

The
precision
expert

IN IMMOBILIZATION SYSTEMS
FOR RADIATION ONCOLOGY



© Flanders Investment & Trade



**The
precision
expert**

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 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.

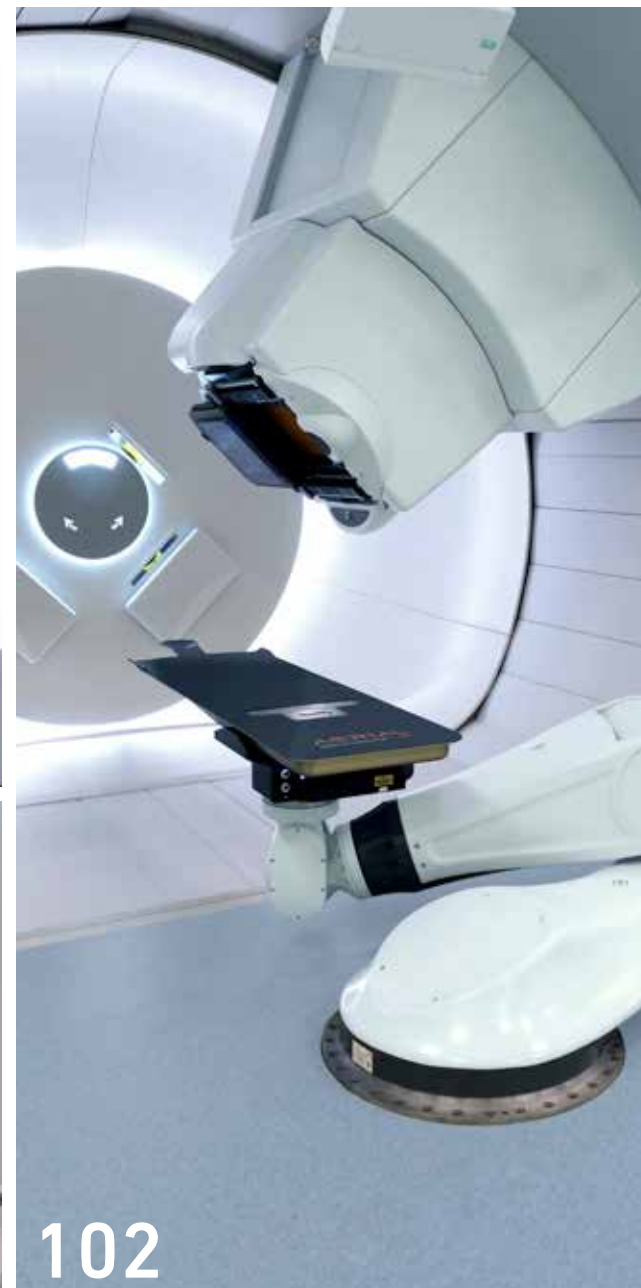
Our thermoplastic masks and hardware form a complete range of high-quality immobilization and positioning products for all conventional and modern radiation therapy procedures..

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.



4 HEAD, NECK AND SHOULDERS SOLUTIONS

9 High Precision Immobilization Systems

- 10 High Precision Masks
- 16 High Precision Base Plates
- 18 High Precision Head Supports
- 21 High Precision Blocks and Wedges
- 25 High Precision Accessories

27 Push-Pin Immobilization Systems

- 28 Push-Pin Masks
- 32 Push-Pin Base Plate
- 34 Push-Pin Head Supports
- 37 Push-Pin Accessories

38 Pediatric Immobilization Systems

- 39 Pediatric Masks
- 42 Pediatric Base Plates
- 43 Pediatric Head Supports

45 UON® and DUON®

- 46 UON® Masks
- 47 DUON® Masks
- 50 Base Plates
- 51 Head Support Adapter Plates

52 THE AIO SOLUTION® 3.0

52 The AIO Solution® 3.0

- 56 AIO Cushion Sets
- 57 SBRT solutions
- 61 AIO 3.0 Base Plates
- 62 AIO 3.0 Storage Solution
- 63 AIO Masks

66 PELVIC SOLUTIONS

- 68 Pelvicast Base Plates
- 70 Pelvic Masks
- 71 Accessories

72 HIGH PRECISION LUNG BOARD

- 72 High Precision Lung board

74 MAMMORX® BREAST BOARD

- 75 MammoRx® Breast Board
- 77 MammoRx® Masks
- 78 MammoRx® Accessories

82 SAGITTILT® PRONE BREAST SOLUTION

- 85 Sagittilt® Features and Benefits
- 90 Sagittilt® Mask
- 91 Sagittilt® Accessories

92 STEREOTACTIC SOLUTIONS

92 SRS-Fix Solution

- 92 SRS-Fix Masks
- 95 Thermofit Personalized Head Support

98 THE EXTREMITIES SOLUTION

- 99 Extremities Base Plates
- 101 Masks for Extremities

102 PROTON SOLUTIONS

- 103 Aerial® Couch Top
- 104 HP PRO® Base Plates
- 105 HP PRO® Head Supports
- 106 HP PRO® Accessories
- 107 HP PRO® Masks

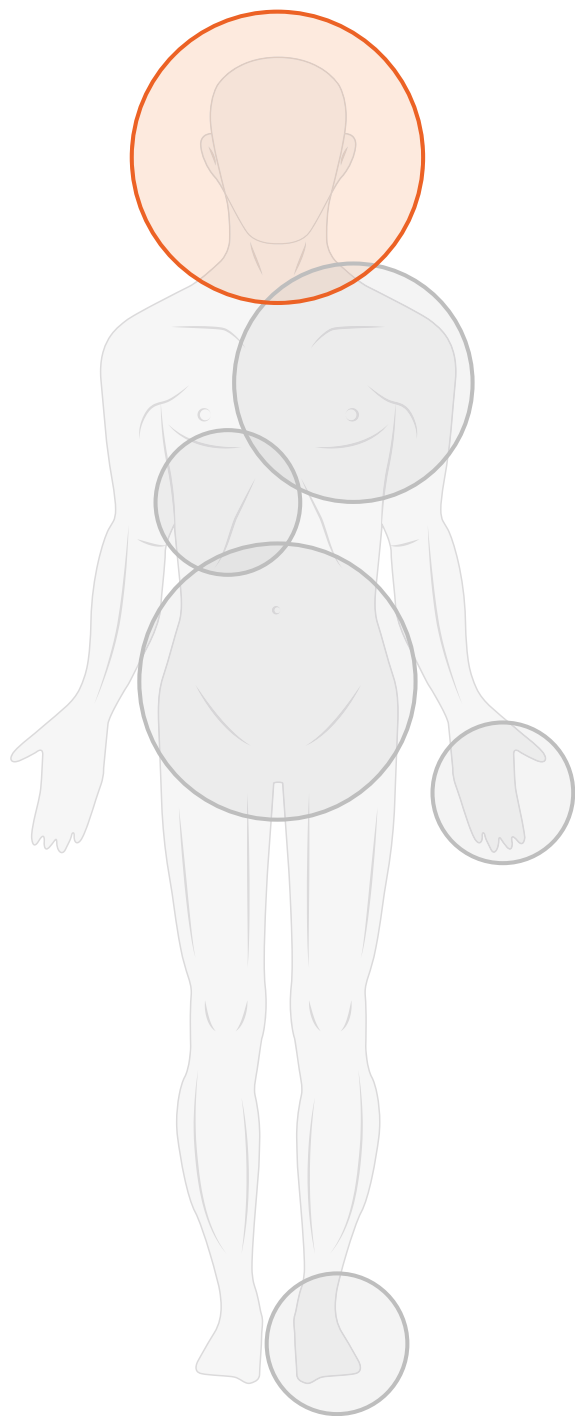
110 MRI COMPATIBLE PRODUCTS

- 110 MRI Compatible Products
- 113 Orfit MRI-P and Orfit MRI-G Solution
- 114 Orfit MRI-S Solution

116 ACCESSORIES

- 117 Vacuum Bags
- 120 Vacuum Bag Accessories
- 122 Moldcare
- 125 Bolus Material
- 126 Cyberknife Full Body Cushion
- 127 Comfort Cushions
- 130 Water Baths
- 131 Digital Dry-Heat Convection Oven
- 132 Storage Solutions
- 133 Fixation Devices

134 PRODUCT INFORMATION AND EDUCATION



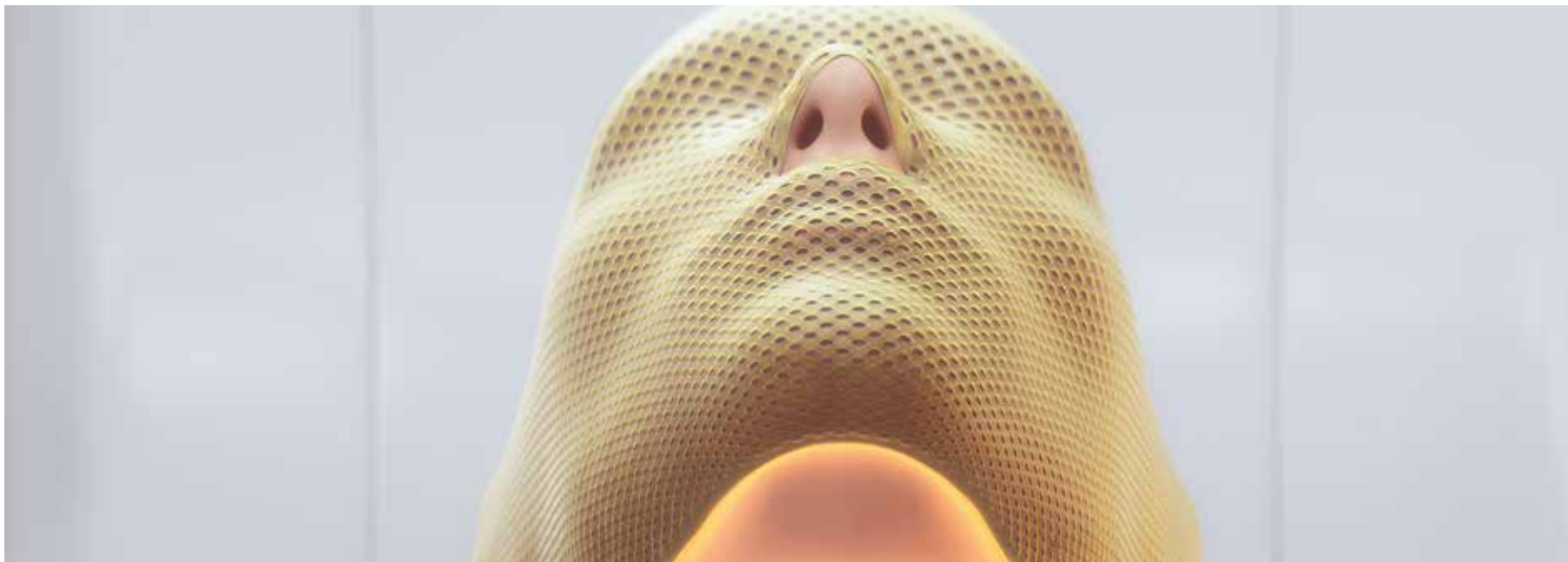
HEAD, NECK AND SHOULDERS

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

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).

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

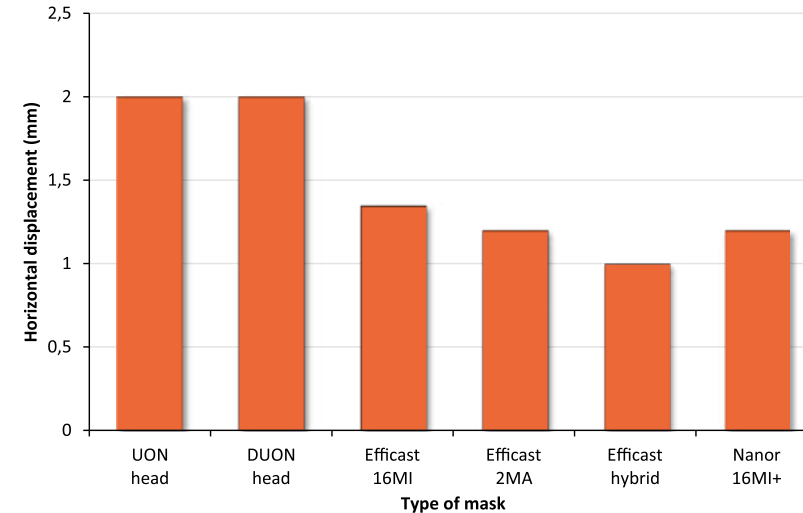
Our engineering and production capabilities with proprietary thermoplastic formulations result in the best mask materials available. Stretch and shrinkage properties are always the same and assure a reliable mask molding technique, resulting in a perfect fit around the patient's anatomy and a high degree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



Orfit Industries, Inge Jordaens - 2016

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

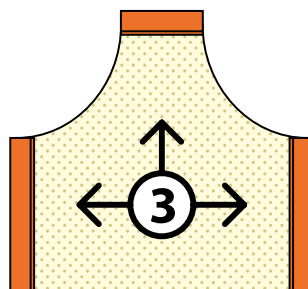
Meet specific patient requirements

An extensive range of Orfit 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.

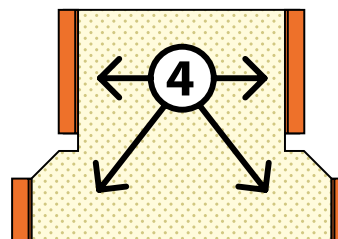
Orfit masks are available with various combinations of prepunched cutouts for ease-of-use.

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



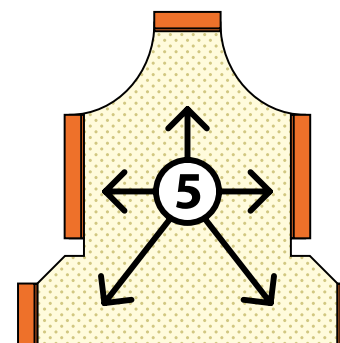
head

3-points



head, neck
and shoulders

4-points



head, neck
and shoulders

5-points
(with cranial flap)

A number of clinical studies have proven the effectiveness of Efficast in combination with 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 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 patient treatment or simply to save on waste.

Thinner masks result in less absorption and increased skin sparing.

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

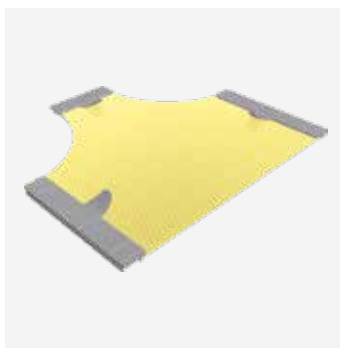
Quick release system allows for fast and safe removal of the mask from the patient.

HIGH PRECISION MASKS

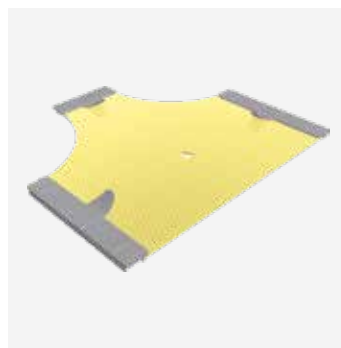
SINGLE LAYER



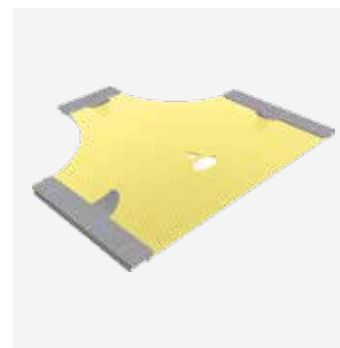
Art. N° 33776/2MA**
2-points chin mask



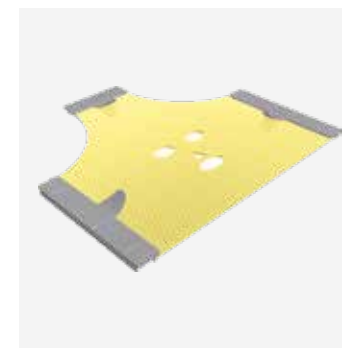
Art. N° 35763/2MA/NH*
3-points head mask



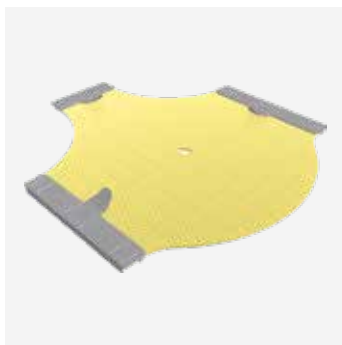
Art. N° 35763/2MA*
3-points head mask
with nose hole



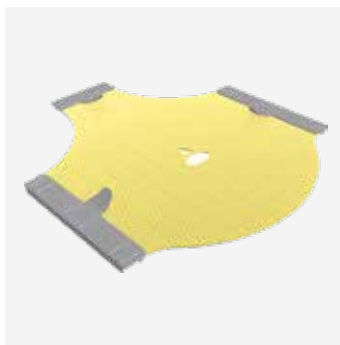
Art. N° 35763/2MA/M
3-points head mask
with nose and mouth hole



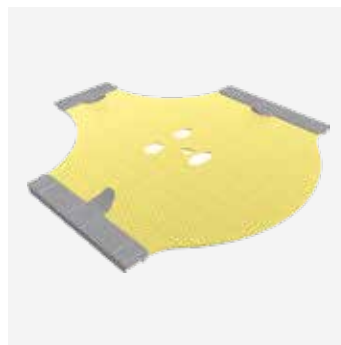
Art. N° 35763/2MA/EM*
3-points head mask
with nose, eyes and mouth hole



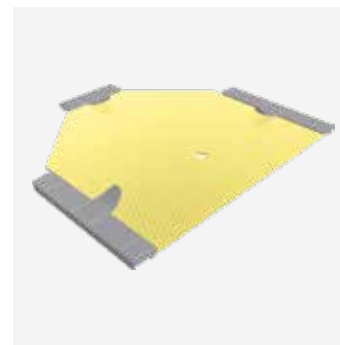
Art. N° 35779/2MA*
3-points head mask
with nose hole
with neck flap



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



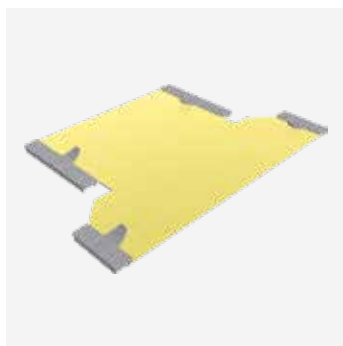
Art. N° 35779/2MA/EM
3-points head mask
with nose, eyes and mouth hole
with neck flap



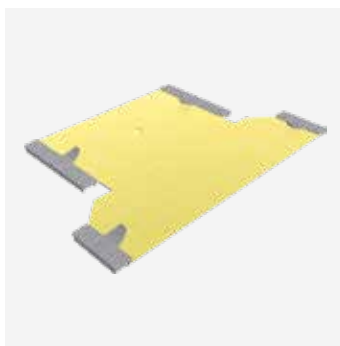
Art. N° 35760/EFF2MA*
3-points head mask
with nose hole
with extra cranial flaps

HIGH PRECISION MASKS

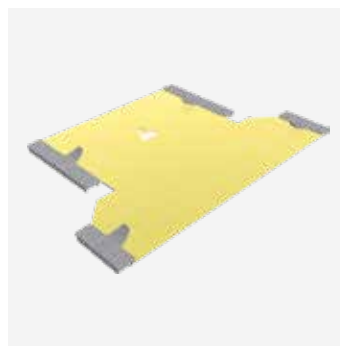
SINGLE LAYER



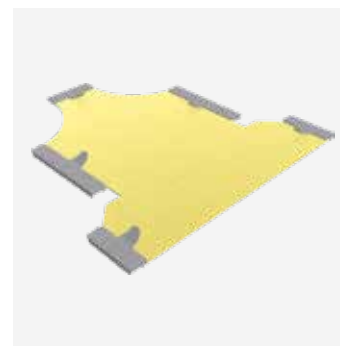
Art. N° 35764/2MA/NH
4-points head, neck and shoulders mask



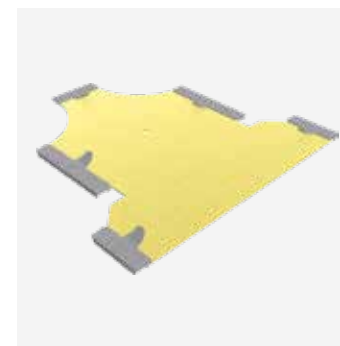
Art. N° 35764/2MA*
4-points head, neck and shoulders mask
with nose hole



