

# Creating a Range Compensator

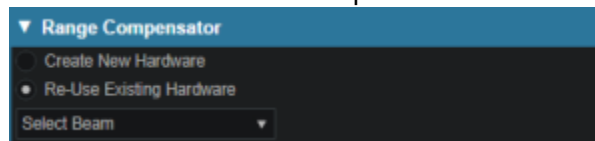


**Note:** Range compensators can only be added to SOBP beams.

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 of the snout's range compensator.

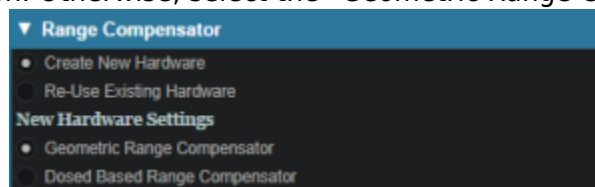
## Re-using Existing Hardware

- From within the SOBP Beam Task you may either create a new range compensator or re-use a range compensator used in 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. Otherwise, select the “Geometric Range Compensator” option.



## Range Compensator Parameters

- The range compensator calculation 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 non-linear distance weighting coefficient which influences the smoothing in the range compensator calculation. A smaller smear radius will result in more smoothing. The “Target Distal Dose” is the dose value that the range compensator calculation will try to achieve on the distal edge of the target.

▼ Range Compensator

• Create New Hardware

○ Re-Use Existing Hardware

New Hardware Settings

○ Geometric Range Compensator

• Dosed Based Range Compensator

Beam Range: 111.6 mm

Beam Mod: 56.9 mm

Range Margin Distance: 2.5 mm

Range Margin Percent: 1 %

Smear Radius: 6 mm

Target Distal Dose: 90 %

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