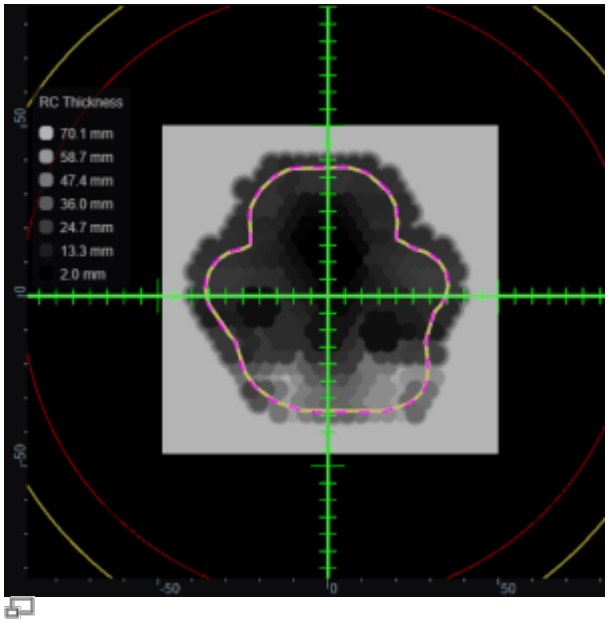
Creating a Range Compensator

Note: Range compensators can only be added to SOBP beams.

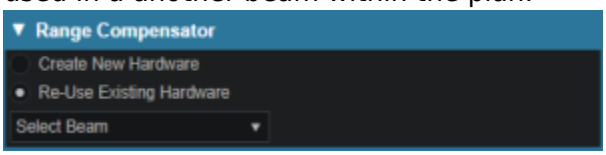


Range Compensator BEV Thickness Image

A range compensator is automatically added for any snout that has range compensator information defined for use in the site specific machine model. The site model also includes the maximum and minimum possible thickness values, the material, and the extents (outer dimensions) of the range compensators for each snout.

Re-using Existing Hardware

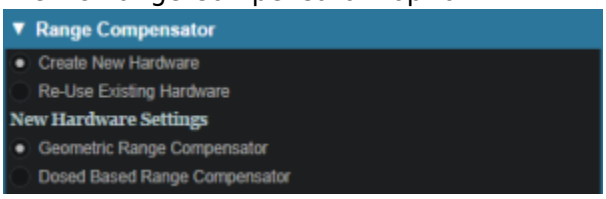
- From within the SOBP Beam Task, you may either create a new range compensator or re-use a range compensator that already exists in the plan. This option ensures that the current beam will use the exact same device used in a another beam within the plan.



Geometric or Dose Based

- If you want to create a range compensator based on an optimized dose, select the “Dosed Based Range Compensator” option. The calculation used to create this device uses isodose shifts to

match the target's distal surface. The number of iterations used in the optimization is defined in the site info. If you don't want to create a range compensator based on an optimized dose calculation, select the “Geometric Range Compensator” option.



Range Compensator Parameters

- The range compensator calcuation uses a distal range margin that is the addition of the user-defined “Range Margin Distance” and the “Range Margin Percentage” of the beam range. The “Smear Radius” is a distance weighting coefficient which influences the smoothing in the range compensator calculation. Any drill points within this radius are dropped to the lowest height neighbor. The “Target Distal Dose” is the dose value that the range compensator calculation will try to achieve on the distal edge of the target.