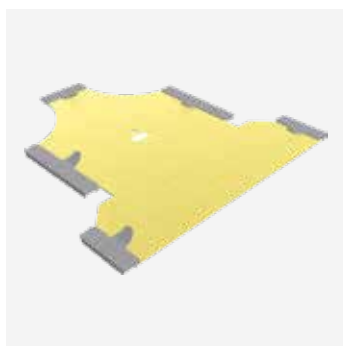
Art. N° 35764/2MA/M
4-points head, neck and shoulders mask
with nose and mouth hole



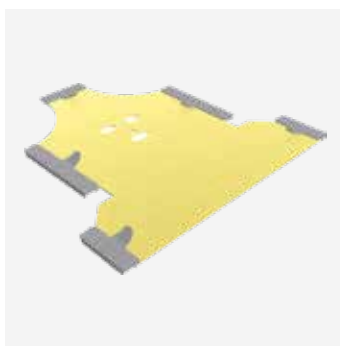
Art. N° 33700/2MA/NH
5-points head, neck and shoulders mask



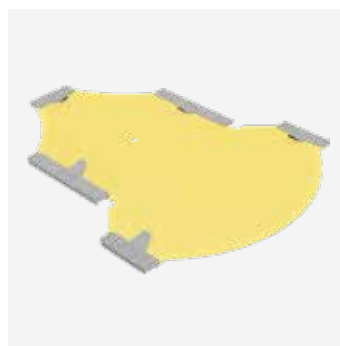
Art. N° 33700/2MA*
5-points head, neck and shoulders mask
with nose hole



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



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



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

All masks are available in 2 mm thickness with maxi perforation
(Art. N° with extension /2MA)

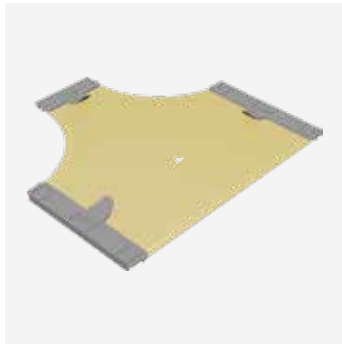
Additional available thickness and perforation type:

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

** 3.2 mm maxi perforation (Art.N° with extension /32MA)

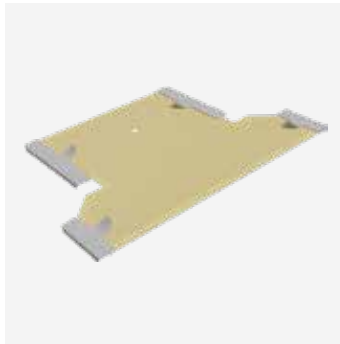
HIGH PRECISION MASKS

NANOR® SINGLE LAYER



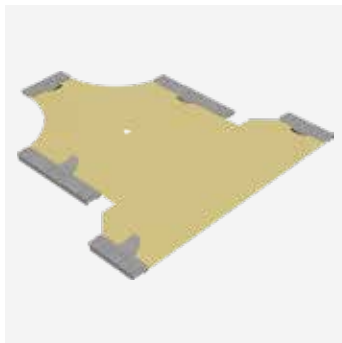
Art. N° 35763/16MI+N

3-points head mask
with nose hole



Art. N° 35764/2MI+N

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



Art. N° 33700/2MI+N

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

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

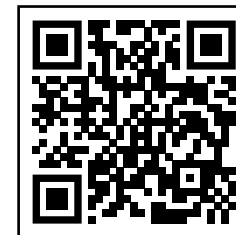
A thin, yet strong mask

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.



HIGH PRECISION MASKS

HYBRID

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

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

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

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

These reinforced thermoplastic masks offer the ease-of-use of a regular thermoplastic mask with an unparalleled horizontal stability and fixation force.

In combination with the unique Orfit High Precision Head Supports, one is able to really achieve good immobilization and positioning of the patient.

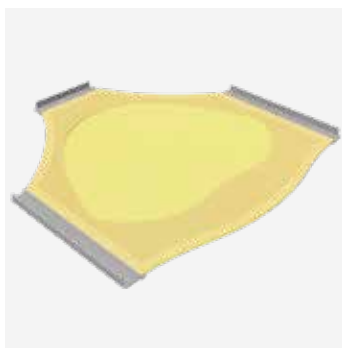
Even the largest and biggest-shouldered patients will be immobilized properly with these masks thanks to the reinforcement rim around the mask and the chin strap offering excellent control over the position of the patient's head.

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 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.

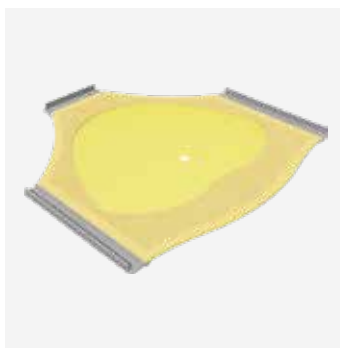
The range of hybrid precuts consists of a 3-points head precut and a 4-points and 5-points head, neck and shoulders precut.

HIGH PRECISION MASKS

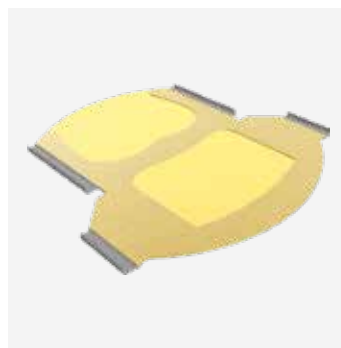
HYBRID



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

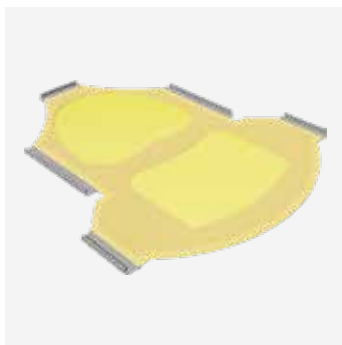


Art. N° 33740/2MA/12MI+N
3-points hybrid head mask
with nose hole

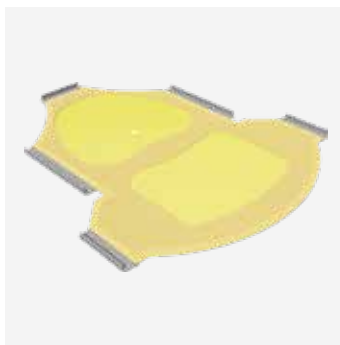


Art. N° 33737/2MA/12MI+N/NH
4-points hybrid
head, neck and shoulders mask

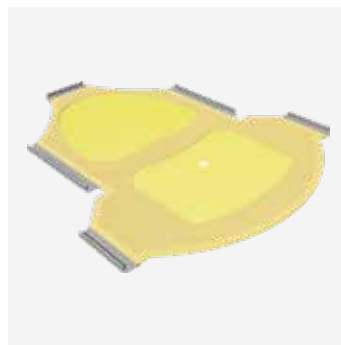
Nanor-reinforced
thermoplastic masks
are thinner and lighter
with excellent stability
and patient comfort.



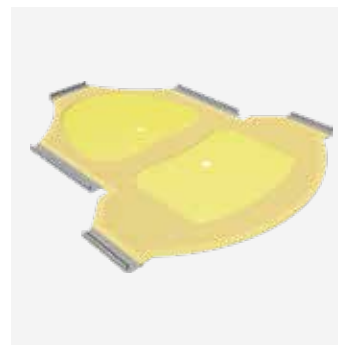
Art. N° 33730/2MA/12MI+N/NH
5-points hybrid
head, neck and shoulders mask



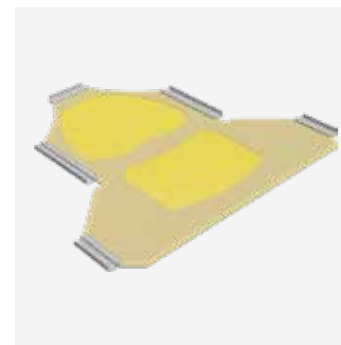
Art. N° 33730/2MA/12MI+N
5-points hybrid
head, neck and shoulders mask
with nose hole



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



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



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

HIGH PRECISION MASKS

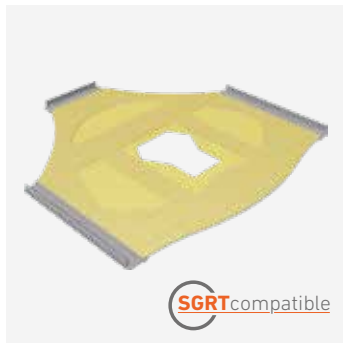
OPEN FACE HYBRID

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

It provides excellent reproducibility of the patient's position. It 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 nano-technology, 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.



Art. N° 33759/16MI/12MI+N
3-points open face hybrid head mask



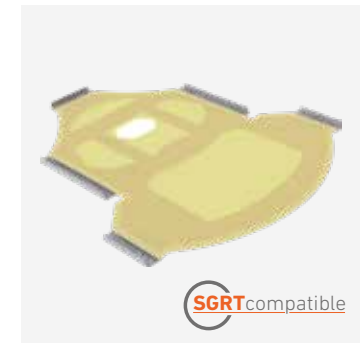
Art. N° 33733/16MI/12MI+N
5-points open face hybrid
head, neck and shoulders mask



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



Art. N° 33800/16MI/12MI+N
3-points open face hybrid mask
with small aperture



Art. N° 33801/16MI/12MI+N
5-points open face hybrid mask
with small aperture

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



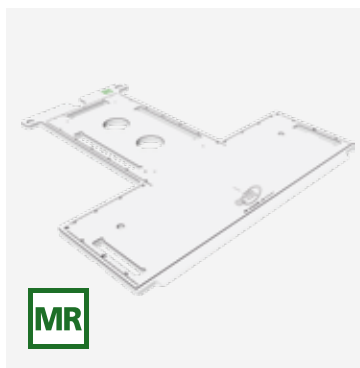
Art. N° 32130/MR

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



Art. N° 35754/6N

High precision base plate in HPL
Head and neck
MR Safe



Art. N° 35751N

High precision base plate in HPL
Head, neck and shoulders
MR Safe



Art. N° 32113MR

HP head, neck and shoulder base plate
for Cyberknife
MR Safe



Art. N° 32117MR

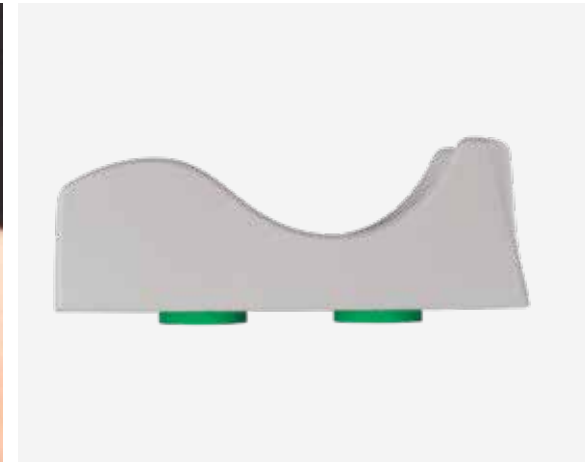
High Precision base plate for Cyberknife
MR Safe

HIGH PRECISION HEAD SUPPORTS

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

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

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



HIGH PRECISION HEAD SUPPORTS

LOW DENSITY

Art. N° 32704 (set)

Set of low density head supports (all sizes)



Art. N° 35755



Art. N° 35765



Art. N° 35753



Art. N° 35753ZF



Art. N° 35752



Art. N° 35752ZF

REGULAR DENSITY

Art. N° 32702-MD (set)

Set of regular density head supports (all sizes)



Art. N° 35758-MD



Art. N° 35758ZF-MD



Art. N° 35713-MD



Art. N° 35713ZF-MD



Art. N° 35714-MD



Art. N° 35714ZF-MD

HIGH PRECISION HEAD SUPPORTS

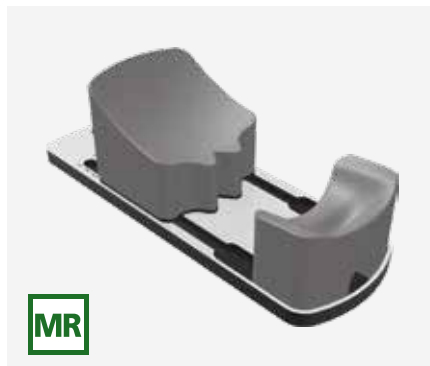
REGULAR DENSITY



Art. N° 32399-MD

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

PRONE



Art. N° 32393

Prone head support adjustable in size
Movable forehead cushion



Art. N° 32380

Prone head support adjustable in size
Movable chin cushion

CUSTOMIZED



Art. N° 32390 Thermofit 13.5 x 30 cm

Art. N° 32391 Thermofit 23 x 30 cm

Art. N° 32392 Thermofit 30 x 35 cm

Customized head support - Thermofit

HIGH PRECISION BLOCKS AND WEDGES

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

FEATURES AND BENEFITS

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

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

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



Art. N° 35703
20 mm
Carbon fiber block



Art. N° 35704
9°
Carbon fiber wedge



Art. N° 35706
40 mm
Carbon fiber block



Art. N° 35707
18°
Carbon fiber wedge

HIGH PRECISION BLOCKS AND WEDGES

LOW DENSITY



Art. N° 35703
20 mm



Art. N° 35706
40 mm



Art. N° 35704
9°



Art. N° 32424
13.5°



Art. N° 35707
18°

Art. N° 32700 (set)

Set of low density blocks and wedges - CFL

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

Art. N° 32709 (set)

Set of low density blocks and wedges - CFL

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

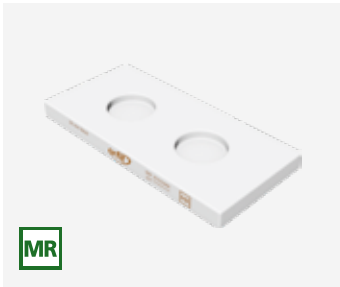
Art. N° 32712 (set)

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° 35703/MR
20 mm



Art. N° 35706/MR
40 mm



Art. N° 35704/MR
9°



Art. N° 32424/MR
13.5°



Art. N° 35707/MR
18°

Art. N° 32700/MR (set)

**Set of low density blocks
and wedges - 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**



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

Art. N° 32712/MR (set)

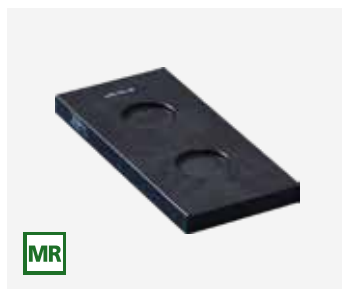
**Set of low density blocks
and wedges - MR Safe**



Art. N°	Description
35703/MR	block 20 mm
35706/MR	block 40 mm
35704/MR	wedge 9°
35707/MR	wedge 18°
32424/MR	wedge 13.5°

HIGH PRECISION BLOCKS AND WEDGES

HIGH DENSITY



Art. N° 35754/1
20 mm



Art. N° 35754/2
40 mm



Art. N° 35754/3
9°



Art. N° 35754/5
13.5°



Art. N° 35754/4
18°

Art. N° 35754/8 (set)

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



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

Art. N° 35754/9 (set)

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



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

Art. N° 35754/11 (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°
35754/4	wedge 18°

HEAD AND NECK 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





CURIOUS ABOUT HOW WE CAN HELP YOU PROVIDE THE BEST CARE FOR YOUR PATIENTS?

Meet us at international conferences
like ESTRO, ASTRO, and many more!

Visit our booth to connect
with our team and discover
our innovative solutions.
More info on our website!



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.

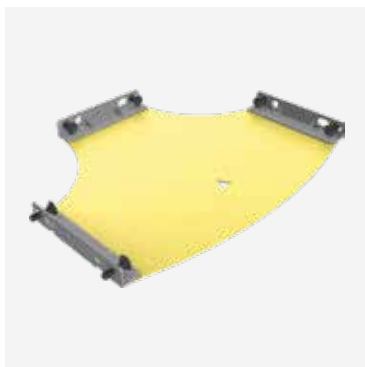
Our thermoplastic masks with push-pin type profiles fit seamlessly on existing hardware that you may have in your department.

**Superior patient
immobilization
with Orfit
thermoplastic masks**



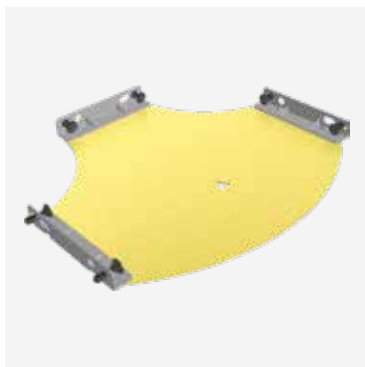
PUSH-PIN MASKS

SINGLE LAYER



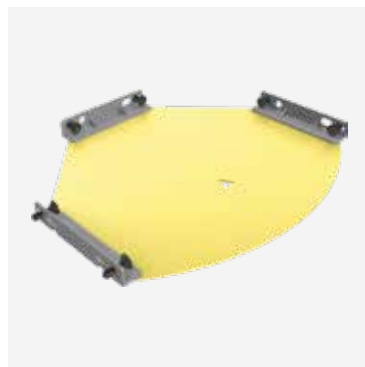
Art. N° 35773/2MA*/**

3-points head mask
with nose hole



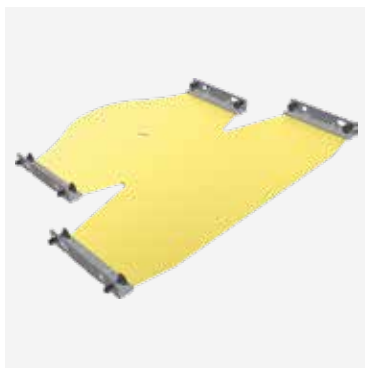
Art. N° 35768/2MA*/**

3-points head mask
with nose hole
with neck flap



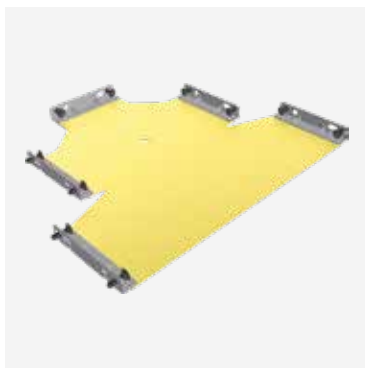
Art. N° 35776/2MA*/**

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

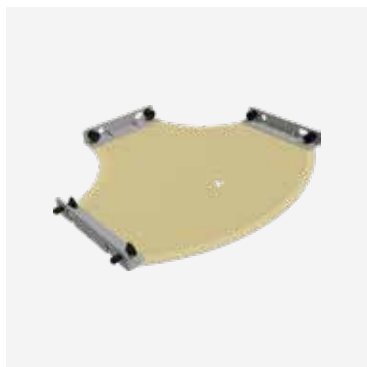
Masks with Art. N° with extension /2MA
are available in 2 mm thickness with maxi perforation

Additional available thicknesses and perforation types:

