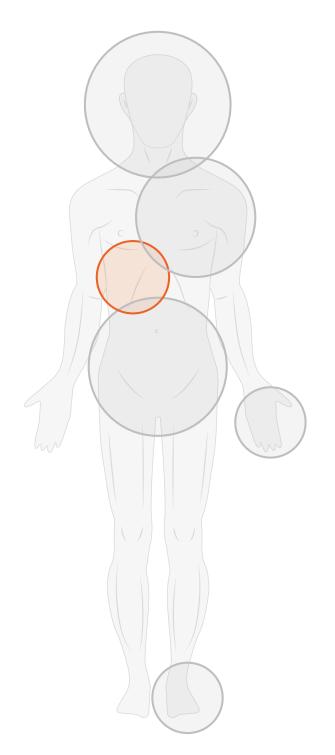
Art. N° 32037
Leg separator
Contains slots for 6-points Pelvicast masks



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

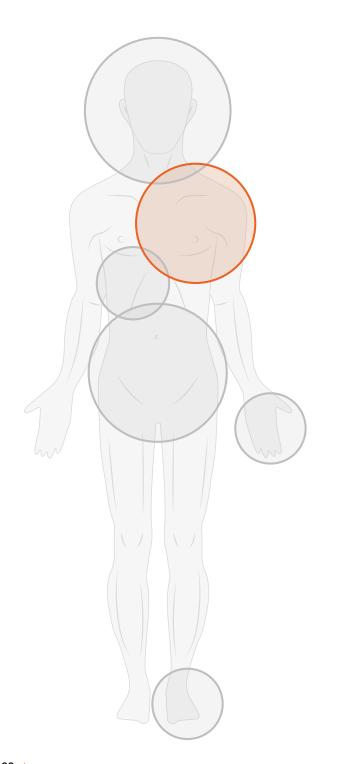
The lung board can be combined with the standard Orfit High Precision Head Supports with cranial stop, Silverman Head Supports and Timo Head Supports (with the use of an adapter).











# MAMMORX® PATIENT POSITIONING SYSTEMS

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

Accurately establish and reproduce patient positions in breast radiation therapy.

83

# 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.



#### 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, 17.5, 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(/EU)

MammoRx carbon fiber breast board



Art. N° CFB-001/MR

MammoRx breast board

MR Safe

### MAMMORX® ANTIBACTERIAL MASKS

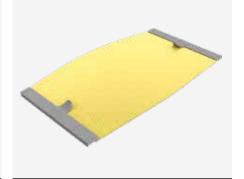
#### **BREAST HIGH PRECISION PRECUTS**







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



Art. N° 35728/32MA

2-points breast mask
large size



#### MAMMORX®

### MAMMORX® ACCESSORIES



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.

The Adjustable Arm Support allows



Art. N° 33176
Fixed grip pole for MammoRx

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° 33170 Adjustable arm support



Art. N° CBS-2 MammoRx bottom stop 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° 33178 Adjustable hand support 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.

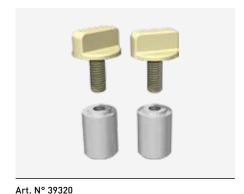
## MAMMORX® ACCESSORIES

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.



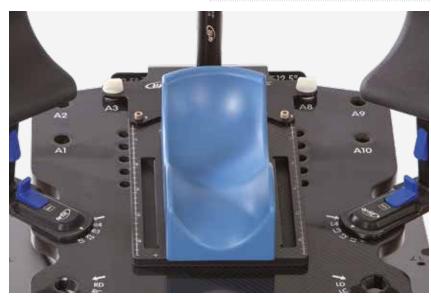
Art. N° CBA-1
Bilateral arm support system (BASS Board)

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 32130/12.



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





#### MAMMORX®

### MAMMORX® ACCESSORIES

A blue gel ring head support can be attached directly to the MammoRx.



Art. N° CHB-1
Blue gel ring head holder

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



Orfit head support interface



Art. N° CHS-1
Silverman head support interface

# MAMMORX® SOLUTION BUNDELS

The MammoRx breast board is available in different solution bundles or product packages. There is a set of solution bundles available per breast board category:

- CFB-001/EU: MammoRx breast board with a grid to indicate the low density treatment field
- CFB-001/EU/NG: MammoRx breast board without a grid for a more homogeneous treatment field
- CFB-001/MR: MammoRx breast board for an MR environment







#### MAMMORX®

# MAMMORX® SOLUTION BUNDELS

#### MAMMORX CARBON FIBER BREAST BOARD

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



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

Head supportCHB-1Blue gel ring head holder1 pc.Arm support33170Adjustable arm support2 pcs.Grip pole33176Fixed grip pole2 pcs.Bottom stopCBS-2MammoRx bottom stop1 pc.	Breast board	CFB-001/EU	MammoRx carbon fiber breast board	1 pc.
Arm support33170Adjustable arm support2 pcs.Grip pole33176Fixed grip pole2 pcs.	Head support	CHB-1	Blue gel ring head holder	1 pc.
Grip pole 33176 Fixed grip pole 2 pcs.	Arm support	33170	Adjustable arm support	2 pcs.
	Grip pole	33176	Fixed grip pole	2 pcs.
	_	CBS-2	MammoRx bottom stop	1 pc.



