

# Controlled Fixation force is the Key

Today's imaging and target localization possibilities allow you to see how your treatment plan corresponds with the location of the tumor. 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 Industries are an active component in achieving a high quality radiation therapy. Our thermoplastic masks immobilize a patient effectively to a point where movement of less than 1.5 millimeter is possible. The Efficast® thermoplastic material allows you to remould a mask when the patient's volume has increased or decreased.

Orfit Industries' engineers developed a (patented) method to measure the relationship between mask contraction and fixation force.

- Precision, Stability and Comfort of Patient Immobilization in Radiation Therapy  
*Dr. Bogdan Bogdanov*

The Orfit range of products allows for a perfect balance between patient comfort and restriction of movement.

UON™ and DUON™ give a comfortable immobilization where poor patient conditions form a restriction.

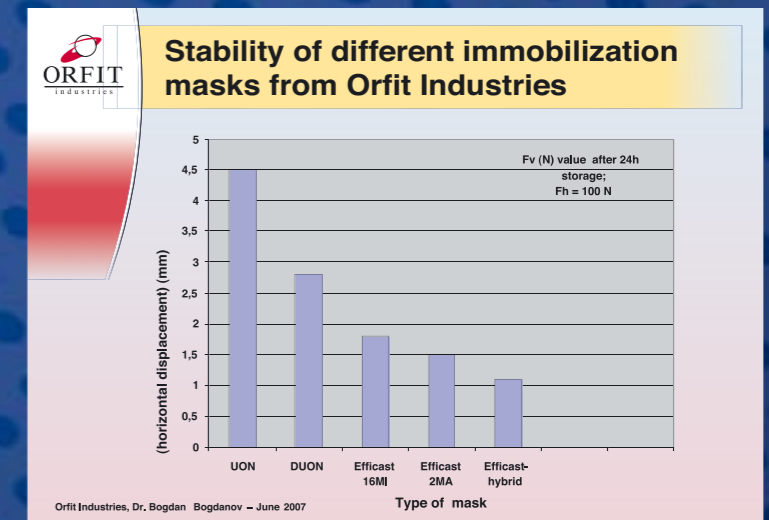
Efficast® High Precision masks restrict movement to the golden standard of less than 2 mm.

Efficast® Hybrid masks bring the movement restriction down to less than 1.5 millimeter.

The unique features of our thermoplastic materials, in combination with our head rests 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.

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

- Repositioning accuracy of a commercially available thermoplastic mask system  
*Martin Fuss - Radiotherapy and Oncology 71 (2004) 339-345*
- Six dimensional analysis with daily stereoscopic x-ray imaging of intrafraction patient motion in head and neck treatments using five points fixation masks  
*Nadine Linthout - Med. Phys. 33 (2), February 2006, 504-513*
- The evolution of quality assurance for intensity-modulated radiation therapy (IMRT): sequential tomotherapy  
*Woo SY, Grant W 3rd, McGary JE, The BS, Butler EB Int J Radiat Oncol Biol Phys. 2003 May 1;56(1):274-86*



*Not all thermoplastics are the same.*