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

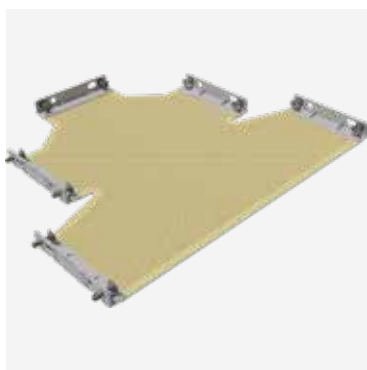
PUSH-PIN MASKS

NANOR® SINGLE LAYER



Art. N° 35768/16MI+N

3-points head mask with nose hole
with neck flap

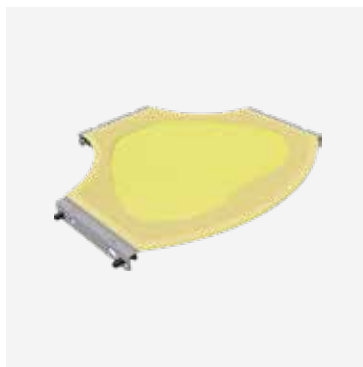


Art. N° 33770/2MI+N

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

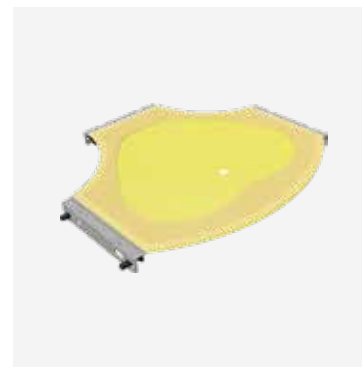
PUSH-PIN MASKS

HYBRID



Art. N° 33747/2MA/12MI+N/NH

3-points
hybrid head mask



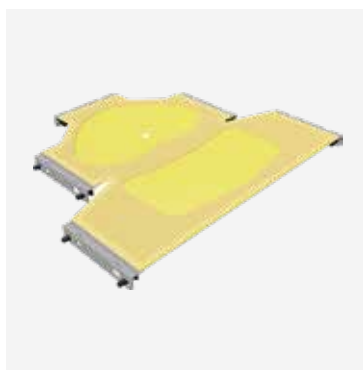
Art. N° 33747/2MA/12MI+N

3-points
hybrid head mask
with nose hole



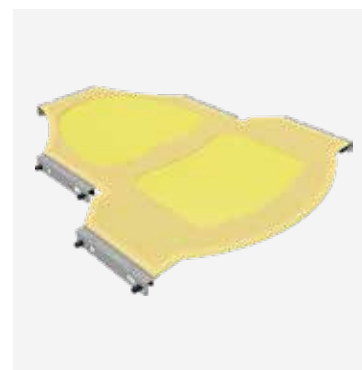
Art. N° 33739/2MA/12MI+N/NH

5-points
hybrid head, neck and shoulders mask



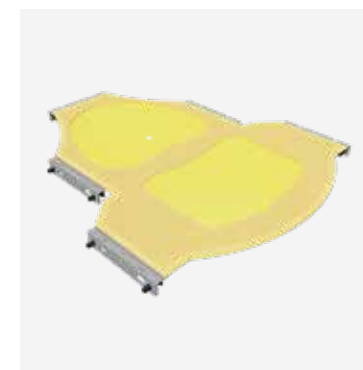
Art. N° 33739/2MA/12MI+N

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

PUSH-PIN MASKS

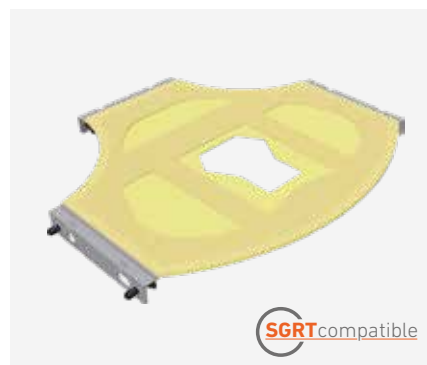
OPEN FACE HYBRID



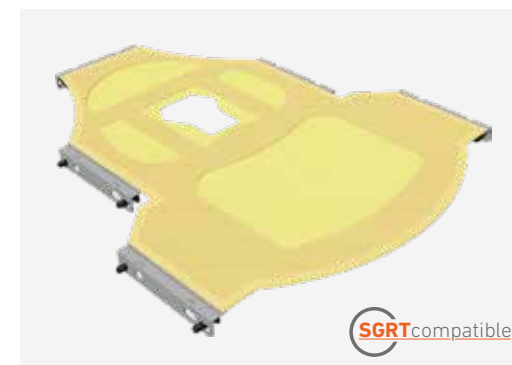
Art. N° 33802/16MI/12MI+N
3-Points open face hybrid mask
with small aperture with push-pin



Art. N° 33803/16MI/12MI+N
5-Points open face hybrid mask
with small aperture with push-pins



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

PUSH-PIN 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



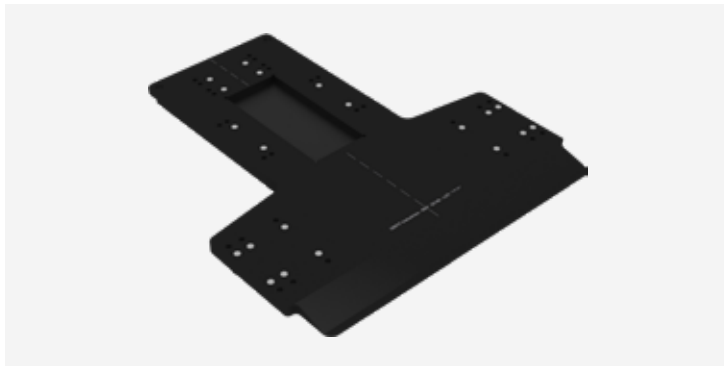
35791/16MI/NP
5-points
head, neck and shoulders mask
with nose hole
large size

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)

PUSH-PIN BASE PLATE

BASE PLATE



Art. N° 32148

Base plate in CFL for push-pin masks

Head, neck and shoulders



PUSH-PIN MASKS

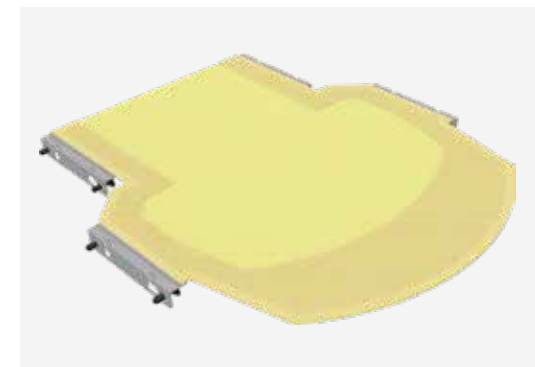
MASK FOR LUNG TREATMENT



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

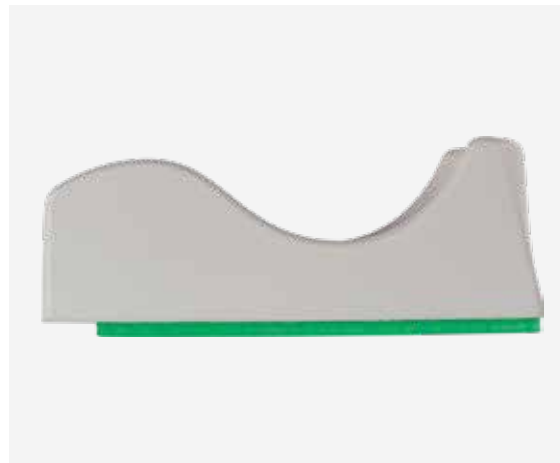
4-points hybrid lung mask for push-pin hardware

PUSH-PIN 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° 32414



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

PUSH-PIN HEAD SUPPORTS

REGULAR DENSITY



Art. N° 32426-MD

Regular density head support

With lateral neck flaps for patients with a curved spine

PRONE



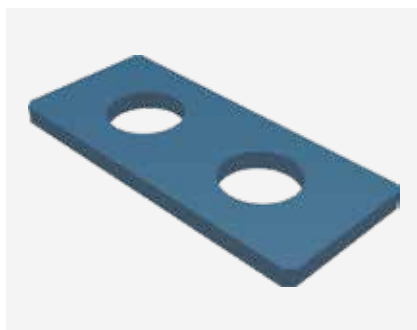
Art. N° 32379

Prone head support rectangular interface

Movable forehead cushion

PUSH-PIN ACCESSORIES

ADAPTERS FOR HP HEAD SUPPORTS AND BLOCKS AND WEDGES



Art. N° 32048

Regular density adapter

PROFILES IN CARBON FIBER



Art. N° 35675

Large



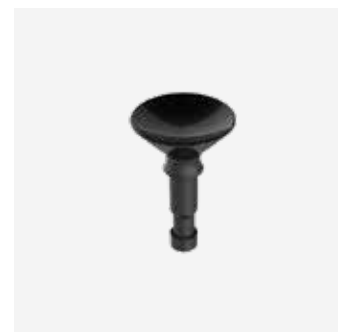
Art. N° 35674

Small



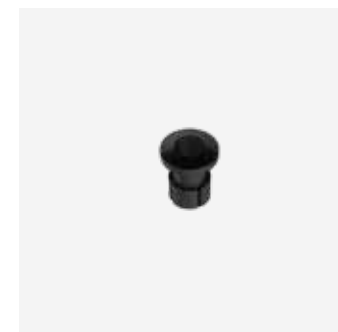
Art. N° 35664/20

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

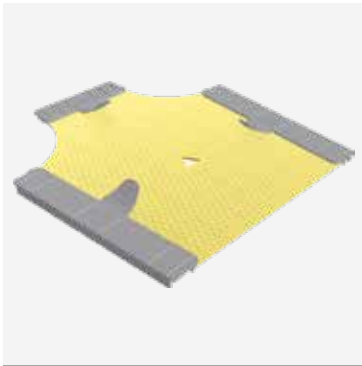
Orfit offers a full range of products dedicated to pediatric patients. It contains base plates, head supports and thermoplastic masks. The products are suitable for patients from 0 to 12 years old.

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



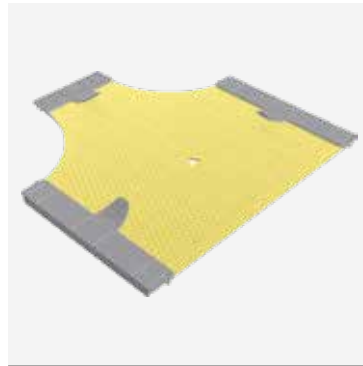
HIGH PRECISION PEDIATRIC MASKS

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



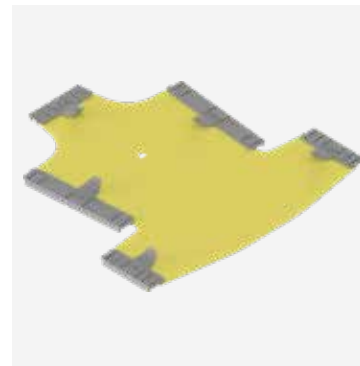
Art. N° 33705/2MA

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

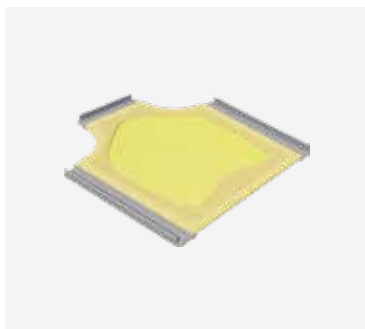


Art. N° 33794/2MA

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

HIGH PRECISION PEDIATRIC MASKS

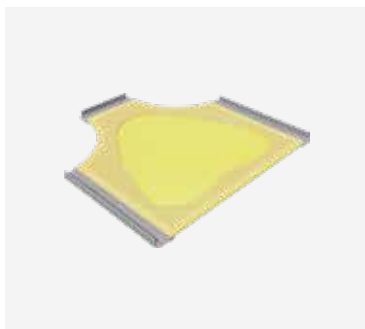
HYBRID



Art. N° 33748/2MA/12MI+N/NH

3-points hybrid head mask

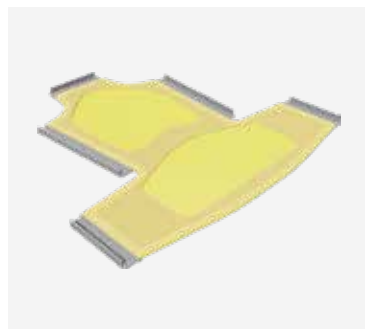
small size



Art. N° 33749/2MA/12MI+N/NH

3-points hybrid head mask

medium size



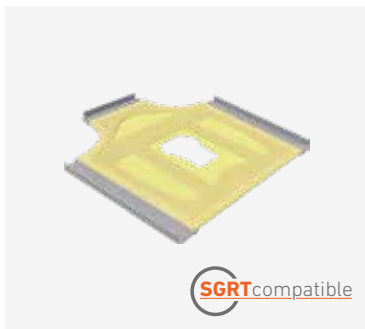
Art. N° 33750/2MA/12MI+N/NH

5-points hybrid

head, neck and shoulders mask

small size

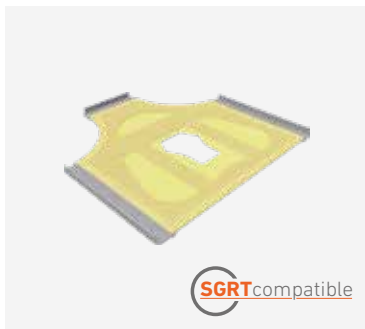
OPEN FACE HYBRID



Art. N° 33782/16MI/12MI+N

3-points open face hybrid head mask

small size



Art. N° 33783/16MI/12MI+N

3-points open face hybrid head mask

medium size

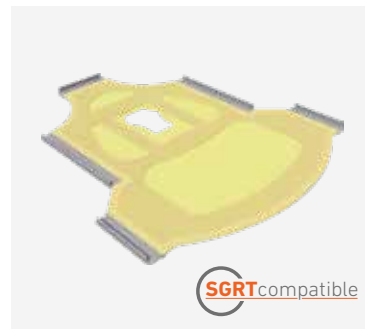


Art. N° 33785/16MI/12MI+N

5-points open face hybrid

head, neck and shoulders mask

small size



Art. N° 33787/16MI/12MI+N

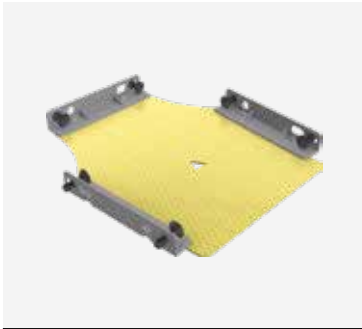
5-points open face hybrid

head, neck and shoulders mask

medium size

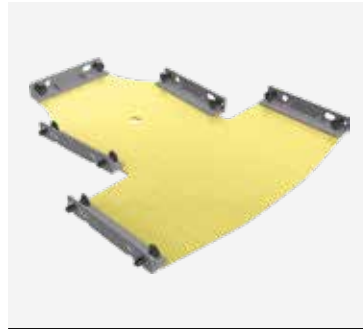
PUSH-PIN PEDIATRIC MASKS

SINGLE LAYER



Art. N° 33690/2MA

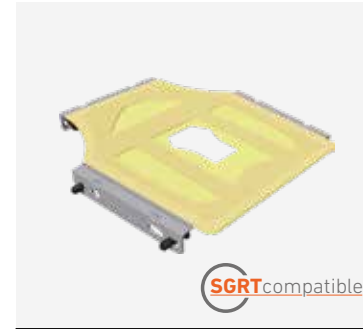
3-points head mask
with nose hole
small size



Art. N° 33691/2MA

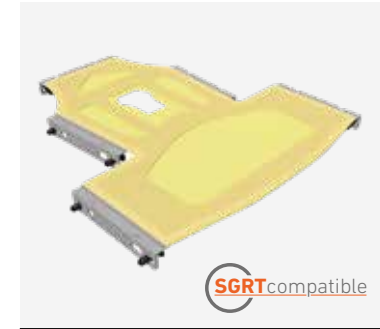
5-points head, neck and shoulders mask
with nose hole
small size

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



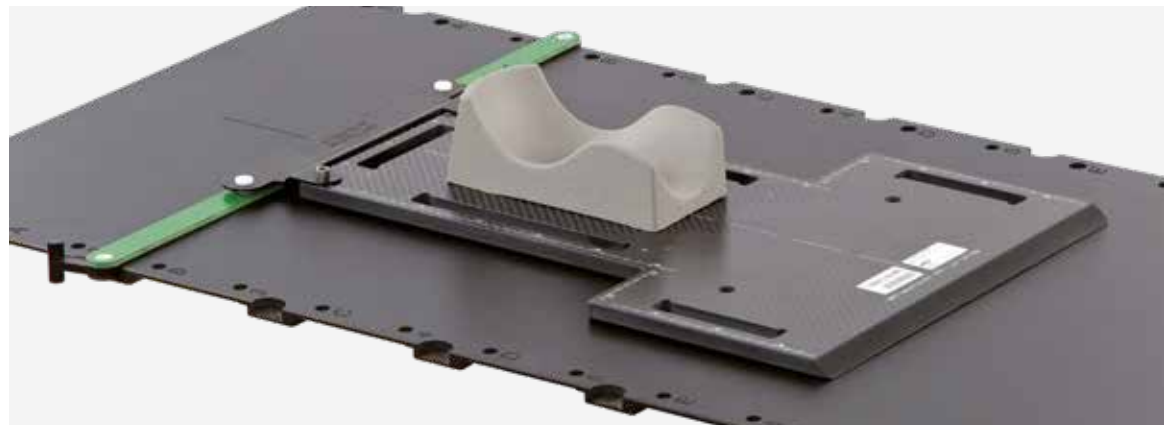
Art. N° 32111

High precision pediatric base plate in CFL
Head, neck and shoulders



Art. N° 32150-PED

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



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.



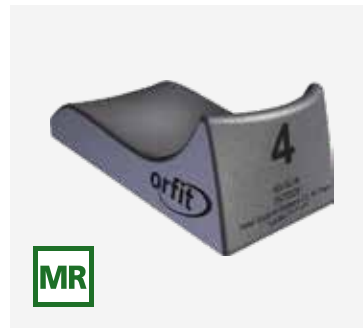
HIGH PRECISION PEDIATRIC HEAD SUPPORTS

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

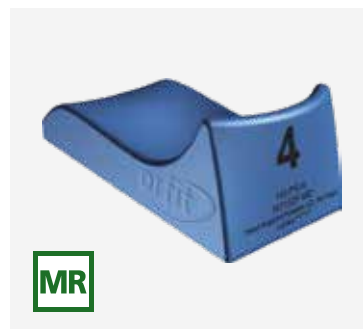
Pediatric head support
with lateral neck flaps
Extra-small size
Age 0 to 5

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



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.

Non-stick coating

Each mask is treated with a water-based non-stick coating. The coating prevents sticking of the mask to skin, hair and hardware.

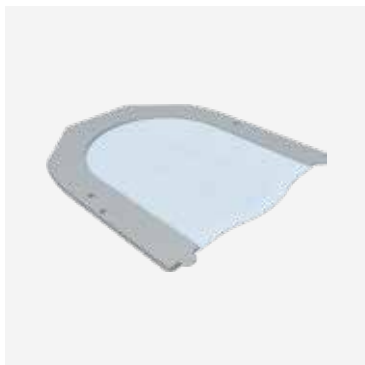
Thermoplastic properties

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.

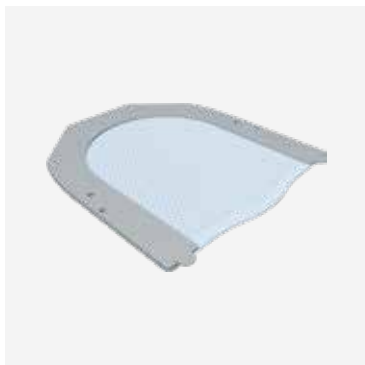


UON® MASKS

HEAD AND NECK



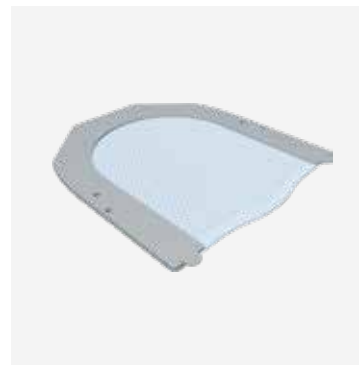
Art. N° 60110
2.4 mm
hybrid perforation



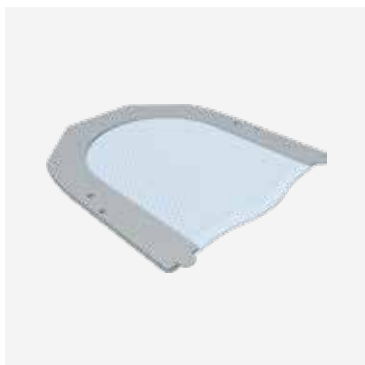
Art. N° 60112
2.4 mm
micro plus perforation



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



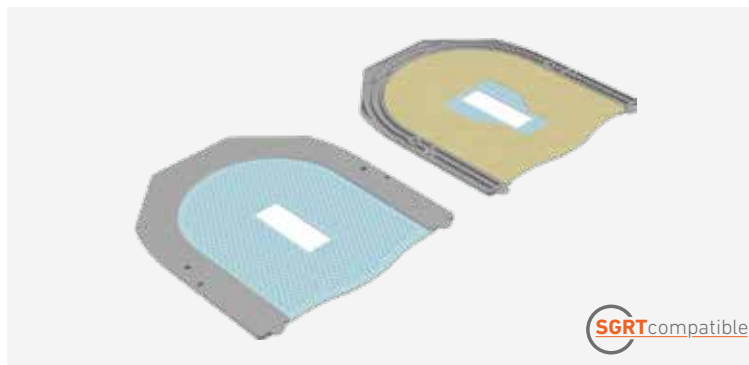
Art. N° 60114
2.4 mm
maxi perforation



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

DUON® 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



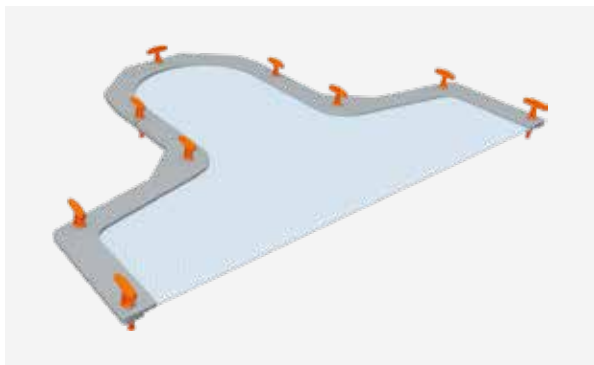
Art. N° 60121
3.2 mm
maxi perforation



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

DUON® MASKS

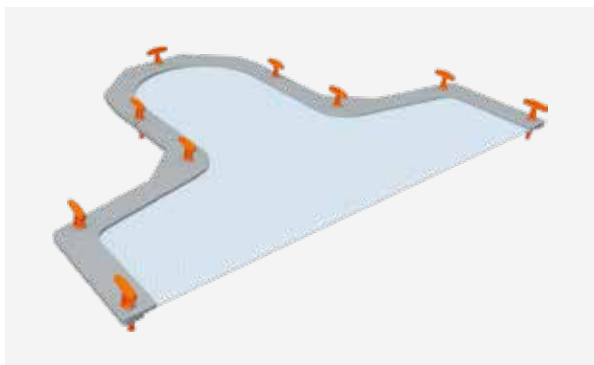
HEAD, NECK AND SHOULDERS



Art. N° 60001

2.4 mm

micro plus perforation



Art. N° 60002

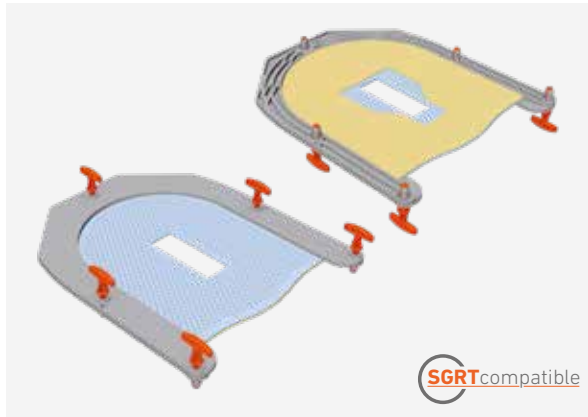
3.2 mm

maxi perforation



DUON® 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. N° 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-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.