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

Breast board	CFB-001/EU	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/EU - COMBINATION

			ı pe.
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.



#### CFB-006/EU - COMBINATION

Breast board	CFB-001/EU	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.
Hand support	33178	Adjustable hand support	2 pcs.
Bottom stop	CBS-2	MammoRx bottom stop	1 pc.



#### MAMMORX®

# MAMMORX® SOLUTION BUNDELS

#### MAMMORX CARBON FIBER BREAST BOARD

Standard Configuration	Art. N°	Description	
		MammoRx carbon fiber breast board	1 pc.



#### CFB-003/EU/NG - BILATERAL ARM CONFIGURATION

Breast board		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/EU/NG - BILATERAL ARM SUPPORT CONFIGURATION

Breast board	CFB-001/EU	/NG 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/EU/NG - COMBINATION

Breast board	CFB-001/EU/NG	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.



#### CFB-006/EU/NG - COMBINATION

Breast board		NG 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.
Hand support	33178	Adjustable hand support	2 pcs.
Bottom stop	CBS-2	MammoRx bottom stop	1 pc.



#### MAMMORX®

# MAMMORX® 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 рс.
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 рс.



#### 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

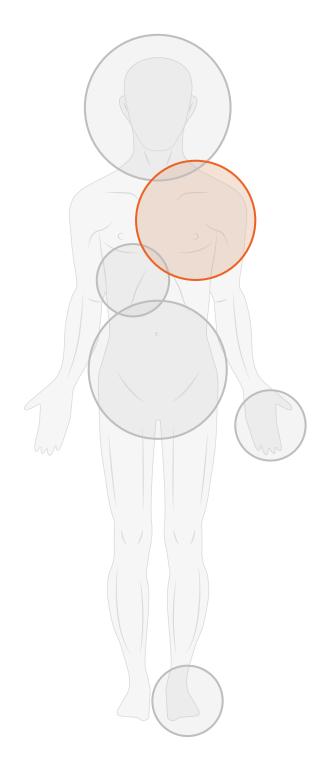
Breast board	CFB-001/MR	MammoRx breast board	1 pc.
Head support	CHB-1	Blue gel ring head holder	1 pc.
Arm support	33170	Adjustable arm support	2 pcs.
Arm support	CBA-1	Bilateral arm support board	1 pc.
Grip pole	33176	Fixed grip pole	2 pcs.
Bottom stop	CBS-2	MammoRx bottom stop	1 pc.



#### CFB-006/MR - COMBINATION

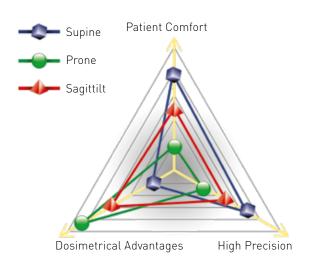
Breast board	CFB-001/MR	MammoRx carbon fiber breast board	1 pc.
Head support	CHB-1	Blue gel ring head holder	1 pc.
Arm support	33170	Adjustable arm support	2 pcs.
Arm support	CBA-1	Bilateral arm support board	1 pc.
Hand support	33178	Adjustable hand support	2 pcs.
Bottom stop	CBS-2	MammoRx bottom stop	1 pc.





# SAGITTILT® PRONE BREAST SOLUTION

Radiation therapy of breast cancer in prone position is an increasingly used treatment technique. Several publications, also recent ones, 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."

#### **SAGITTILT®**

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 to rotate 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 only can perform the tilt.





**SAGITTILT®** 

## 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 what is used 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.











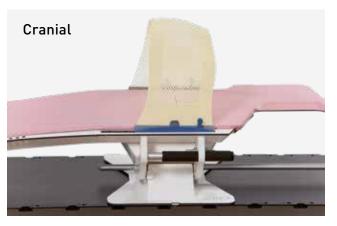
## SAGITTILT® FEATURES AND BENEFITS

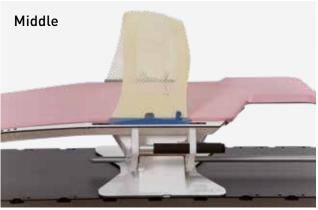
### IMMOBILIZATION WITH A THERMOPLASTIC MASK

A dedicated thermoplastic mask (Art. N° 33774/2MA/12MI+N) for the Sagittilt immobilizes the hips of the patient and keeps the patient in place in a secure way 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®** 

## 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

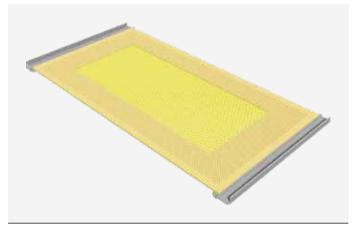
Cucchiaro, S. et al. (2014), Clinical Introduction of an all-in class solution for prone breast hypofractionated SIB with multibeam IMRT, Radiotherapy & Oncology, Vol. 111, Supplement 1, p. 47

