Enhanced performance
through improved imaging and increased access
The continuous research and development of the Leksell® Stereotactic Neurosurgery instrumentation strives to meet new needs at the forefront of stereotaxy and radiosurgery. By combining new and existing components improved utility has been created.

The combination of Leksell® Stereotactic Frame with the newly developed Insulated Curved Posts and Titanium Fixation Screws is one example of enhanced performance through improved imaging and increased access to peripheral targets.
Improved imaging

Leksell® Stereotactic Frame with its compact and clean design is well suited for use in the smallest MR head coils. Tailor-made scanner adapters ensure parallel and equidistant as well as distortion free images. The use of Titanium Fixation Screws and Insulated Fixation Posts further strengthens the performance.

Titanium Fixation Screw
The properties of the titanium in the fixation screw enable the screw to be made in one piece without hard metal tip. Additionally, the new hexagon socket enables flush mount with the frame post which allows for more space in tight head coils.

Insulated Fixation Posts
The new design effectively insulates the fixation screw from the post, thereby minimizing the occurrence of radio frequency generated thermal effects when using high tesla MR scanners and high frequency MR sequences.

Insulated Curved Posts
The curved posts give a tighter and more stable fit of the frame on smaller heads, ensuring the best possible accuracy.

Increased access

Leksell® Stereotactic Frame with its slim and clean design allows access to peripheral targets in Gamma Knife® surgery. This is further increased with the new Titanium Fixation Screws and Insulated Fixation Posts.

Titanium Fixation Screw
The hexagon socket of the new Titanium Fixation Screw enables flush mount with the frame that may give an extended treatable volume of up to 5 mm.

Insulated Fixation Posts
Insulated Fixation Posts have a rounded top that provides a decreased number of potential collisions and also an increased treatable volume of up to 5 mm when performing Gamma Knife® surgery.

Insulated Curved Posts
Treatable volume is further increased with the curved posts, which may provide an increased value of up to a few centimeters in certain directions.
Some of the images show the stereotactic application on a head of ice. The head has been sculptured by a Swedish local artist and come from Jukkasjärvi village at the Torne river in Sweden, approximately 200 km north of the Arctic Circle. Since decades artists in the very north of Sweden have been using ice and snow as material for outdoor sculpture exhibitions and contests.

The choice of ice from the Torne river is deliberate. The ice is very clean and clear as glass thanks to the lack of pollution and the very few air bubbles making it suitable for carving sculptures. Today ice from Torne river is actually the sole building material of the Ice Hotel at Jukkasjärvi.

...adapted to the task