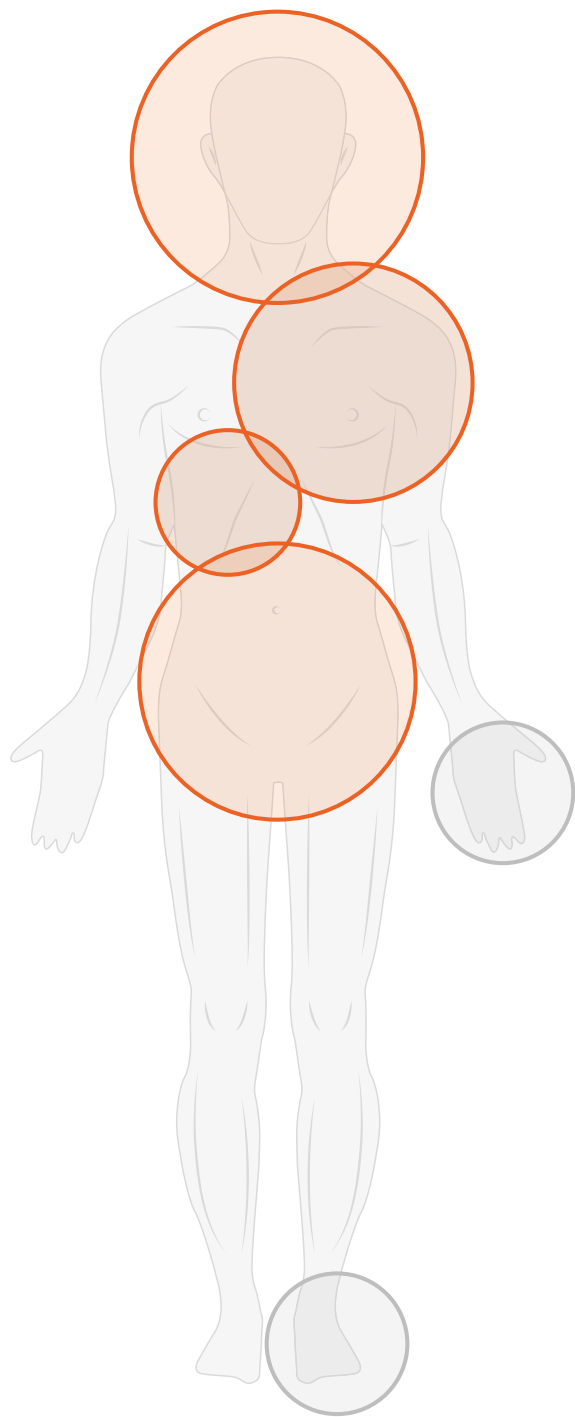
Art. N° 32046

For use with U-shaped base plates
Acrylic



Art. N° 32047-CFL

For use with S-shaped base plates
CFL



THE AIO SOLUTION® 3.0

ALL-IN-ONE PATIENT POSITIONING SYSTEM

CREATED BY DR. KATI HIDEGHÉTY

NEW FUNDAMENTALLY REDESIGNED

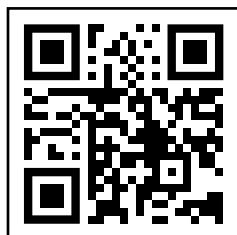
The AIO Solution facilitates and refines treatments by limiting potential changes in the patient position to a minimum. With one base plate and different sets of cushions and thermoplastic masks, all parts of the body are positioned and immobilized in a comfortable, exact and reproducible way.

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 prone position
- > Prone breast position

All cushions are easily positioned on the base plate in an indexed way. Color coding enables 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

The cushions are made of low density foam with excellent dosimetric properties. They are coated to assure patient comfort and hygiene.

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.



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**

The full AIO setup fits in small CT-bores and reduces the risk of collision with the gantry.

Immobilize without a base plate

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 wedges 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, which increases patient 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.



STEREOTACTIC BODY RADIATION THERAPY (SBRT)

The SBRT option 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.

**Developed in collaboration
with users worldwide.**

Hexapod and MRI compatible SBRT solution available.

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



Art. N° 32317/9, 32317/18, 32317/28

Pressure belt 120 cm, 130 cm, 175 cm

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.



AIO CUSHION SETS

PRONE BREAST BOARD

The yellow cushion set is designed to achieve a comfortable and reproducible position for breast patients treated in prone position. It is easy to assemble the lightweight elements and use to allow positioning of the arms and hands above the head. Or use the adjustable hand grip (optional) for increased patient comfort and optimal reproducibility.

2-types of head rests can be combined with the AIO 3.0 Prone Breast Solution: an indexed prone head support and a non-indexed comfort cushion. This variability will further help in increasing the precision and in finding a comfortable, yet reproducible, patient position.



Optional hand grip



Images courtesy of
AZ Sint Maarten, Mechelen (Belgium)

FEATURES AND BENEFITS

This cushion based prone breast board is a lightweight solution that is comfortable for both patients and therapists.

The AIO 3.0 Prone Breast Cushions can be used in combination with an AIO 3.0 base plate or can be indexed directly on the simulation or treatment couch. This makes the set suitable for use with small bore CT and MR scanners.

When the cushions are used in combination with an AIO 3.0 base plate, an extracranial mask can be moulded over the patient's hips, increasing the reproducibility and precision by reducing translational and rotational movements.

The extra soft support wedge for the contralateral breast increases patient comfort and limits the volume of the sternum and contralateral breast tissue.

The slope in the ergonomically shaped cranial cushion allows for a comfortable position of the arms, reducing the tension in the shoulders and increasing the patient's comfort.

The cranial cushion has an integrated hand positioning area that allows for a reproducible position of the hands. For optimized hand and arm positioning use the optional hand grip.

The use of the elevation cushions increases the total height of the set (6 cm), which allows positioning of patients with pendulous breasts in a reproducible way.

Easy to switch between right- and left-sided set-up.

The head can be positioned by means of 2 types of head supports.

All cushions and accessories are MR safe.

Compatible with the AIO 3.0 knee and leg positioning cushions to support the ankles and lower legs in a comfortable way.

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.

FEATURES AND BENEFITS

The opening in the belly board can be fitted with two different sizes of belly inserts. The smallest insert is made of 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

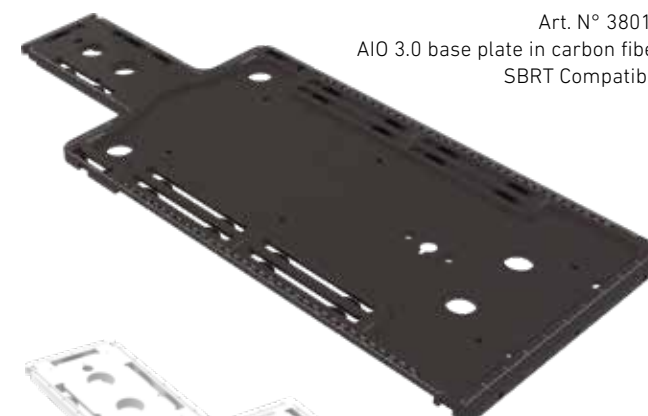
The AIO base plates ensure reproducible positioning of all body regions.

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

Art. N°	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 compatible
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 with pediatric mask 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
38015	AIO 3.0 base plate in carbon fiber - SBRT Compatible - without leg separator - MR Safe
38016	AIO 3.0 base plate CFL - SBRT Compatible - without leg separator
38018	AIO 3.0 base plate CFL for Hexapod - without leg separator - paediatric
38019	AIO 3.0 base plate CFL for Hexapod - SBRT Compatible
38020	AIO 3.0 base plate CFL for Hexapod - SBRT Compatible - without leg separator
38021	AIO 3.0 base plate CFL for Hexapod - SBRT Compatible - without leg separator - Pediatric shoulder slots
38022	AIO 3.0 base plate FGL - without Leg Separator - MR Safe



Art. N° 38013
AIO 3.0 base plate in carbon fiber
SBRT Compatible



Art. N° 38012
AIO 3.0 base plate in fiber glass
with pediatric mask slots
MR safe

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.



Art. N° 38215

AIO 3.0 Storage Cabinet

AIO MASKS

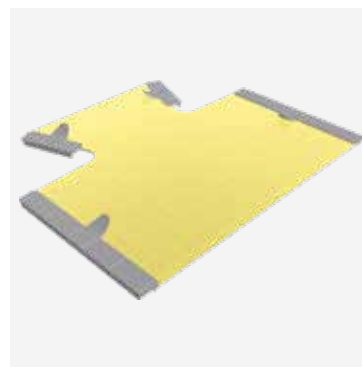
LUNG, BREAST, THORAX AND ABDOMEN



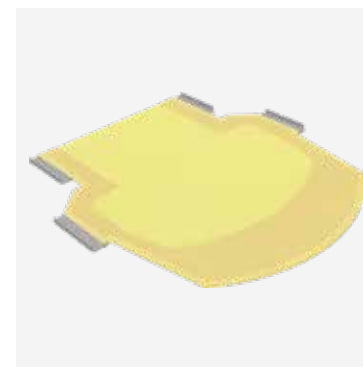
Art. N° 33715/2MA
4-points thorax supine mask
small size



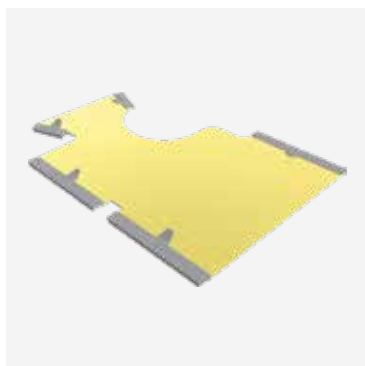
Art. N° 33716/2MA
4-points thorax supine mask
medium size



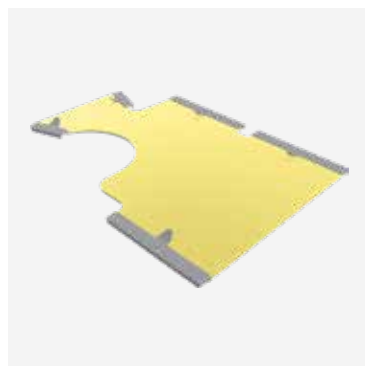
Art. N° 33717/2MA
4-points thorax supine mask
large size



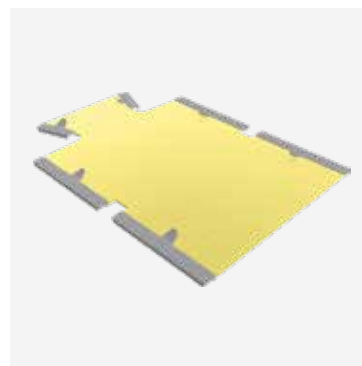
Art. N° 33775/2MI/12MI+N
4-points hybrid lung mask



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



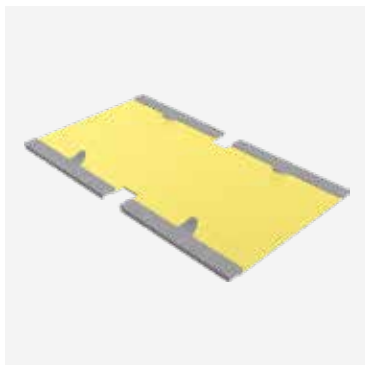
Art. N° 33723/32MA/R
5-points assymetric breast supine mask
right side



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

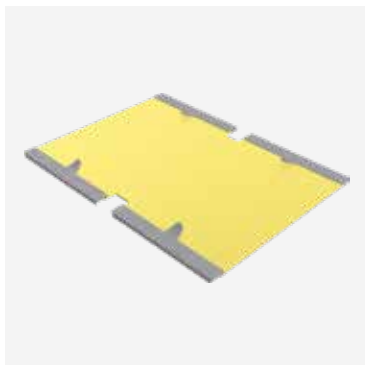
AIO MASKS

PELVIS



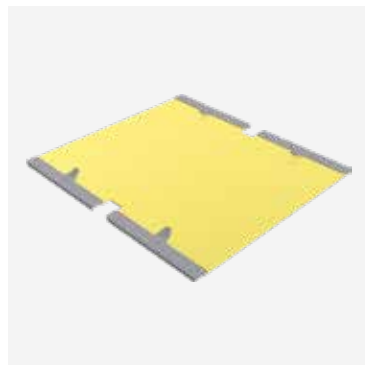
Art. N° 35788/32MA

4-points pelvic mask - small
prone and supine



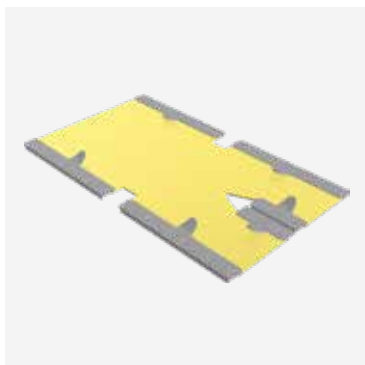
Art. N° 35787/32MA

4-points pelvic mask - medium
prone and supine



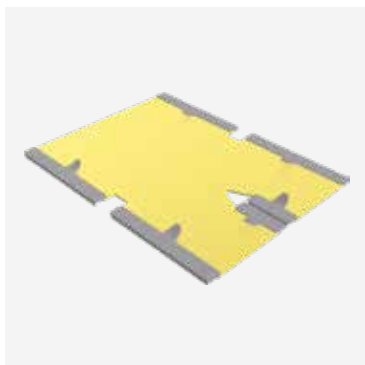
Art. N° 35784/32MA

4-points pelvic mask - large
prone and supine



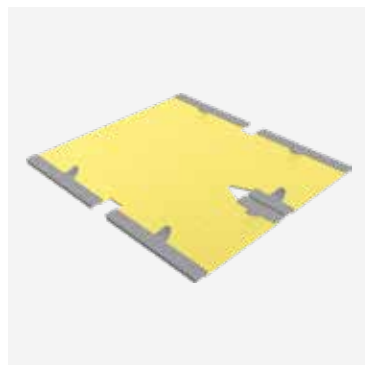
Art. N° 35710/32MA

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



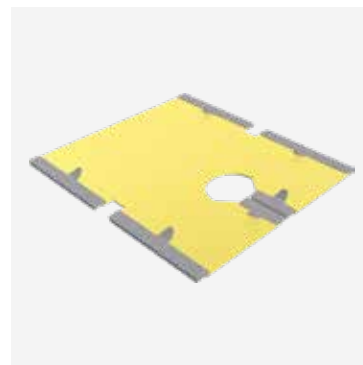
Art. N° 35711/32MA

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

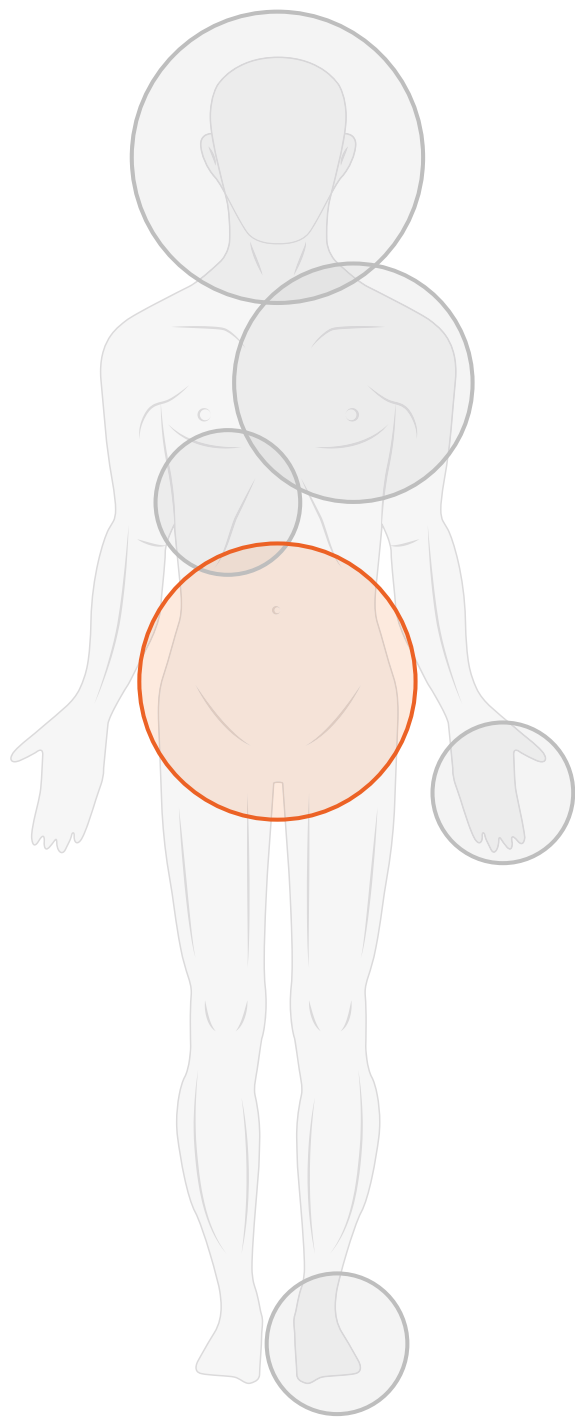
The main goal in the positioning of patients with head and neck tumors is a very precise and reproducible positioning and immobilization of the head and upper torso of the patient. To achieve this, a combination of the AIO hardware and High Precision thermoplastic masks provides an ideal solution.

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 21-24 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. 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 for high risk patients.

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

PELVICAST BASE PLATES

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

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

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

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

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

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



PELVICAST
BASE PLATES



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

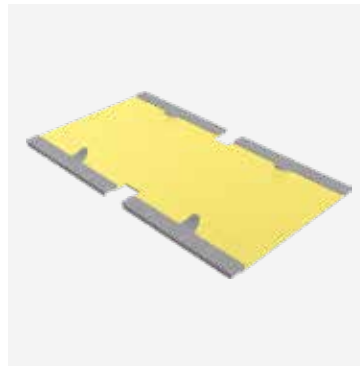


Art. N° 32124/MR
.....
High precision base plate
.....
For Exact* or iBEAM* couches
.....
MR Safe
.....

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

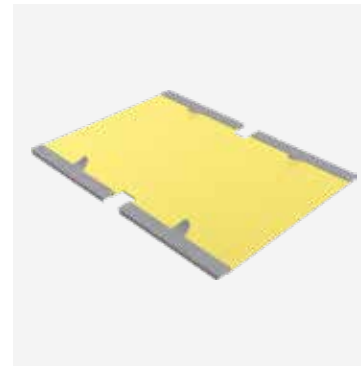
PELVIC MASKS

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.