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 preclinical 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

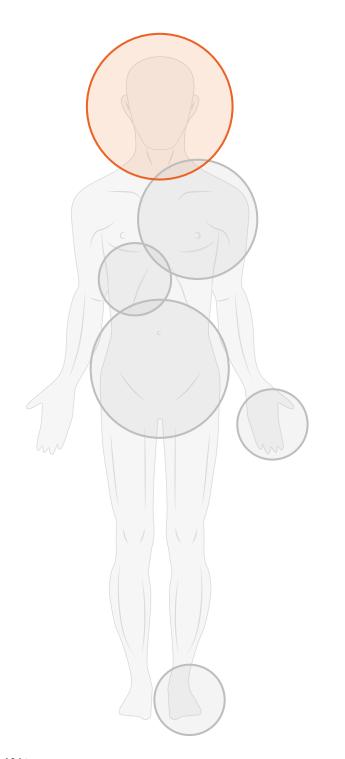


Art. N° 32070/21
Sagittilt sanitary cover for comfort cushion (package of 50 pieces)



Art. N° 32070/14

Sanitary cover for Sagittilt forehead support (package of 50 pieces)



# SRS-FIX SOLUTION

SRS treatment puts high demands on patient immobilization. The Orfit solution, SRS-Fix, is simple in use, reliable in functioning and stable in immobilizing a patient's head.

It is a patient-centered system that fulfills the special requirements to achieve millimeter precision and daily reproducibility. SRS-Fix comes in three setups: a Standard Setup, a Customized Setup and an Advanced Customized Setup.



## **SRS-FIX SOLUTION**

#### SRS-Fix mask

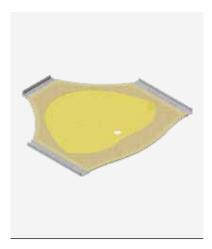
Its hybrid configuration with a Nanor layer, its controlled shrinkage behavior and strong fixation force result in optimal immobilization with a high degree of patient comfort.

#### **BiteFix**

BiteFix offers a simple, onesize-fits-all solution reducing pitch movement. The airway and mask opening ensure comfortable breathing.

## Customized head support and vacuum bag

Create a personalized patient immobilization solution with your preferred choice of individual head rest: Thermofit or Vacuum bag.



Art. N° 33792/2MA/12MI+N/NH SRS-Fix mask



Art. N° 32788
BiteFix bite block without tongue depressor



Art. N° 32789 BiteFix bite block with tongue depressor



Art. N° 18208

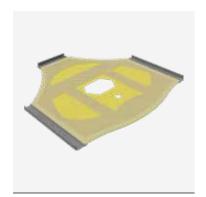
Customized head support: Vacuum bag



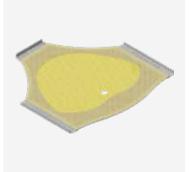
Art. N° 32393

Customized head support: Thermofit

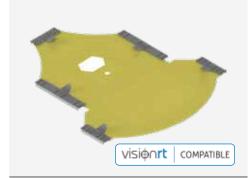
## **SRS-FIX ANTIBACTERIAL MASKS**



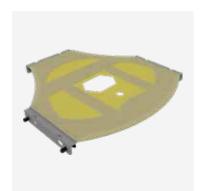
Art. N° 33796/16MI/12MI+N
3-points open face hybrid head mask
High precision profiles
Hole for BiteFix



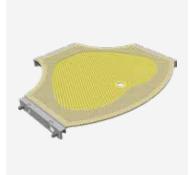
Art. N° 33792/2MA/12MI+N/NH
3-points hybrid head mask
High precision profiles
Hole for BiteFix
No nose hole



Art. N° 33798/16MI/12MI+N
5-points open face hybrid head, neck and shoulders mask
High precision profiles
Hole for BiteFix



Art. N° 33797/16MI/12MI+N
3-points open face hybrid head mask
Push-pin profiles
Hole for BiteFix



Art. N° 33793/2MA/12MI+N/NH
3-points hybrid head mask
Push-pin profiles
Hole for BiteFix
No nose hole



## SRS-SBRT

## **SRS-FIX PACKAGES**

#### Art. N° 36401

#### SRS-Fix Hardware Starter Package 1

Art. N°	Description	Quantity
32110/12	Head, Neck and Shoulders Base Plate	1рс
32702-MD	Set of Regular Density Head Supports	1рс
32709	Set of Low Density Blocks and Wedges	1рс

#### Art. N° 36402

#### SRS-Fix Hardware Starter Package 2

Art. N°	Description	Quantity
32110/12	Head, Neck and Shoulders Base Plate	1рс
32702-MD	Set of Regular Density Head Supports	1рс
32709	Set of Low Density Blocks and Wedges	1рс
18208	Vacuum Bag	10 pcs

Your local sales representative can help you determine the correct package for your immobilization needs.

