

Electron Bolus Creation



A user is able to add an electron bolus to their beams to aid in proper distribution of dose.

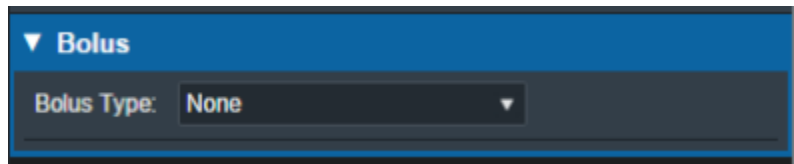


Fig. 1: Beams Block

There are four options for boluses in the electronRT app as defined below:

Optimized Thickness Bolus

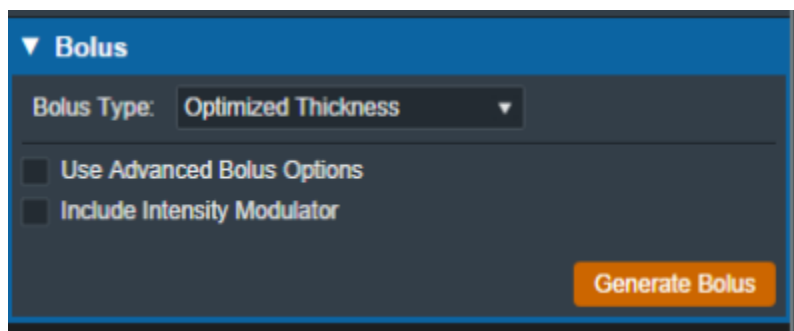


Fig. 2: Beams Block

The screenshot shows the 'Bolus' configuration panel. At the top, 'Bolus Type' is set to 'Optimized Thickness' and 'Bolus Material' is 'Blue Wax'. Below these, 'External Structure' is 'Use course external' with a sub-label 'skin (External)'. 'Add New Operator' is set to 'Automated Marching'. A section titled 'Bolus Geometry Options' contains several input fields: 'Block Outer Border' (1 cm), 'Target Inner Border' (0.2 cm), 'Depth Beyond Target' (0.5 cm), 'Minimum Thickness' (0.2 cm), and 'Distal PTV Smoothing' (0 cm). There is a checkbox for 'Include Intensity Modulator' and a link for 'Bolus Design History'. At the bottom right, there is an orange 'Generate Bolus' button and a link 'Hide Advanced Bolus Options'.

Fig. 4: Beams Block

This screenshot shows the same 'Bolus' configuration panel as Fig. 4, but with the 'Add New Operator' dropdown menu open. The menu lists several options: 'Automated Marching' (which is highlighted), 'Geometric Sequence', 'Single Shift Sequence', 'Double Shift Sequence', 'Create', 'Smooth', 'Isodose Shift', 'Truncate', 'Specified Shift', and 'Intensity Modulation'. The 'Generate Bolus' button is now greyed out. A 'clear all' link is visible near the bottom right, and the 'Hide Advanced Bolus Options' link remains at the bottom.

Fig. 3: Beams Block

▼ Bolus

Bolus Type: **Optimized Thickness** ▼

☒ Use Advanced Bolus Options

Add New Operator: **Automated Marching** ▼

Bolus Geometry Options

Block Outer Border: **1** cm

Target Inner Border: **0.2** cm

Depth Beyond Target: **0.5** cm

Minimum Thickness: **0.2** cm

Distal PTV Smoothing: **0** cm

☐ Include Intensity Modulator

▼ Bolus Design History

No bolus operators

clear all

Generate Bolus

Fig. ##: Beams Block

Add New Operator: **Automated Marching** ▼

Bolus Geometry Options

Block Outer Border:

Target Inner Border:

Depth Beyond Target:

Minimum Thickness:

Distal PTV Smoothing:

☐ Include Intensity Modulator

▼ Bolus Design History

- Automated Marching
- Geometric Sequence
- Single Shift Sequence
- Double Shift Sequence
- Create
- Smooth
- Isodose Shift
- Truncate
- Specified Shift
- Intensity Modulation

Fig. ##: Beams Block

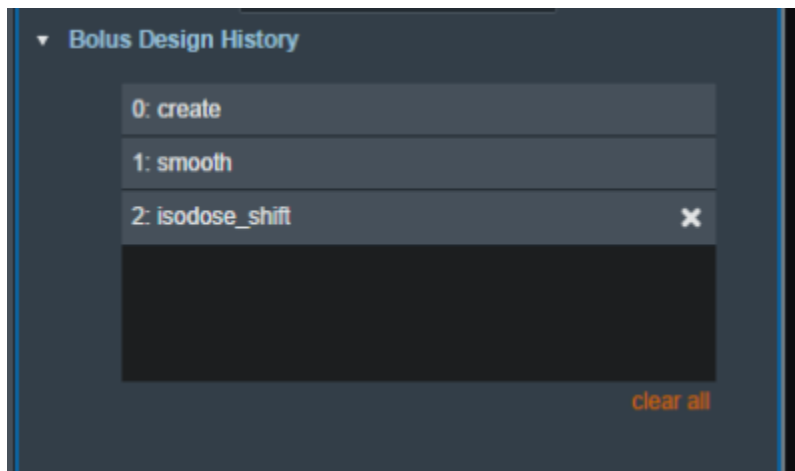


Fig. 5: Beams Block

Uniform Thickness Bolus

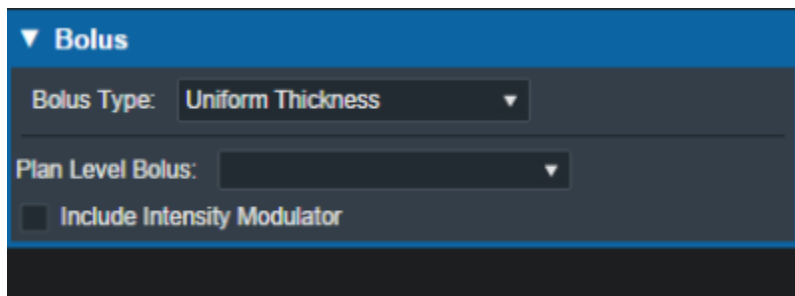


Fig. 8: Beams Block

Bolus as a Structure

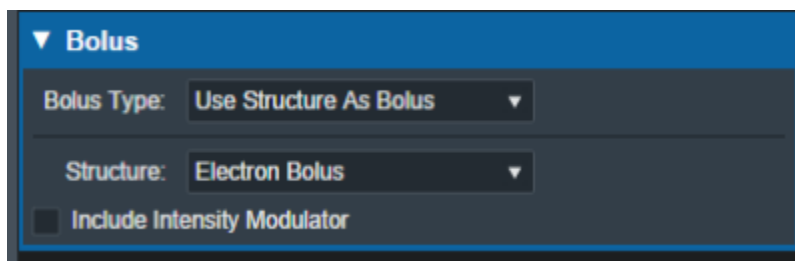


Fig. ##: Beams Block

IMET Device

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Last update: **2021/07/29 18:24**