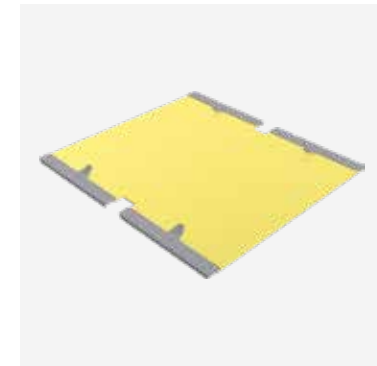
Art. N° 35788/32MA

4-points pelvic mask - small
prone and supine



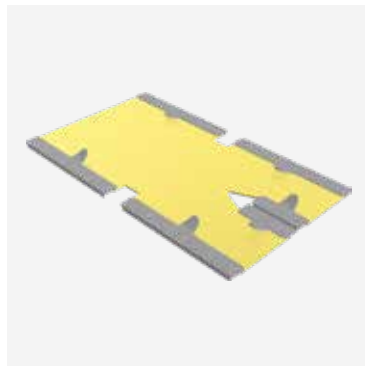
Art. N° 35787/32MA

4-points pelvic mask - medium
prone and supine



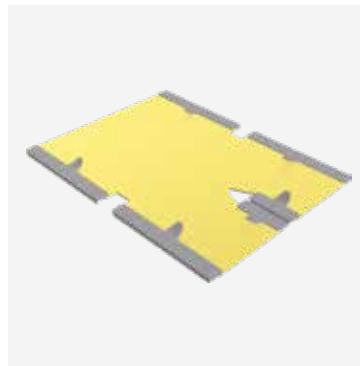
Art. N° 35784/32MA

4-points pelvic mask - large
prone and supine



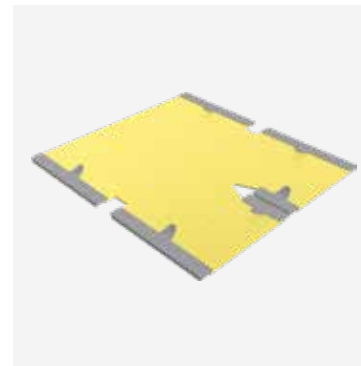
Art. N° 35710/32MA

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



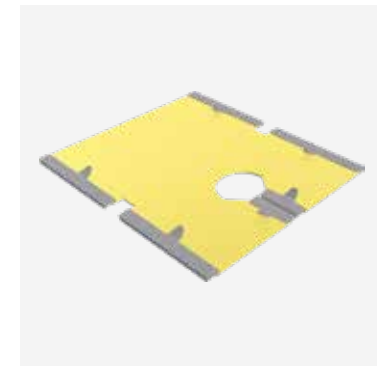
Art. N° 35711/32MA

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

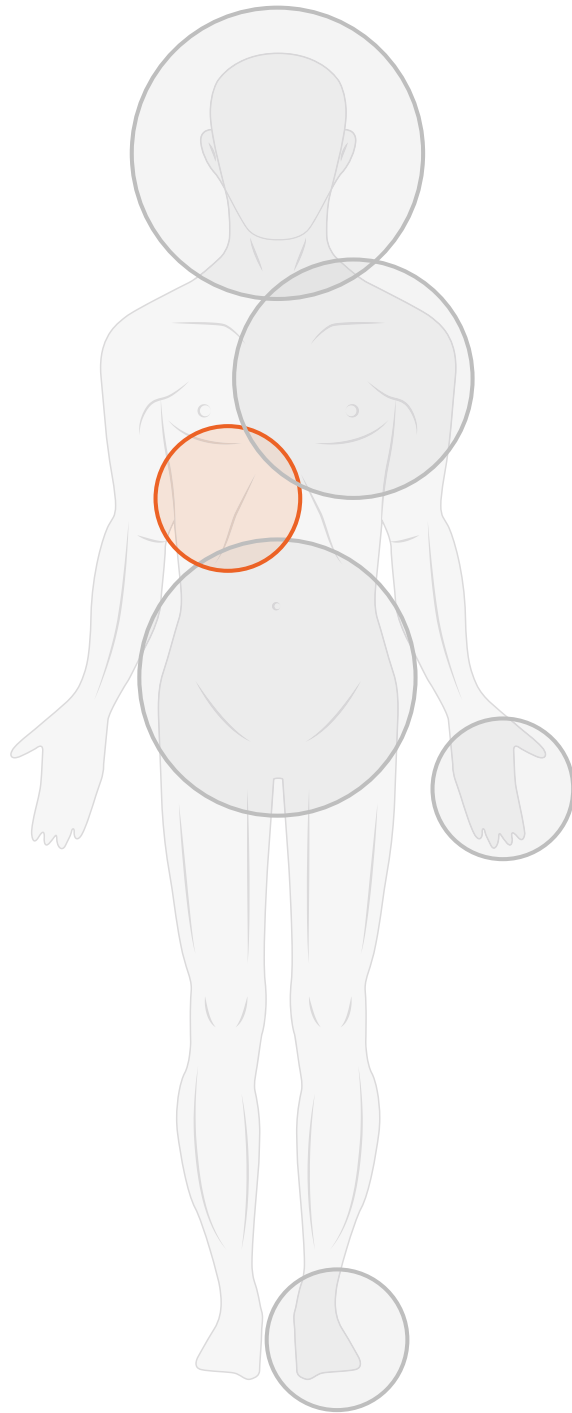


Art. N° 32008

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.



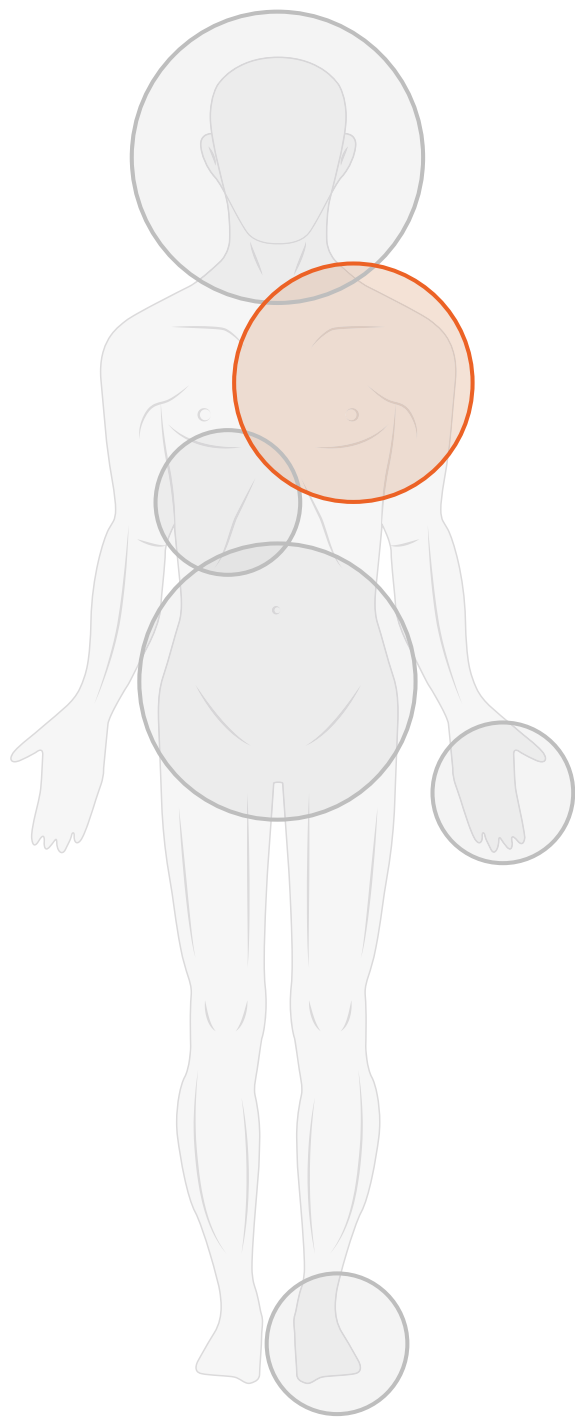
HIGH PRECISION LUNG BOARD

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). See pages 19 & 20.



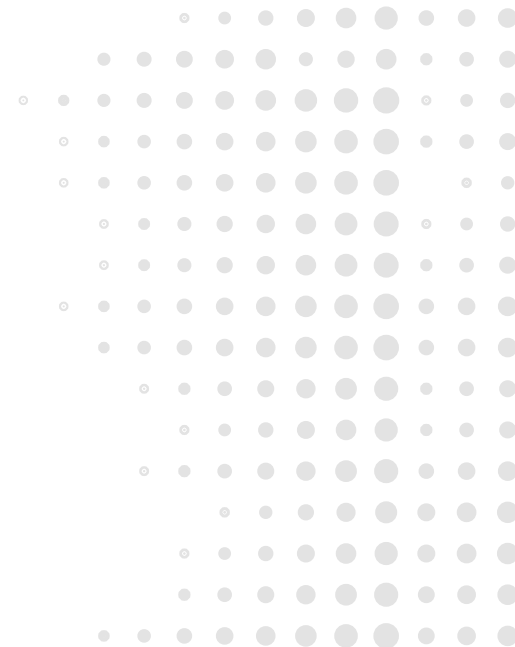
Art. N° 29115





MAMMORX[®]

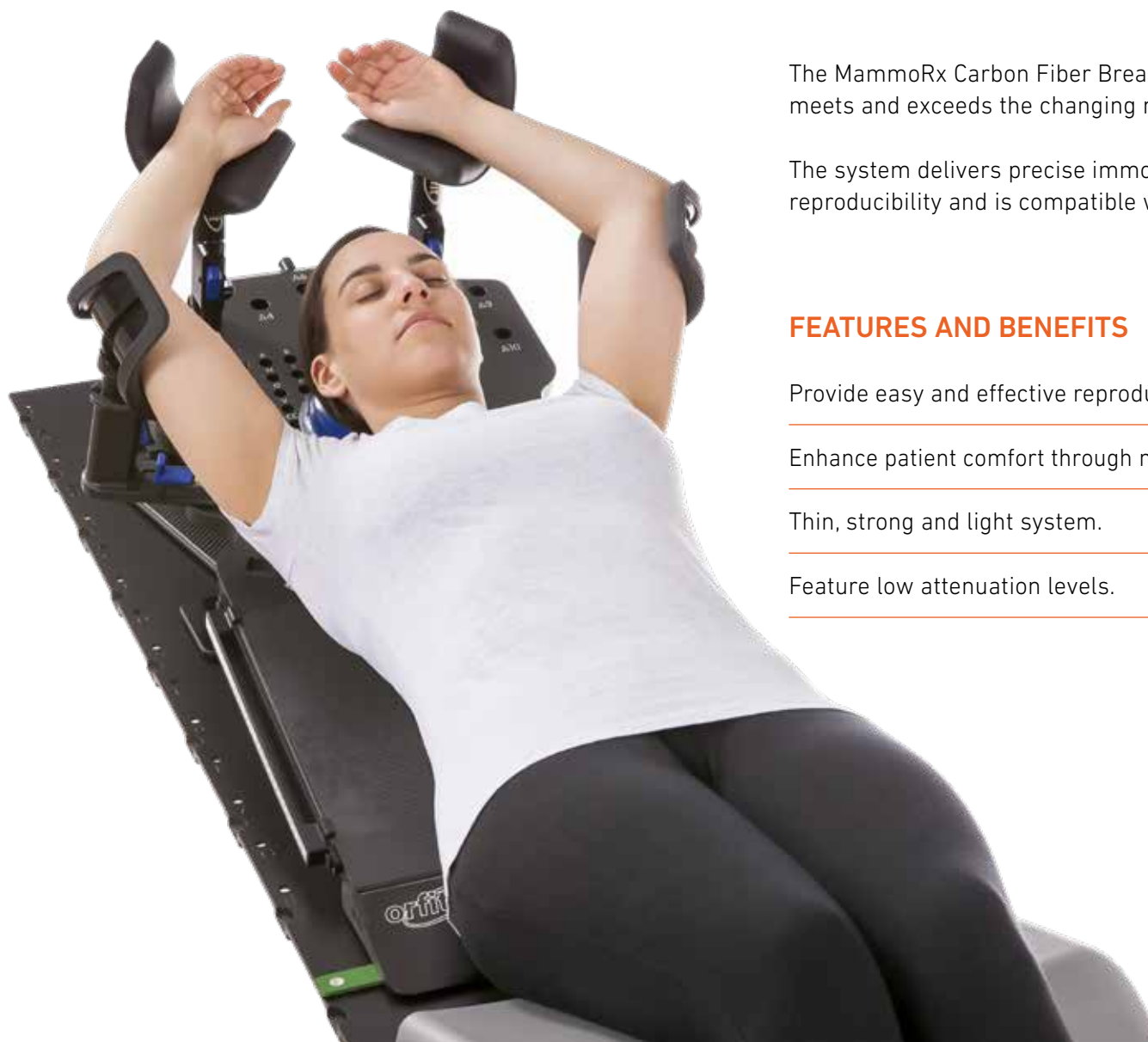
PATIENT POSITIONING SYSTEMS



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.**

MAMMORX® BREAST BOARD



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

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

FEATURES AND BENEFITS

Provide easy and effective reproduction of patient setup.

Enhance patient comfort through next-generation design improvements.

Thin, strong and light system.

Feature low attenuation levels.

MAMMORX® BREAST BOARD

MAMMORX CARBON FIBER BREAST BOARD

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

Built-in supports allow you to quickly achieve standard treatment angles of 0, 5, 7.5, 10, 12.5, 15, 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® MASKS

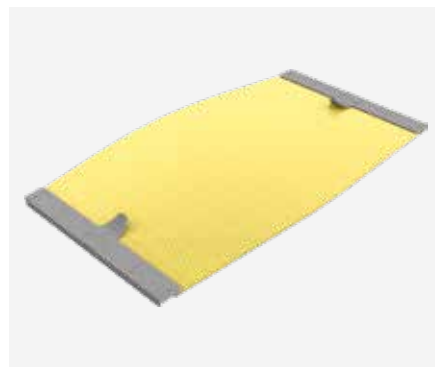
BREAST HIGH PRECISION PRECUTS



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



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



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



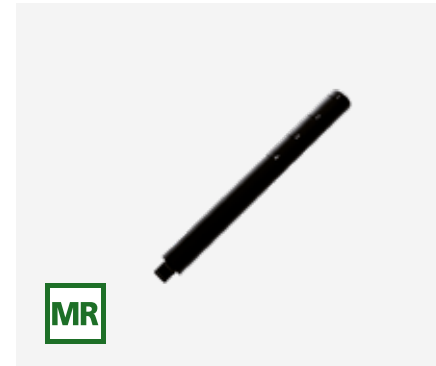
MAMMORX® ACCESSORIES



Art. N° 33170

Adjustable arm support

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



Art. N° 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° 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.



Art. N° 39320

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



MAMMORX® ACCESSORIES

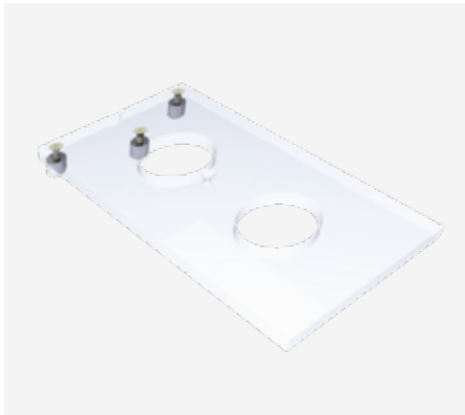
A blue gel ring head support can be attached directly to the MammoRx.



Art. N° CHB-1

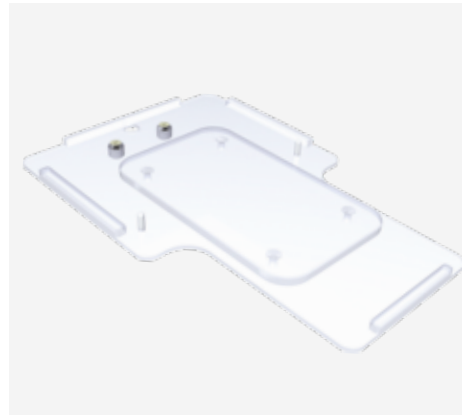
Blue gel ring head holder

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



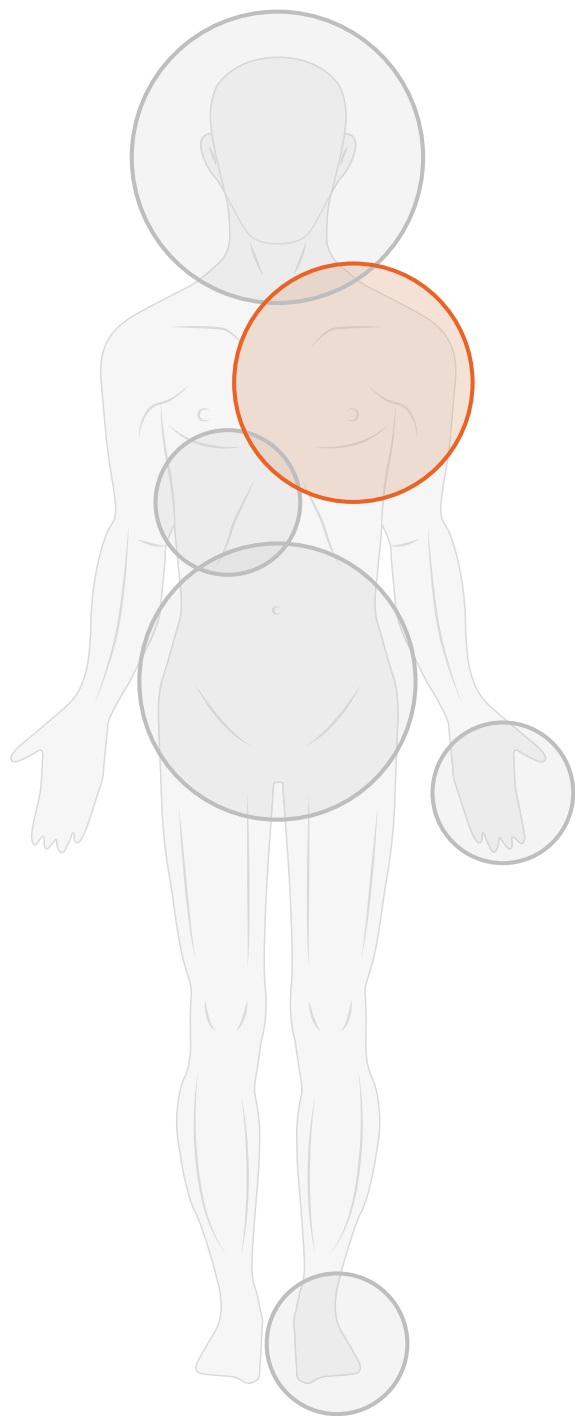
Art. N° CHO-1

Orfit head support interface



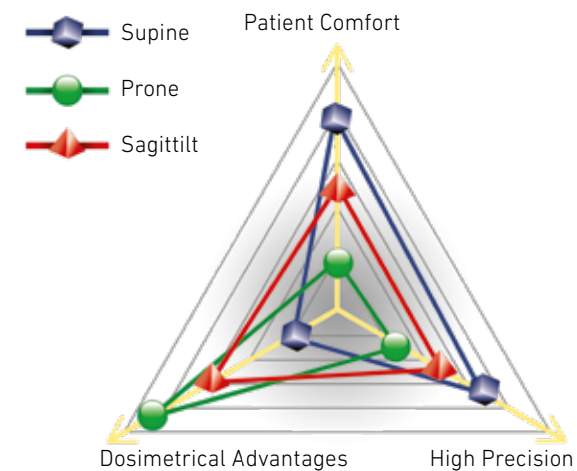
Art. N° CHS-1

Silverman head support interface



SAGITTILT® PRONE BREAST SOLUTION

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



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

CLINICAL STUDIES

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

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

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

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

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

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

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

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

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

"The prone position has been shown to reduce skin reactions by eliminating skin folds." "This position can reduce late toxicities by greatly reducing the amount of dose to critical organs." "Dose homogeneity can be improved up to 1.2%."

"The prone position also has shown reduced intrafractional motion while having interfractional motion within tolerance."

Temme, N.; Hermann, R.M.; Carl, U.M., Nitsche, M. et al. [2022], Radiotherapy of Breast Cancer in Laterally Tilted Prone vs. Supine Position: What about the Internal Mammary Chain? *J. Perso. Med.* 2022, 12, 653.

"For the EBRT of the PTV 'breast', positioning in the laterally tilted prone position shows the best planning results regardless of the planning technique."