#### Art. N° 36403

#### SRS-Fix Consumable Package 1 - HP Profiles

Art. N°	Description	Quantity
33792/2MA/12MI+N/NH	SRS-Fix Mask	10 pcs
32788	BiteFix Bite Block without Tongue Depressor	10pcs

#### Art. N° 36404

#### SRS-Fix Consumable Package 2 - HP Profiles

Art. N°	Description	Quantity
33792/2MA/12MI+N/NH	SRS-Fix Mask	10 pcs
32788	BiteFix Bite Block without Tongue Depressor	10 pcs
32392	Thermofit Personalized Head Support	10 pcs
32406/10	Waterproof bag for Thermofit (package of 10)	1pc

#### Art. N° 36405

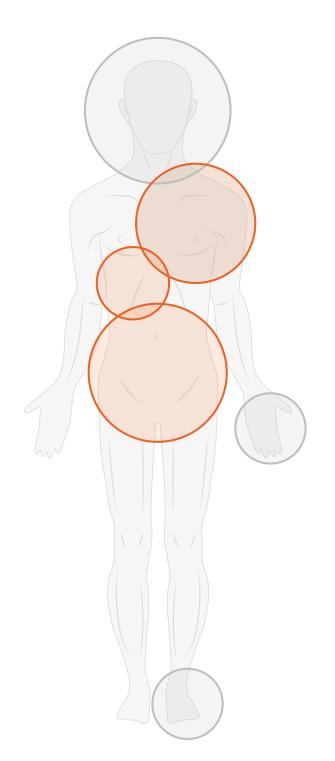
#### SRS-Fix Consumable Package 3 - Push-pin Profiles

Art. N°	Description	Quantity
33793/2MA/12MI+N/NH	SRS-Fix Mask	10pcs
32788	BiteFix Bite Block without Tongue Depressor	10pcs

#### Art. N° 36406

#### SRS-Fix Consumable Package 4 - Push-pin Profiles

Art. N°	Description	Quantity
33793/2MA/12MI+N/NH	SRS-Fix Mask	10pcs
32788	BiteFix Bite Block without Tongue Depressor	10pcs
32392	Thermofit Personalized Head Support	10pcs
32406/10	Waterproof bag for Thermofit (package of 10)	1pc



# 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 allows 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 - package 1



#### Art. N° 32331

SBRT short base plate - package 3

SRS-SBRT

# 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.









#### SRS-SBRT

# 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, high, and Hexapod compatible version of the bridge. The position of the bridge can be adjusted in the longitudinal and vertical direction.



Art. N° 32317/2, 32317/10, and 32317/23

Pressure system bridge low, high and Hexapod compatible



SRS-SBRT

# 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 three sizes: 120 cm, 130 cm, and 175 cm long.



Art. N° 32317/9, 32317/18, 32317/28
Pressure belt 120 cm, 130 cm, 175 cm



# SBRT SOLUTION FEATURES AND BENEFITS

#### **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.



SRS-SBRT

# 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 2nd Generation.\*

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





<sup>\*</sup> please see page 67.

## SRS-SBR

## SBRT ANTIBACTERIAL MASKS



Art. N° 35784/32MA



Art. N° 33683/32MA

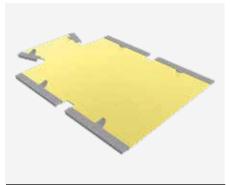
Slots are provided over the entire length of the long base plate to allow the use of different thermoplastic masks.



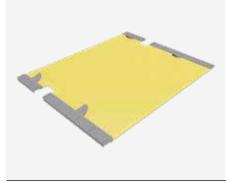
Art. N° 33724/32MA

#### SRS-SBRT

# SBRT ANTIBACTERIAL MASKS



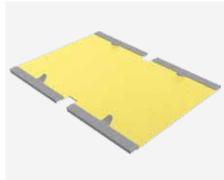
Art. N° 33724/32MA 6-points thorax and abdomen supine mask



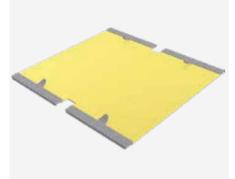
Art. N° 33683/32MA
4-points shoulders and thorax mask for SBRT



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

MR Safe

Also available for Elekta HexaPODTM evo RT System



#### Art. N° 32317/19

SBRT long base plate with extra lung slots

MR Safe



Art. N° 32317/14

SBRT short base plate

MR Safe

SRS-SBRT

# SBRT SOLUTION BUNDLES

#### PACKAGE 1: SBRT LONG BASE PLATE



ECHVNICVI	PRESSURE SYS	TEM + CUSHION	J ARM SETUP

Art.	N٥	323	17

Art. N°	Description
32317/1	Long 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 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



## SRS-SRRT

# 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
32317/4	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

Δrt	NIO	วว	าา	•
$\Delta \Gamma \Gamma$	14 -	-5/	-3-3	-1

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



## SRS-SRRT

# SBRT SOLUTION BUNDLES

#### PACKAGE 3: SBRT SHORT BASE PLATE



MECHANICAL PRESSURE SYSTEM + MAMMORX ARM SETUP	
--	--

Art. Nº 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
•••••	



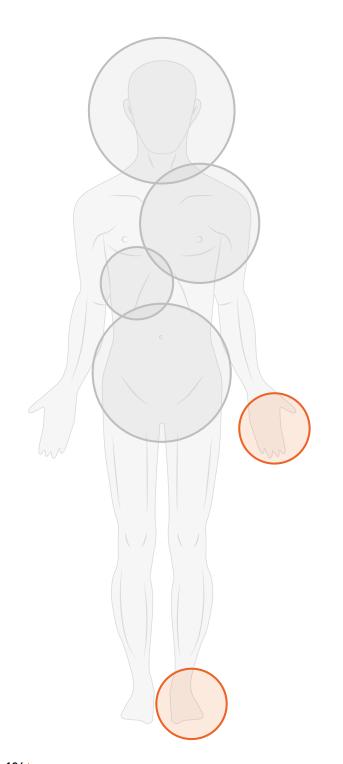
## **PACKAGE 4: SBRT SHORT BASE PLATE**



#### 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 dedicated masks. The base plate can be indexed to any couch top on 2-pin bars and has multiple holes to offer a maximum of possibilities 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.

#### THE EXTREMITIES SOLUTION

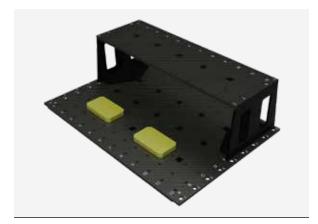




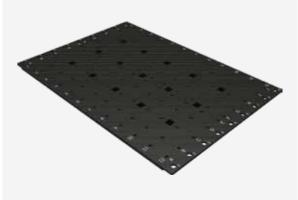




## **EXTREMITIES BASE PLATES**



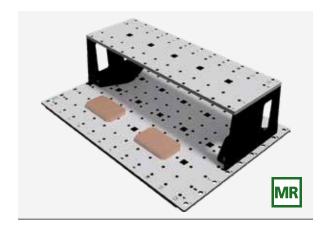




Art. N° 32103/1 Base plate - CFL



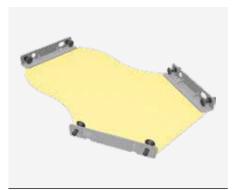
Art. N° 32103/3 Leg support - CFL



Art. N° 32103/MR Set - MR Safe

# EXTREMITIES

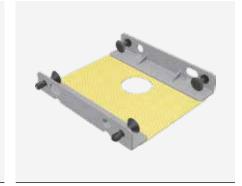
# ANTIBACTERIAL MASKS FOR EXTREMITIES



Art. N° 35792/32MA 3-points foot mask



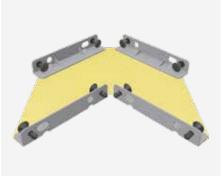
Art. N° 35793/32MA 2-points knee mask



Art. N° 35794/2MI 2-points hand mask



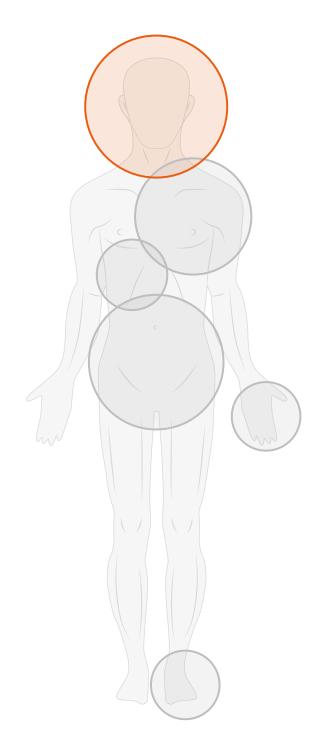
Art. N° 35795/2MI 2-points elbow mask - straight



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)



# PROTON SOLUTION POSITIONING AND IMMOBILIZATION FOR PROTON THERAPY

www.orfit.com/proton

The Orfit solution for proton therapy consists of a couch top solution or a base plate solution. Combined with HP PRO® masks, this solution brings more comfort to the patient while safeguarding stability and reproducibility.

The proton positioning and immobilization solutions have been designed to meet the specific standards proton therapy demands. A homogeneous, low density base plate with a narrow head and neck area allows the gantry to come close to the patient and minimize the air gap.

The Couch Top and Base Plates have excellent dosimetric properties.



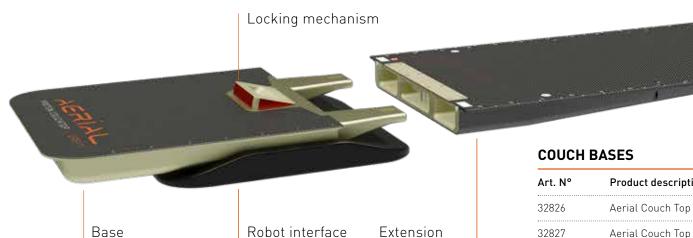
Designed to meet the specific standards proton therapy demands.