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. The tilt can be performed by a single person.



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

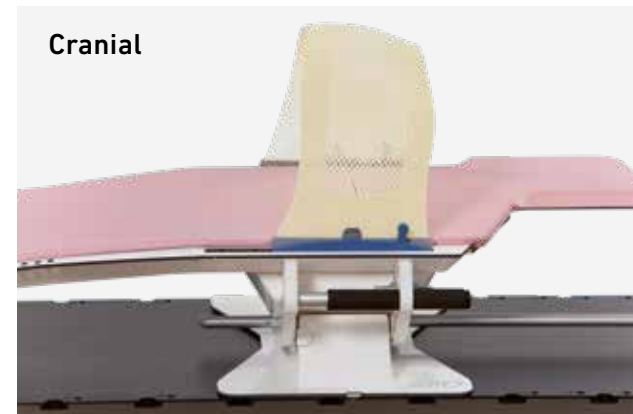
IMMOBILIZATION WITH A THERMOPLASTIC MASK

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.

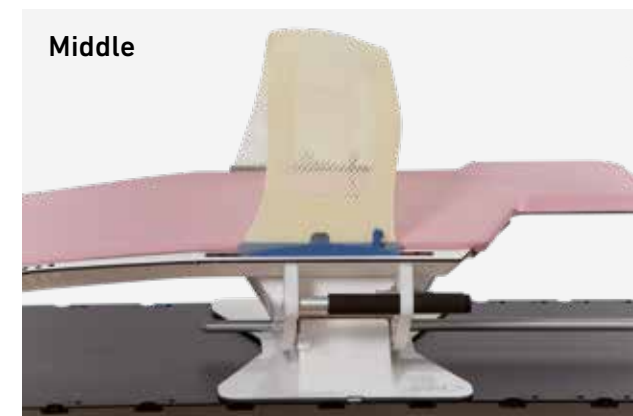
Both the thermoplastic mask and the elbow support prevent the patient from sliding sideways when using the tilt function. There are three different positions for the thermoplastic mask: cranial, middle and caudal.

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

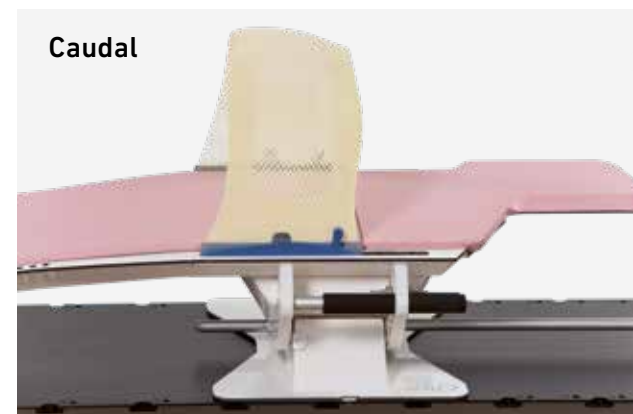
Cranial



Middle



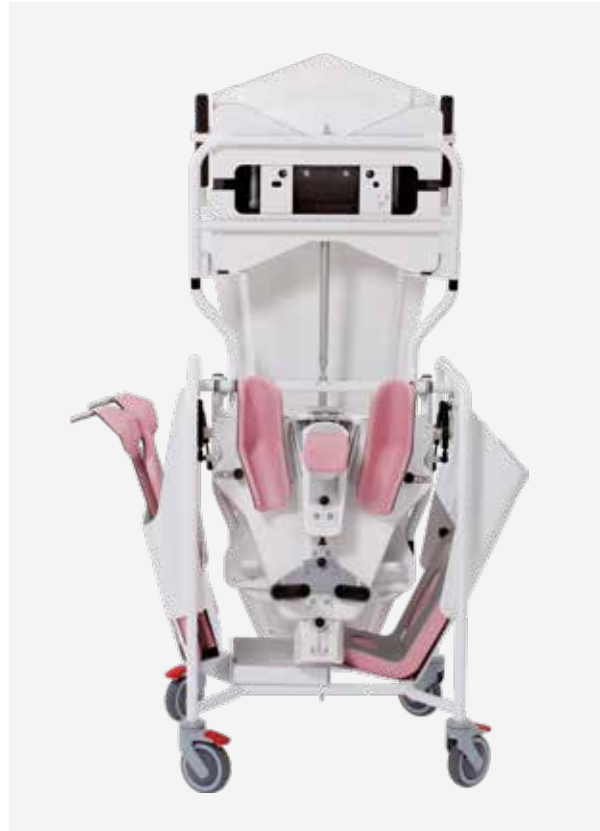
Caudal



SAGITTILT® FEATURES AND BENEFITS

EASY STORAGE

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



COUCH INDEXATION

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



SAGITTILT® FEATURES AND BENEFITS

HIGH-TECH DESIGN PRODUCT

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

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



CLINICAL PUBLICATIONS ABOUT THE SAGITTILT PRONE BREAST SOLUTION

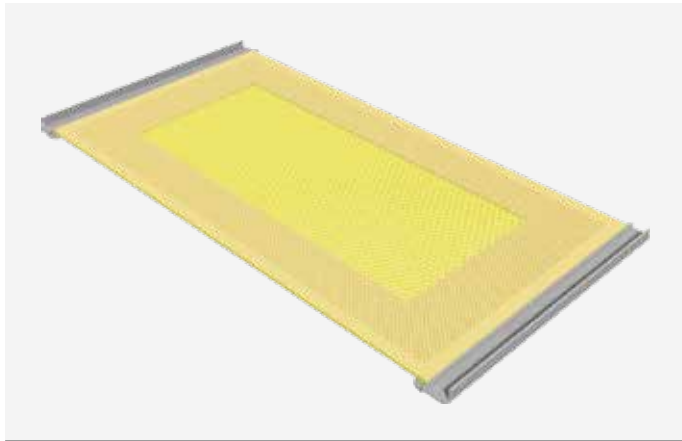
Cucchiaro, S. et al. (2014), Clinical Introduction of an all-in class solution for prone breast hypofractionated SIB with multibeam IMRT, Radiotherapy & Oncology, Vol. 111, Supplement 1, p. 47

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

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

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

SAGITTILT® 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



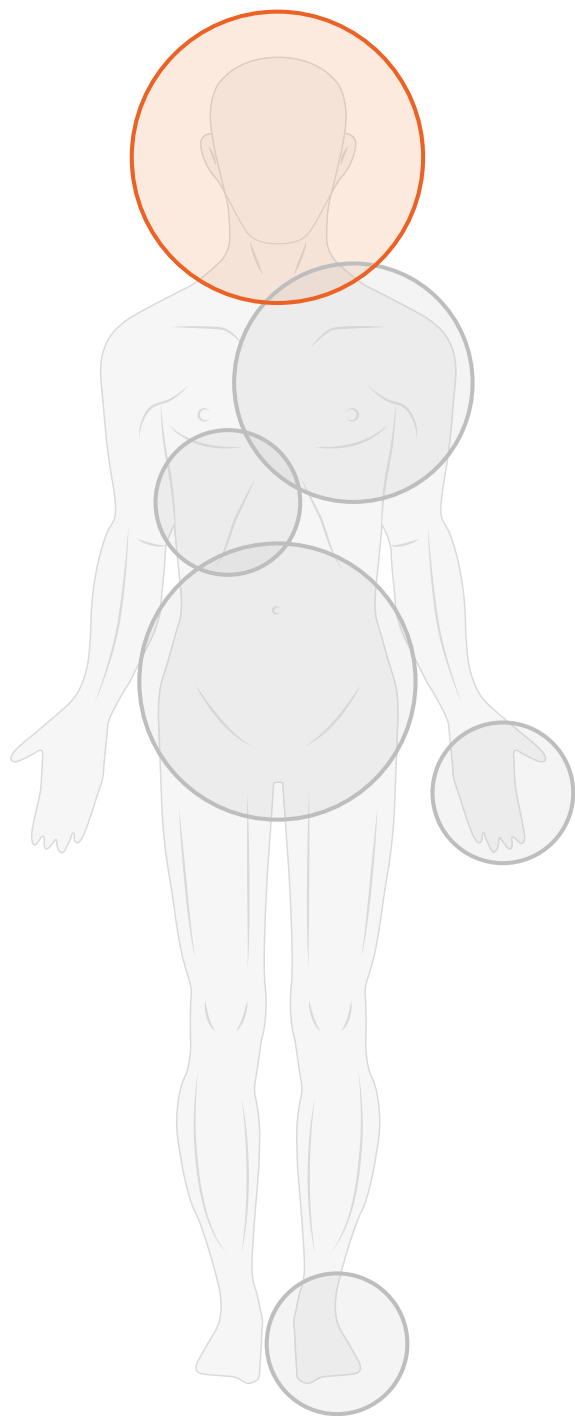
Art. N° 32070/21

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

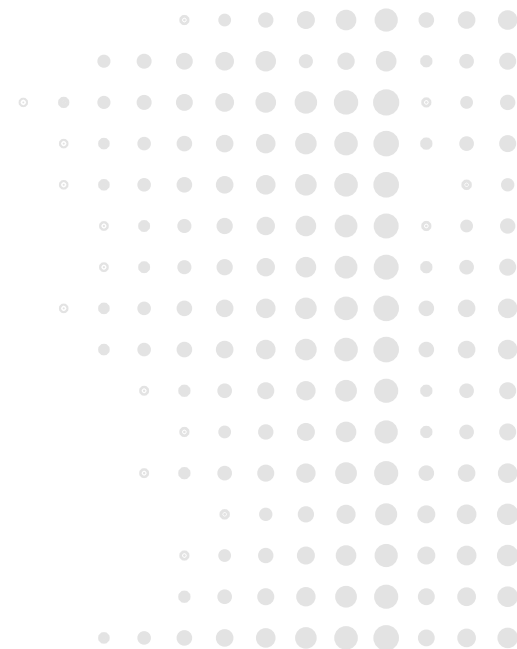


Art. N° 32070/14

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.

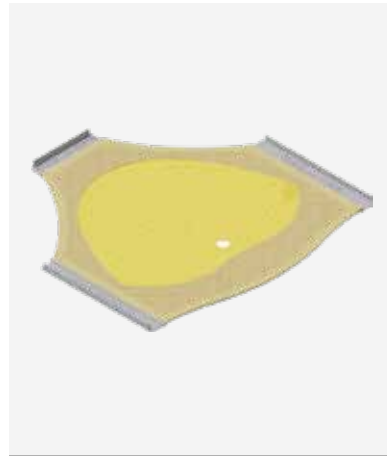
SRS-Fix comes in three setups: a Standard Setup, a Customized Setup and an Advanced Customized Setup.



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.



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

BiteFix

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



Art. N° 32788
BiteFix bite block without tongue depressor



Art. N° 32789
BiteFix bite block with tongue depressor

Customized head support and vacuum bag

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

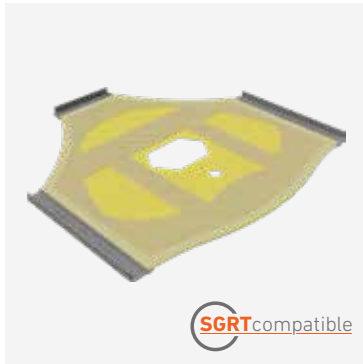


Art. N° 18208
Customized head support: Vacuum bag

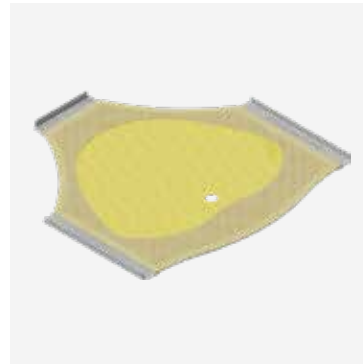


Art. N° 32392
Customized head support: Thermofit

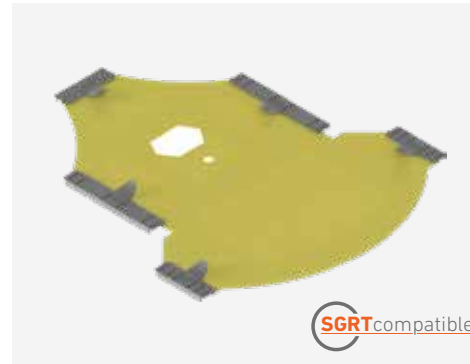
SRS-FIX MASKS



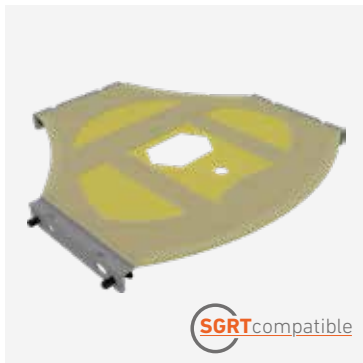
Art. N° 33796/16MI/12MI+N
3-points open face hybrid head mask
High precision profiles
Hole for BiteFix



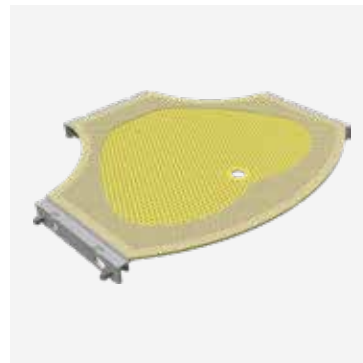
Art. N° 33792/2MA/12MI+N/NH
3-points hybrid head mask
High precision profiles
Hole for BiteFix
No nose hole



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



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 dosimetric properties with a low attenuation percentage.

Thermofit is odorless and has a long shelf life.



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)

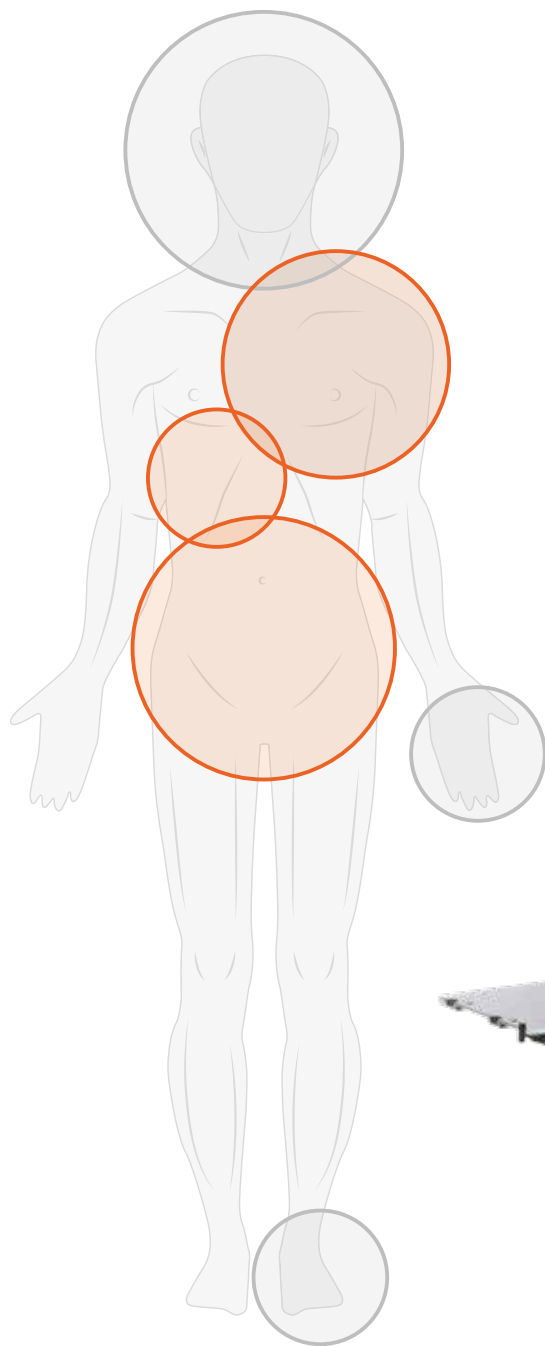
THE SBRT SOLUTION

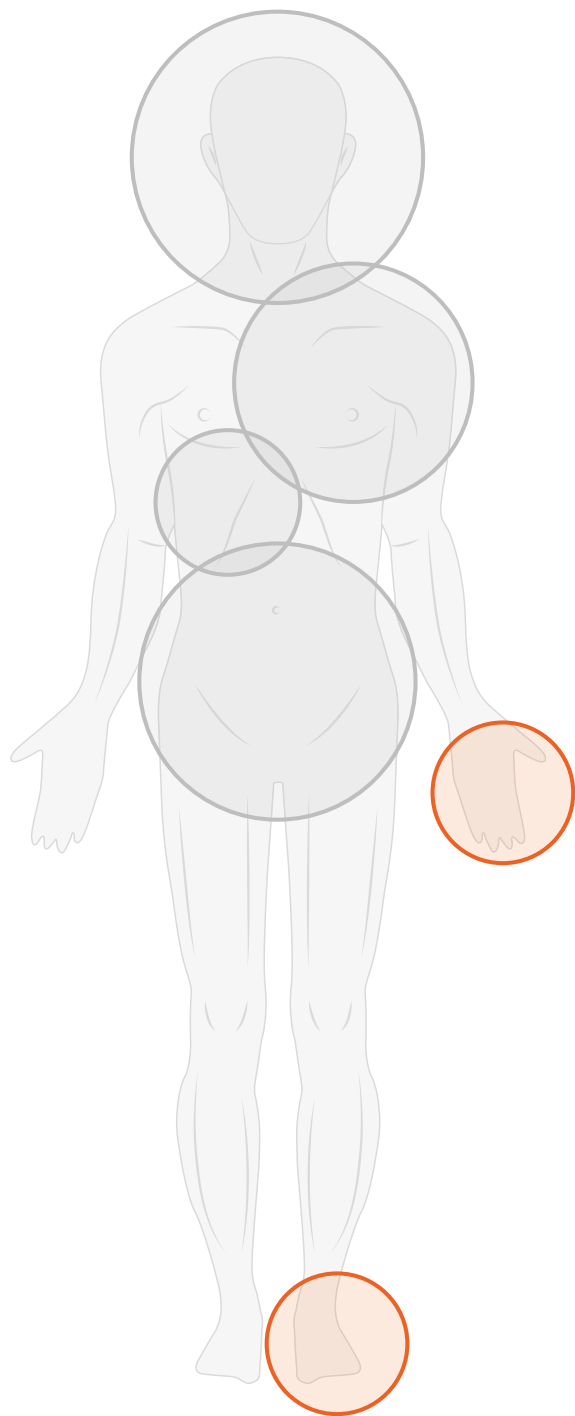
The SBRT Solution is developed in collaboration with users worldwide based on existing SBRT studies, products available on the market and on-site testing to provide a system which combines high technology, ease of use and precision to meet current

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.

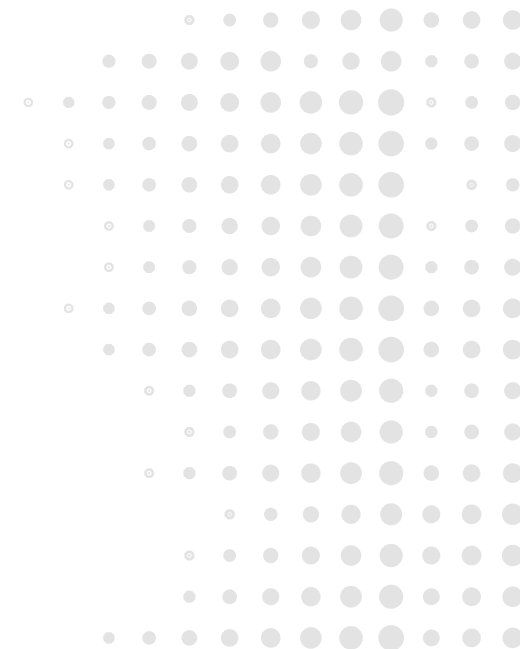
The Orfit SBRT Solution for Stereotactic Body Radiation Therapy is now integrated in The AIO Solution 3.0.

Please see The AIO Solution 3.0 section for more details.