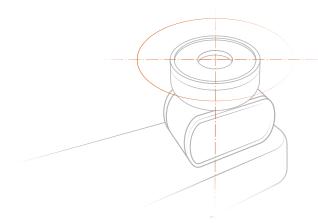
#### **CLINICAL STUDY**

Wagenaar D. (2021), Head and neck IMPT probabilistic dose accumulation: Feasibility of a 2 mm setup uncertainty setting, Radiotherapy and Oncology, 154 (2021) 45-52

## **AERIAL® COUCH TOP**







Aerial® is an entirely new couch top that optimizes the impact of the proton dose. The couch top consists of a base and a variety of extensions. All compatible with the HP PRO® masks.

Art. N°	Product description
32826	Aerial Couch Top for IBA + Leoni
32827	Aerial Couch Top for IBA + Forte
32838	Aerial Couch Top for Mevion

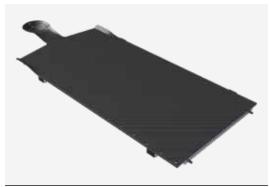
#### **EXTENSIONS**

Art. N°	Product description
25000/34	HP PRO Extension for Aerial Couch - adult
25000/67	HP PRO Extension for Aerial Couch - adult - Short version
25000/62	HP PRO Extension for Aerial Couch - pediatric 0-7 years
25000/38	Rectangular Extension for Aerial Couch - Long Version
25000/53	Rectangular Extension for Aerial Couch - Short Version

#### **CT OVERLAYS**

Art. N°	Product description	
25000/43	HP PRO CT Overlay - Aerial Couch Compatible - adult	
25000/63	HP PRO CT Overlay - Aerial Couch Compatible - pediatric 0-7 years	

# HP PRO® BASE PLATES



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



Art. N° 25000/1/MR
Overlay base plate
MR Safe

#### **ADULT BASE PLATES**

Art. N°	Product description	Interface	Compatibility
25000/1	Extension and overlay	pin	
25000/22	Extension and overlay	pin	Mevion
25000/25	Extension extra long	pin	
25000/20	Extension Type 1	clamp	
25000/30	Extension Type 2	clamp	
25000/18	Overlay		
25000/26	Overlay		Elekta HexaPOD™ evo RT System
25000/1/MR	Overlay		MR Safe

#### **PEDIATRIC BASE PLATES**

Art. N°	Product description	Interface	Compatibility
25000/27	Extension for pediatric 0-7 years	pin	
25000/16	Extension for pediatric 8-16 years	pin	
25000/36	Extension for pediatric 8-16 years Long Version	pin	
25000/35	Extension for pediatric 8-16 years Type 1	clamp	
25000/28	Extension for pediatric 0-7 years Type 2	clamp	
25000/29	Extension for pediatric 8-16 years Type 2	clamp	
25000/33	Overlay for pediatric 8-16 years		
25000/16/MR	Overlay for pediatric 8-16 years		MR Safe
25000/75	Overlay for pediatric 0-7 years		
25000/27/MR	Overlay for pediatric 0-7 years		MR Safe

## HP PRO® HEAD SUPPORTS

#### **MOLDCARE\***



Art. N° 18090 Moldcare cushion 150 x 200 mm

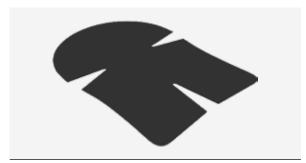
#### **FLEXIBLE SHIM**



Art. N° 25070/10

Flexible shim - 1 mm

[Package of 10 pieces]



Art. N° 25071/10

Pediatric flexible shim - 1 mm

[Package of 10 pieces]

#### **HEAD REST INDEXING PLATE**



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



Art. N° 25000/39/20

Head rest indexing plate pediatric (0-7 years)

[Package of 20 pieces]

\* Moldcare is a trademark from ALCARE

# HP PRO® ACCESSORIES

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



# HP PRO® ANTIBACTERIAL 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 contribute to maximal 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.







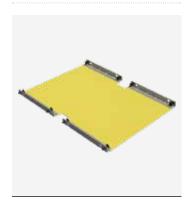
# HP PRO® ANTIBACTERIAL MASKS



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



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



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

#### **HP PRO MASKS - ADULTS**

Art. N°	Product description
25100/16MI+N	3-points mask - Nanor 1.6 mm micro+ with nose hole
25100/16MI+N/NH	3-points mask - Nanor 1.6 mm micro+ without nose hole
25105/2MI+N	5-points mask - Nanor 2.0 mm micro+ with nose hole
25113/24MI+N	3-points mask - Nanor 2.4 mm micro+ with nose hole
25114/24MI+N	3-points open face mask - Nanor 2.4 mm micro
25105/2MI+N/NH	5-points mask - Nanor 2.0 mm micro+ without nose hole
25108/2MI+N/NH	5-points mask - Nanor 2.0 mm micro+ without nose hole, large size
25115/24MI+N	5-points mask - Nanor 2.4 mm micro+ with nose hole
25116/24MI+N	5-points open face mask - Nanor 2.4 mm micro
45204/32MA/EFF	pelvic mask - Efficast 3.2 mm maxi with push-pins

#### **HP PRO MASKS - PEDIATRIC**

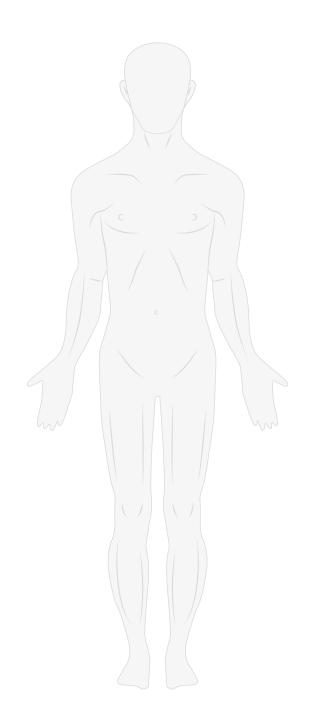
Art. N°	Product description	
25103/16MI+N/NH	3-points pediatric mask - Small - Nanor 1.6 mm micro+ without nose hole	
25101/16MI+N	3-points pediatric mask - Medium - Nanor 1.6 mm micro+ with nose hole	
25101/16MI+N/NH	3-points pediatric mask - Medium - Nanor 1.6 mm micro+ without nose hole	
25110/24MI+N	3-points pediatric open face mask - Medium - Nanor 2.4 mm micro+	
25107/2MI+N/NH	5-points pediatric mask - Small - Nanor 2.0 mm micro+ without nose hole	
25106/2MI+N	N 5-points pediatric mask - Medium - Nanor 2.0 mm micro+ with nose hole	
25106/2MI+N/NH	5-points pediatric mask - Medium - Nanor 2.0 mm micro+ without nose hole	
25112/24MI+N	2/24MI+N 5-points pediatric open face mask - Medium - Nanor 2.4 mm micro+	











## **ACCESSORIES**

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

Vacuum bags

Moldcare

Bolus material

Cyberknife full body cushion

Comfort cushions

Water bath

Digital dry-heat convection oven

Cleaning products

Storage solutions

Fixation devices

### **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° 18208)
  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.

#### **ACCESSORIES**

## **VACUUM BAGS**



Art. N° 18209

AIO vacuum bag half body - adult



Art. N° 18211

T-shape vacuum bag for head, neck and shoulders



Art. Nº 18210

AIO vacuum bag full body - pediatric



Art. N° 18208

Individual head support vacuum bag

## **VACUUM BAGS**



#### **NON-INDEXED VACUUM BAGS**

Art. N°	Product description
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
18208	Vacuum bag 200 x 450 mm / 0.9 liter
18209	Vacuum bag 480 x 900 mm / 16 liter
18210	Vacuum bag 340 x 1240 mm / 16 liter
18211	Vacuum bag 595 x 600 mm / 7 liter / T-shape Head, neck and shoulders
18212	Vacuum bag 700 x 1000 mm / 30 liter



#### **INDEXED VACUUM BAGS**

Art. N°	Product description
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

#### **ACCESSORIES**

# 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	СН
18058/100J	100	J
18058/115	115	US
18076/230EU	230	EU
18076/230UK	230	UK
18076/230CH	230	СН
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 indexing bar can be used in combination with a 2-pin bar or an Orfit base plate

# **MOLDCARE\***







**Art. N° 18091** 20 cm x 25 cm



**Art. N° 18092** 20 cm x 45 cm



Art. N° 18094 Moldcare cushion type S



<sup>\*</sup> 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

45 cm x 60 cm x 2 mm



20 cm x 20 cm x 5 mm



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



SESSORIES

# **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



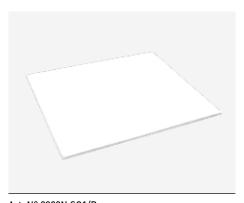
Art. N° 8336.S01/R/60 - 1 CM 30 cm x 30 cm x 10 mm