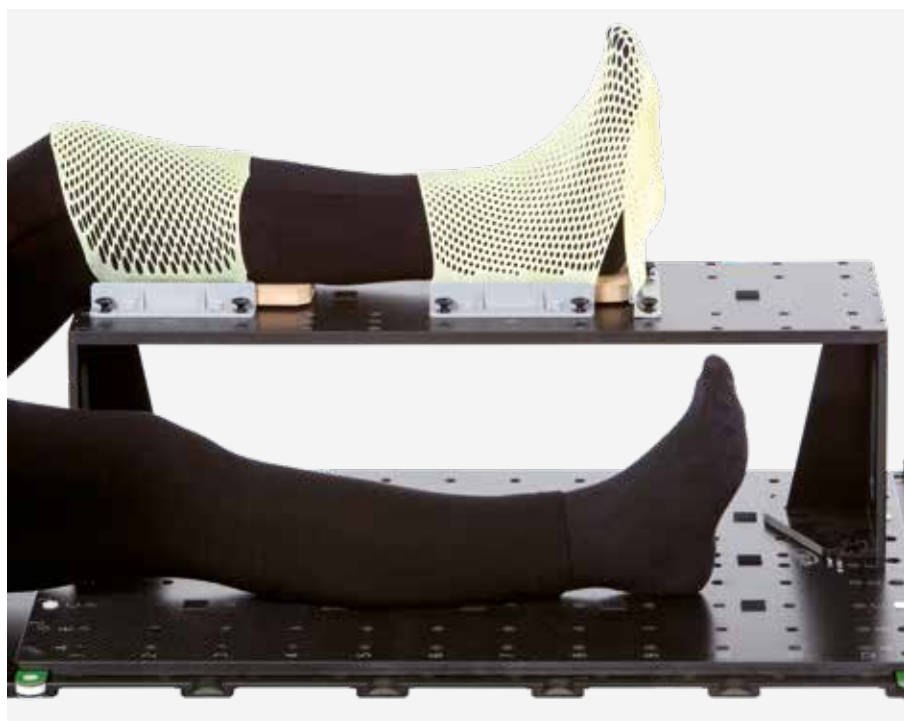
THE EXTREMITIES SOLUTION



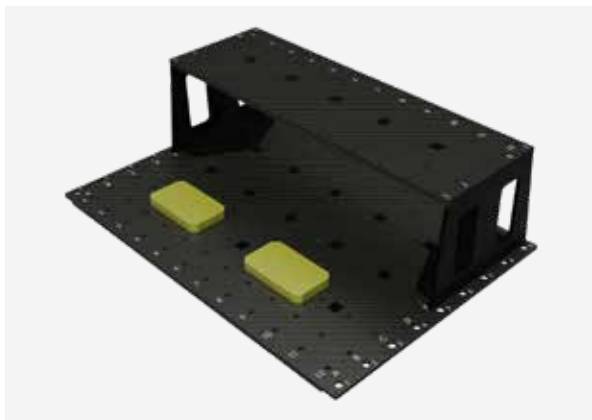
Orfit offers a complete immobilization solution, specifically designed for fixation of extremities in a reproducible way.

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.

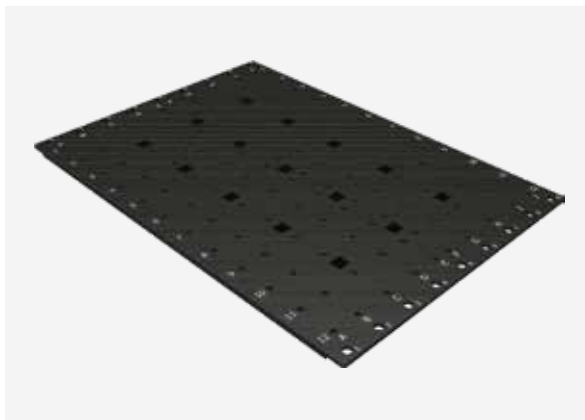


EXTREMITIES BASE PLATES



Art. N° 32103

Set - CFL



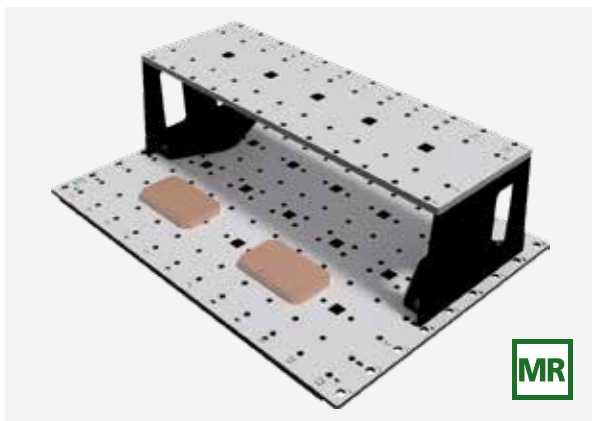
Art. N° 32103/1

Base plate - CFL



Art. N° 32103/3

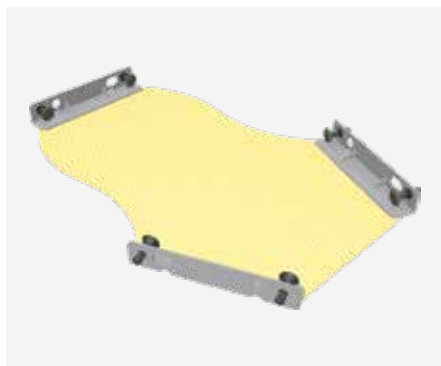
Leg support - CFL



Art. N° 32103/MR

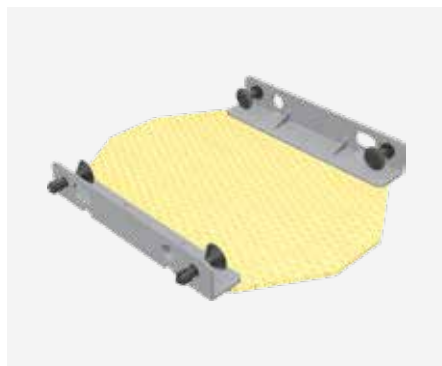
Set - MR Safe

MASKS FOR EXTREMITIES



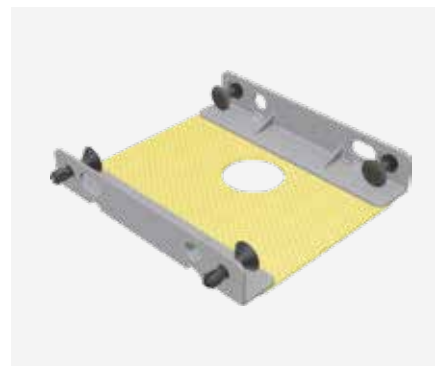
Art. N° 35792/32MA

3-points foot mask



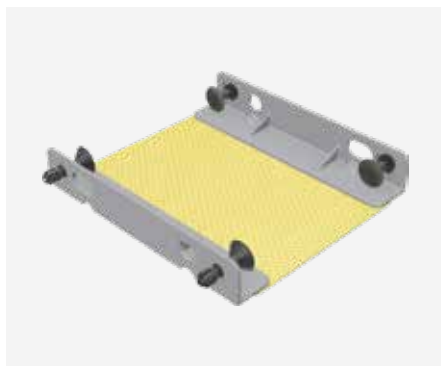
Art. N° 35793/32MA

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

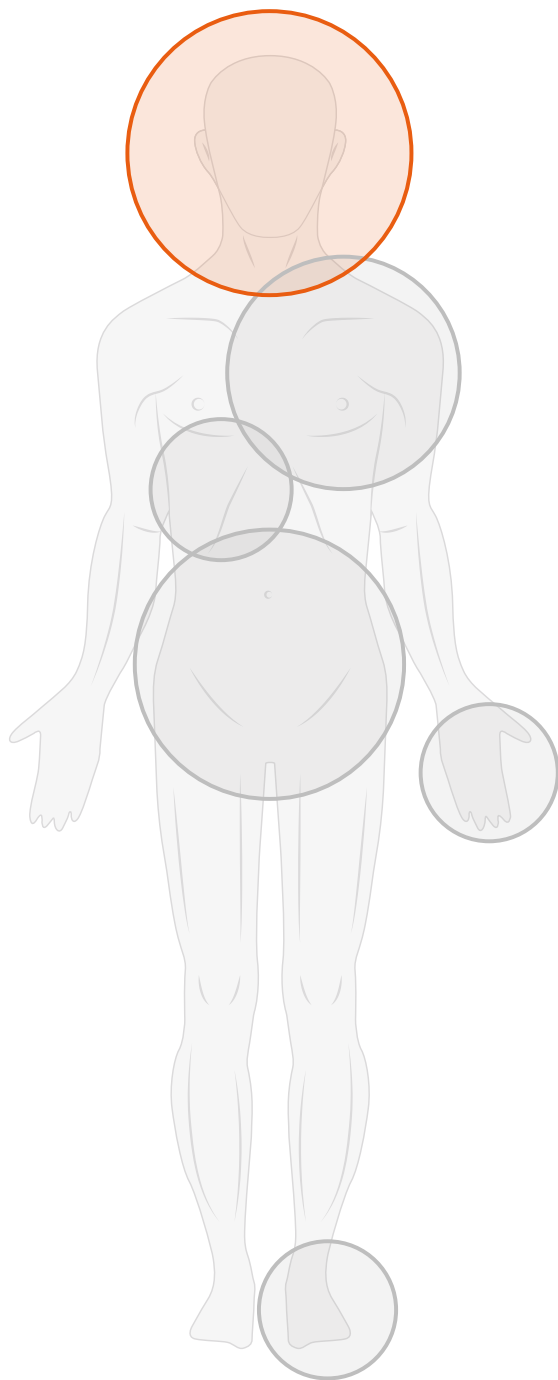


Art. N° 35799/2MI/R

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.



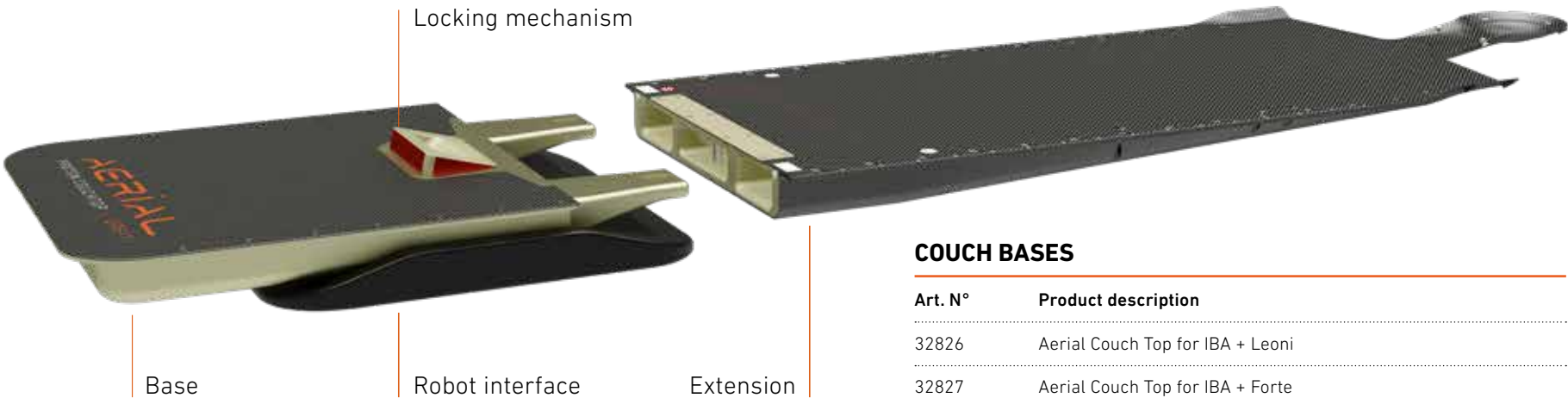
**Designed
to meet the
specific
standards
proton therapy
demands.**

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
PROTON COUCH TOP | ORFIT



COUCH BASES

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

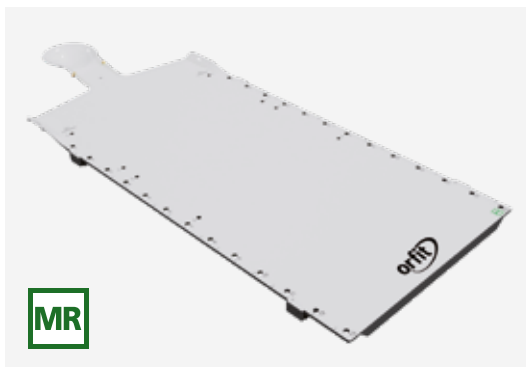
Art. N°	Product description
25000/43	HP PRO CT Overlay - Aerial Couch Compatible - adult
25000/63	HP PRO CT Overlay - Aerial Couch Compatible - pediatric 0-7 years

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.

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
25000/87	Overlay		UCT extension
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
25000/71	Overlay for pediatric 8-16 years		Elekta HexaPOD™ evo RT System
25000/70	Overlay for pediatric 0-7 years		Elekta HexaPOD™ evo RT System

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)

NON-FLEXIBLE SHIM



Art. N° 25000/89
Polycarbonate non-flexible shim
(Sold individually)

HEAD REST INDEXING PLATE



Art. N° 25000/58
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[®] HEAD SUPPORTS

STANDARD HEAD SUPPORTS



Art. N° 25000/61
Model 1



Art. N° 25000/83
Model 2



Art. N° 25000/84
Model 3



Art. N° 25000/88
Model 4

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® 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.





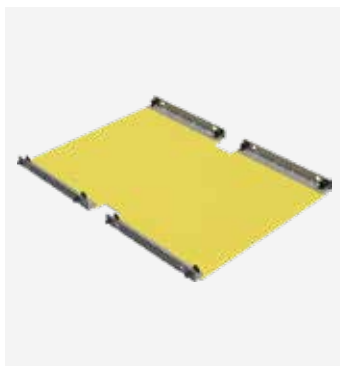
Art. N° 25100/16MI+N/NH

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

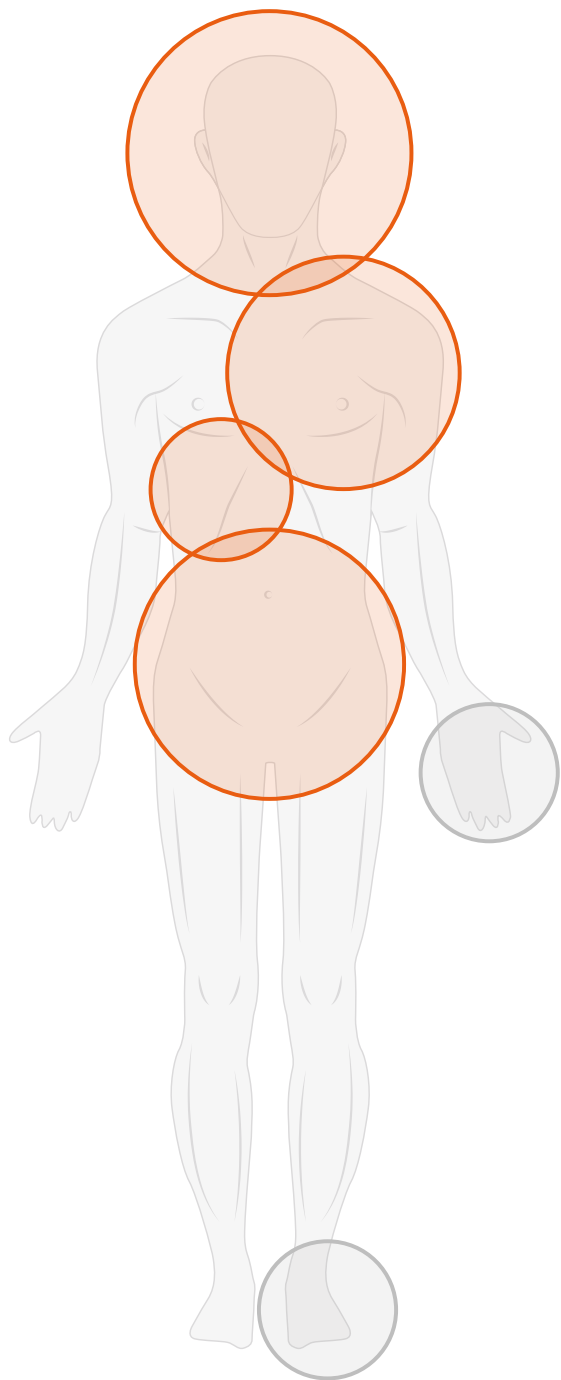
HP PRO MASKS - ADULTS

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
25100/2MI+N/NH	3-points mask - Nanor 2.0 mm micro+ without nose hole
25105/2MI+N	5-points mask - Nanor 2.0 mm micro+ with nose hole
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
45204/32MA/EFF	pelvic mask - Efficast 3.2 mm maxi with push-pins

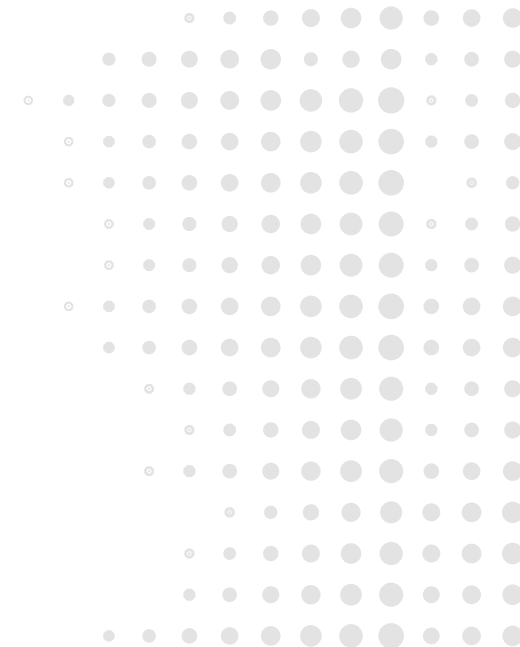
HP PRO MASKS - PEDIATRIC

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
25107/2MI+N/NH	5-points pediatric mask - Small - Nanor 2.0 mm micro+ without nose hole
25106/2MI+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





MRI COMPATIBLE PRODUCTS

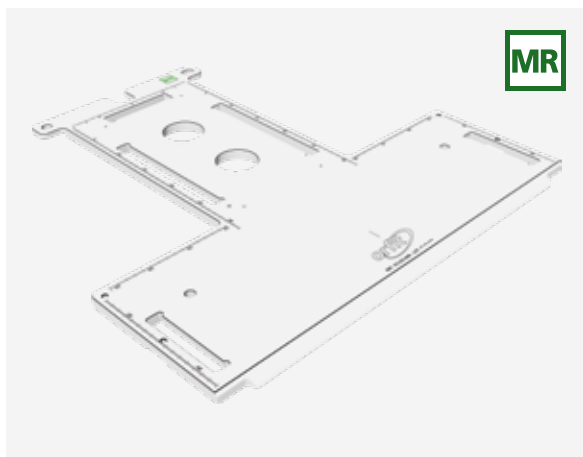


Orfit's range of MRI compatible immobilization devices allows a reproducible setup for each patient, both during simulation and treatment. The devices can be used in the MRI scanner and on the MRI Linac.

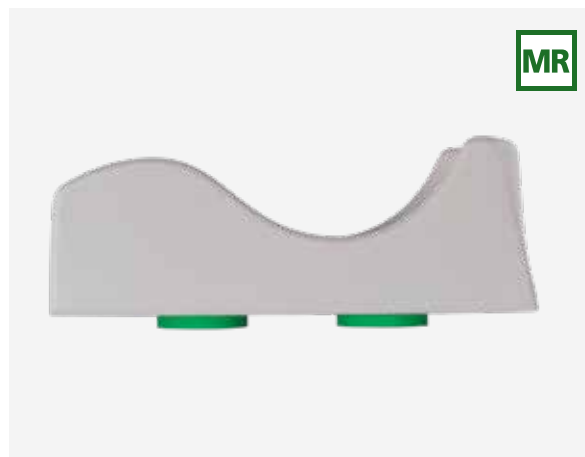
The product range contains high density head and neck base plates for the most common MRI scanners in the market: Siemens, Philips and GE. They allow the setup of the coils in the most optimal position to obtain a good image quality. For the MRI Linac, there are low density versions of the head and neck 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 and neck base plates
Read more on p. 16-17



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



The AOI Solution 3.0

Read more on p. 52



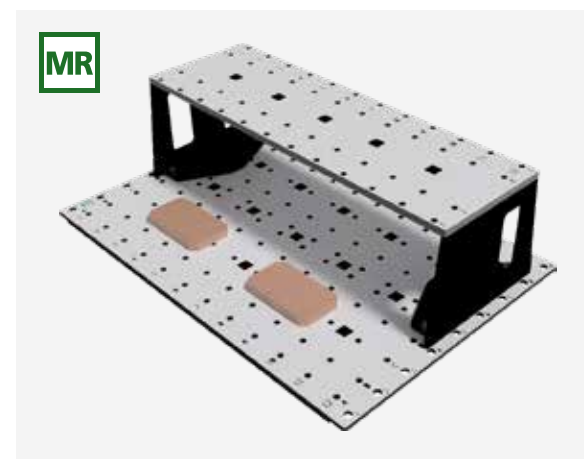
HP PRO base plate

Read more on p. 140



MammoRx

Read more on p. 73



Extremities Solution

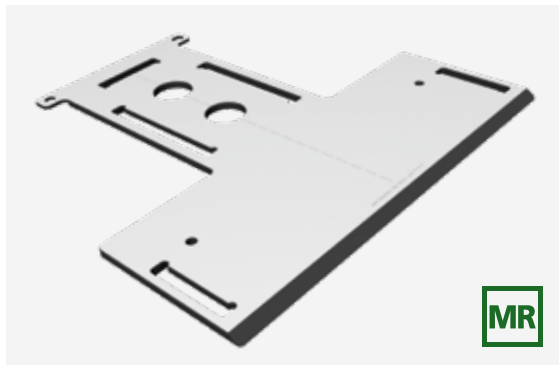
Read more on p. 114

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.

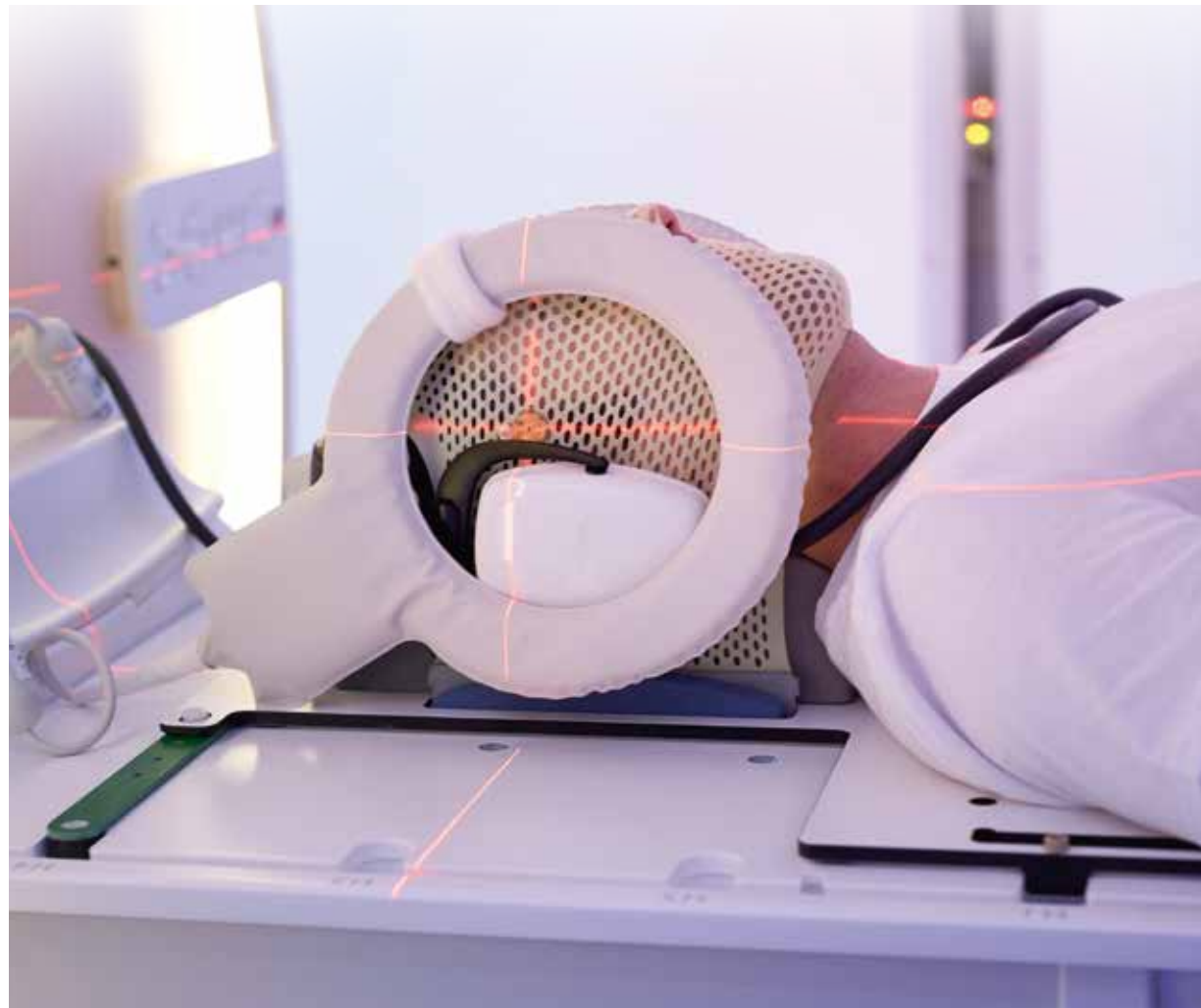
Both solutions can be combined with the flexible coils of the respective MRI scanners. The base plates allow the use of a thermoplastic mask, head supports and blocks and wedges in order to scan the patient in the exact treatment position.

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.

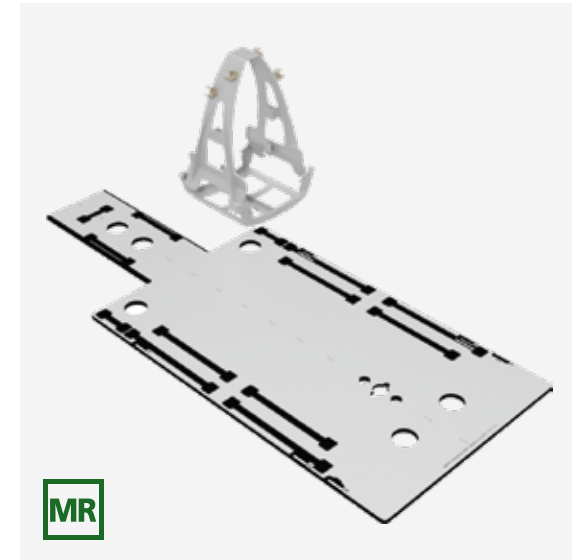
ORFIT MRI-S SOLUTION FOR BRAIN, HEAD AND NECK

	1.5 Tesla	3 Tesla
Tim System	<ul style="list-style-type: none"> > Avanto > Espree > Symphony a Tim System 	<ul style="list-style-type: none"> > Verio > Trio a Tim System
Tim 4G System	<ul style="list-style-type: none"> > Aera > Sola 	<ul style="list-style-type: none"> > 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

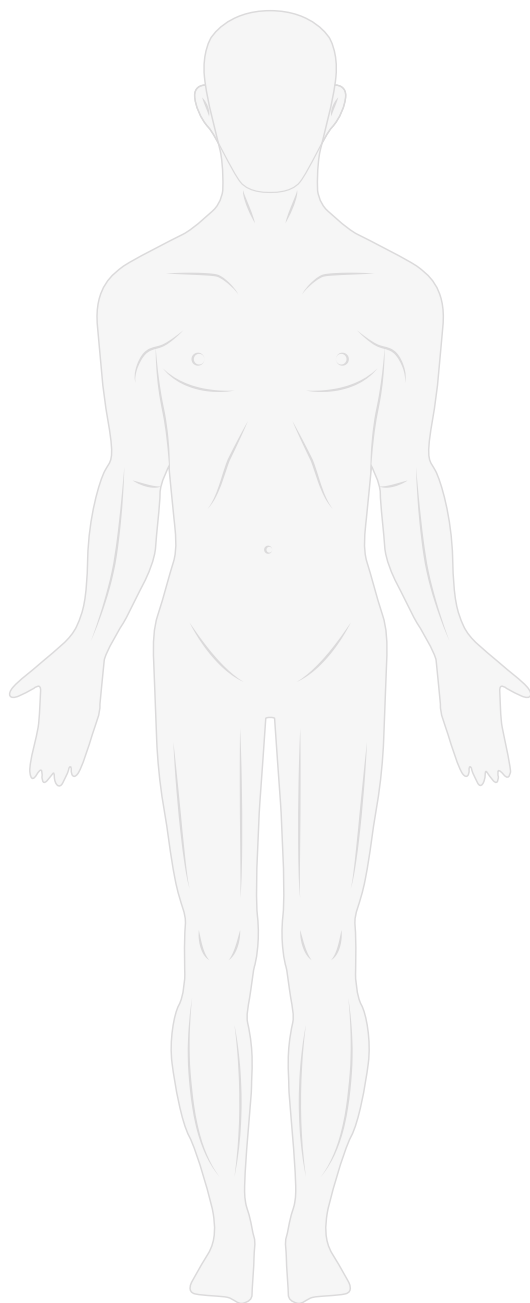
MRI-S Solution

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.



Images courtesy of Siemens Healthineers



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° 18209) 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° 18210) is designed specifically for CNS treatment.

VACUUM BAGS



Art. N° 18209

AIO vacuum bag half body - adult



Art. N° 18211

T-shape vacuum bag for head, neck and shoulders



Art. N° 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

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°	Voltage	Country
18058/230EU	230	EU
18058/230UK	230	UK
18058/100J	100	J
18058/115	115	US
18076/230EU	230	EU
18076/230UK	230	UK
18076/100J	100	J
18076/115	115	US



Art. N° 18076

High capacity vacuum pump with hose, hose
connector and cable

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° 18090
15 cm x 20 cm



Art. N° 18091
20 cm x 25 cm



Art. N° 18092
20 cm x 45 cm



Art. N° 18094
Moldcare cushion type S

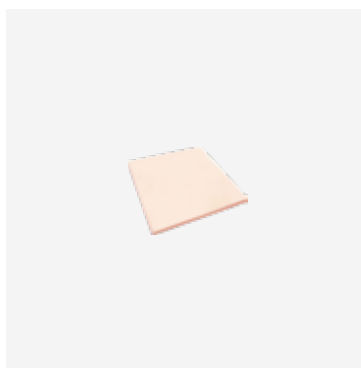


* Moldcare is a trademark from ALCARE

BOLUS MATERIAL

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

SHEETS BEIGE



Art. N° 8336.S01/R/53

10 cm x 10 cm x 5 mm



Art. N° 8336.S01/R/58

15 cm x 15 cm x 5 mm



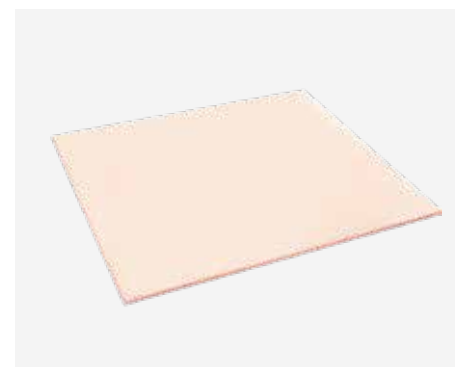
Art. N° 8336.S01/R/59

20 cm x 20 cm x 5 mm



Art. N° 8336.S01/R/60

30 cm x 30 cm x 5 mm



Art. N° 8333.S01/R

45 cm x 60 cm x 2 mm

BOLUS MATERIAL

SHEETS BEIGE



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



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



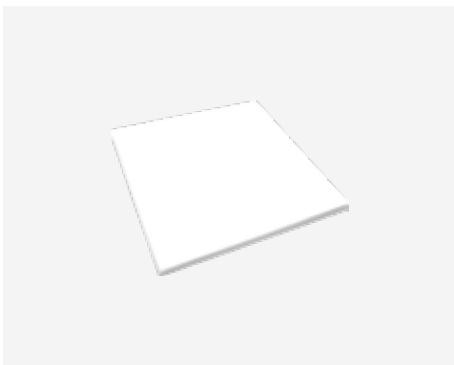
Art. N° 8336.S01/R/59 - 1 CM
20 cm x 20 cm x 10 mm



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

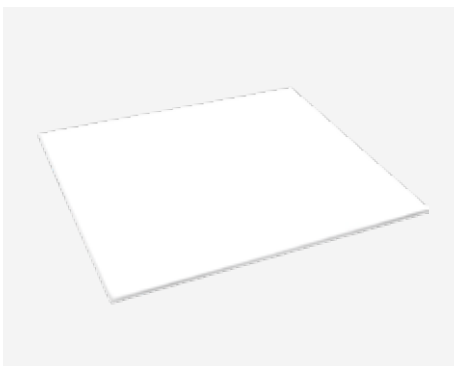
BOLUS MATERIAL

SHEETS WHITE



Art. N° 8313N.S01/R

22.5 cm x 20 cm x 2 mm



Art. N° 8333N.S01/R

45 cm x 60 cm x 2 mm

PELLETS



Art. N° 703011/1

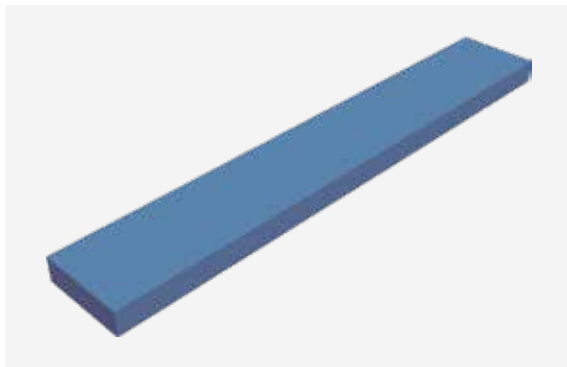
Bag of 500g

CYBERKNIFE FULL BODY CUSHION

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

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

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



Art. N° 32118

Cyberknife full body cushion



COMFORT CUSHIONS



COMFORT CUSHIONS

PATIENT SUPPORT CUSHIONS



Art. N° 32005/2-V2

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

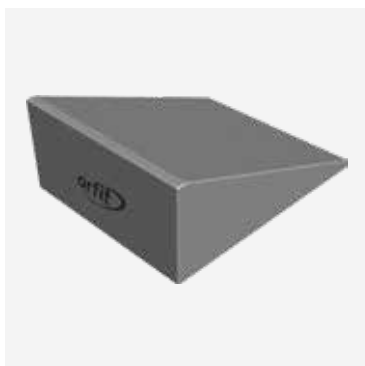


Art. N° 32005/8-V2

Wide wedge

400 x 250 x 100 mm

19.8°



Art. N° 32005/8A-V2

Small wedge

200 x 250 x 100 mm

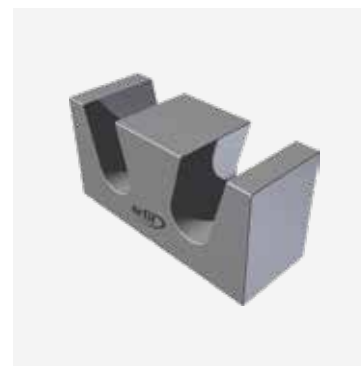
19.8°



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

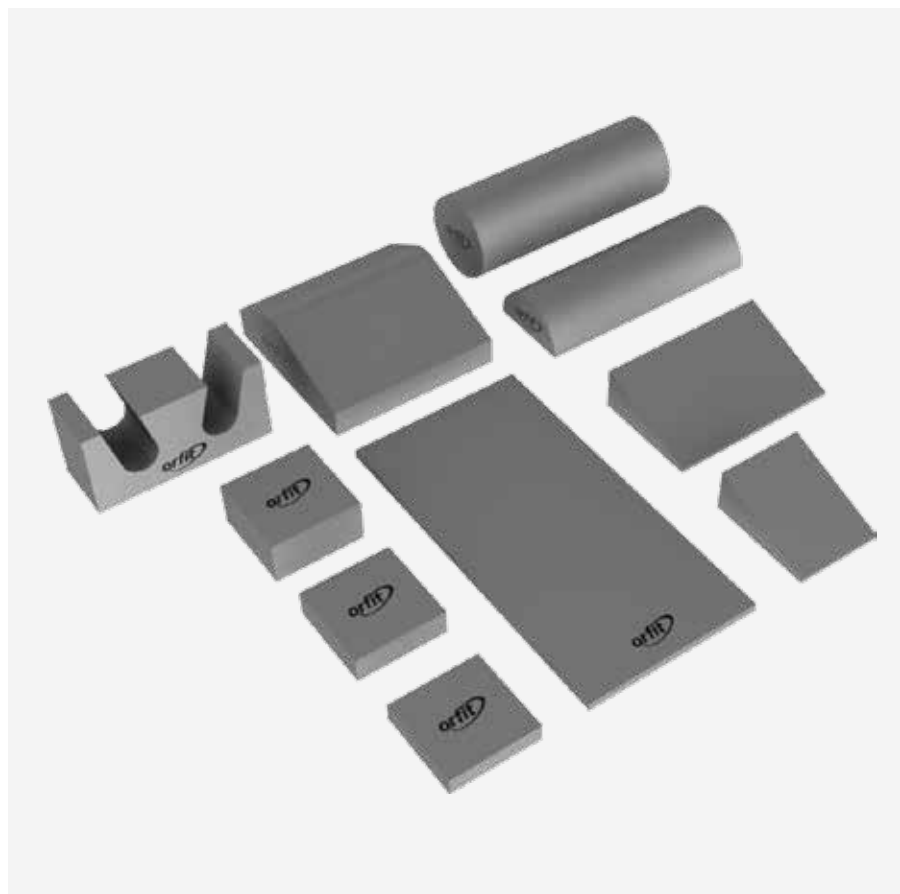


Art. N° 32005/15-V2

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

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

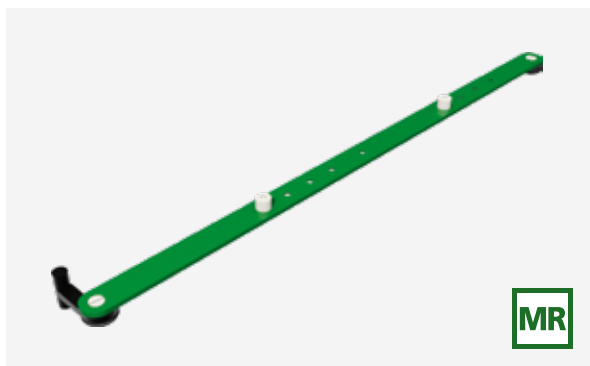


Art. N° 29099

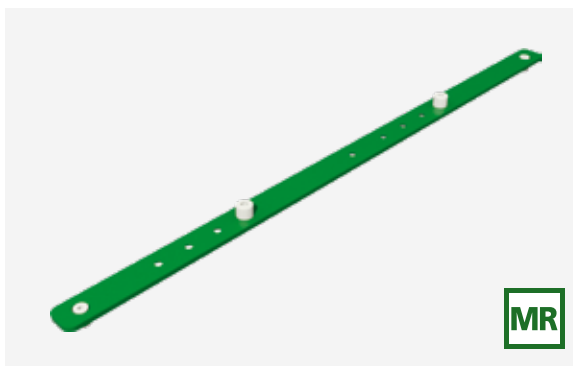
Wall mount storage stand for base plates

FIXATION DEVICES

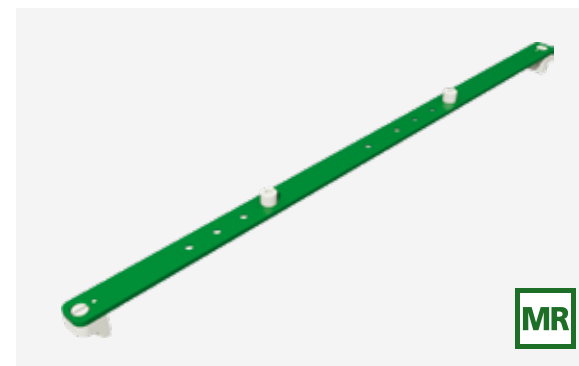
Other fixation devices can be found on www.orfit.com



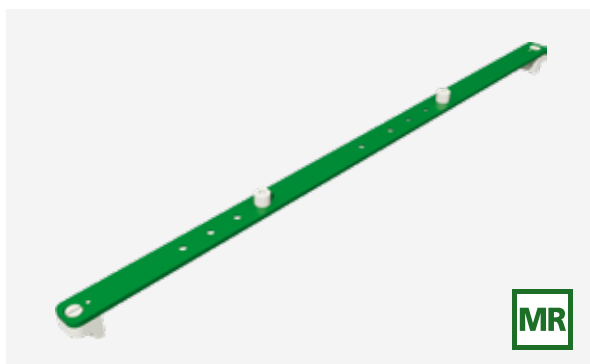
Art. N° 32166
2-pin indexing bar for Exact* couches



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



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

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.

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

DOSIMETRIC CHART

Consult our website for dosimetry data.

<https://www.orfit.com/app/uploads/Dosimetric-Chart.pdf>



ORFIT BLOG

www.orfit.com/radiation-oncology/blog

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

SOCIAL MEDIA



www.instagram.com/orfit_radiation_oncology



www.linkedin.com/showcase/orfit-radiation-oncology



www.twitter.com/orfit



The
precision
expert

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

17-06-2025
Art. N° 51000