# **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**



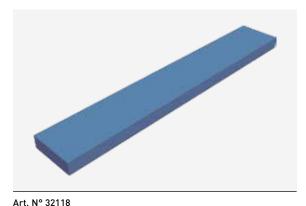
Art. N° 703011/1 Bag of 500g

# CYBERKNIFE FULL BODY CUSHION

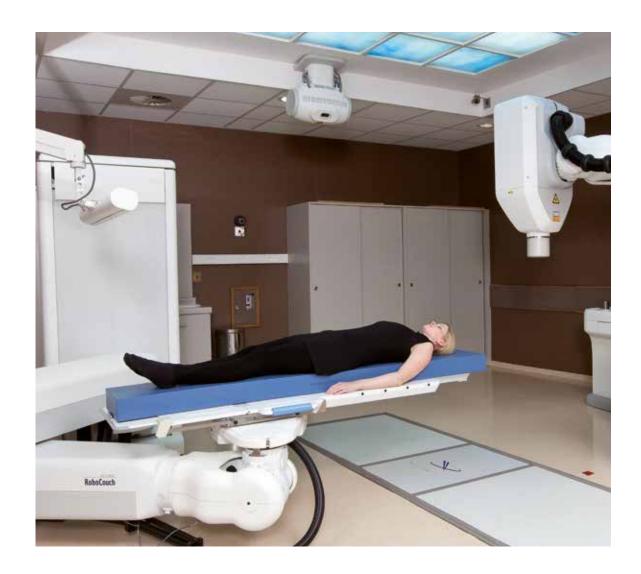
The full body cushion for the Cyberknife Couch Top is designed for spinal and thorax treatment. The patient is positioned supine on the cushion with the arms along the side of the body.

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.



Cyberknife full body cushion



# **COMFORT CUSHIONS**









## **COMFORT CUSHIONS**

#### PATIENT SUPPORT CUSHIONS



Art. N° 32005/2-V2
Truncal 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



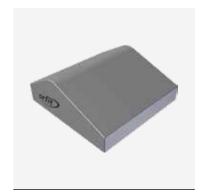
Art. N° 32005/6-V2 Large block 200 x 200 x 100 mm



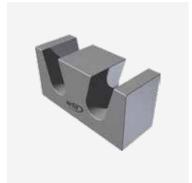
Art. N° 32005/8-V2 Wide wedge 400 x 250 x 100 mm 19.8°



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



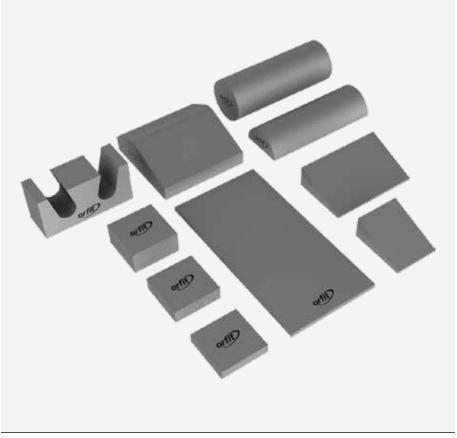
#### Art. N° 32005/14-V2

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**

(NOT AVAILABLE IN NORTH AMERICA)

#### **FEATURES AND BENEFITS**

Extra-large to fit every size of mask (inner dimensions: 74cm x 54.5cm x 9.5cm).

A grill to lift the mask out of the water without putting your hands in the water.

A built-in thermometer (°C and °F) that indicates when the water has reached the target temperature.

A built-in timer.

Easy to empty with a tap on the side.

Available in 115V and 230V.

Art. N°	Voltage	Plug Type
35097/115/1400	115	US
35097/230/1400	230	EU
35097/230/1400/UK	230	UK







Art. N° 35097/RE
Cleaning product for water bath
500 ml

# **WATER BATHS**

(ONLY AVAILABLE IN NORTH AMERICA)

#### **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 ±1 degree.
- > Hinged lid opening in four positions.
- > Bright LED display easy to use.

#### 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/L



Art. N° 35098

# 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 65°C - 82°C (150°F - 180°F).

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

Art. N°	Voltage	Plug Type
35121/230EU	230	UK
35121/230UK	230	UK
35121/120US	120	US



# **STORAGE SOLUTIONS**



Art. N° 32044

Storage stand for base plates



Art. N° 29099

Wall mount storage stand for base plates

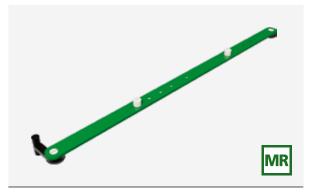
# **FIXATION DEVICES**

Other fixation devices can be found on www.orfit.com



Art. N° 32154

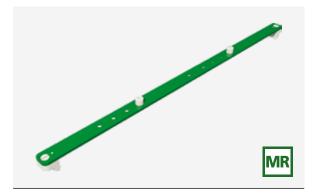
2-pin indexing bar for Exact\* couches



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



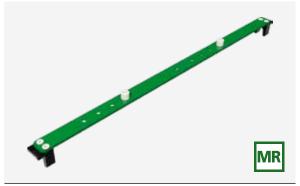
Art. N° 32191
2-pin indexing bar for iBEAM\* couches



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 indexing bar for Pinpoint couches - 50 cm

# PRODUCT INFORMATION AND EDUCATION

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

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

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

#### **INSTRUCTIONAL VIDEOS**

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

#### **SOCIAL MEDIA**

- www.instagram.com/orfit\_radiation\_oncology
- in www.linkedin.com/showcase/orfit-radiation-oncology
- www.twitter.com/orfit



www.orfit.com







#### **ORFIT INDUSTRIES**

Vosveld 9A | B-2110 Wijnegem | Belgium T (+32) (0)3 326 20 26 welcome@orfit.com

#### **ORFIT INDUSTRIES AMERICA**

810 Ford Drive | Norfolk, Virginia 23523 T 516-935-8500 welcome@orfit.com

