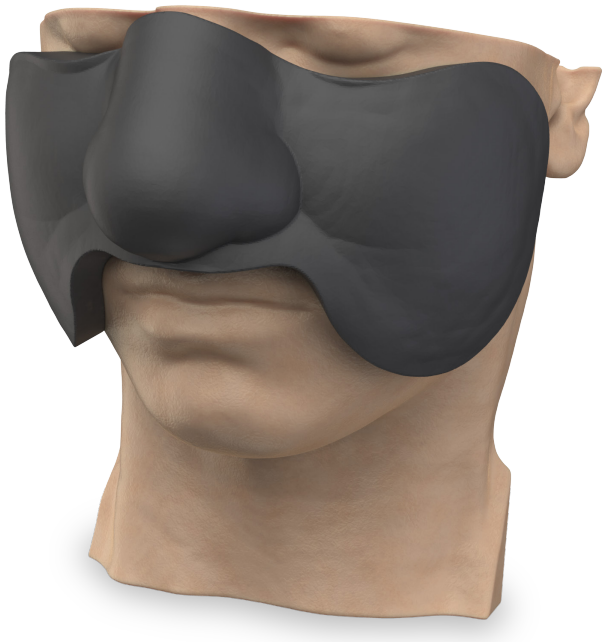
3D PRINTING & Training Center | Clarkson College

Personalize Radiotherapy with **CCSP Bolus**

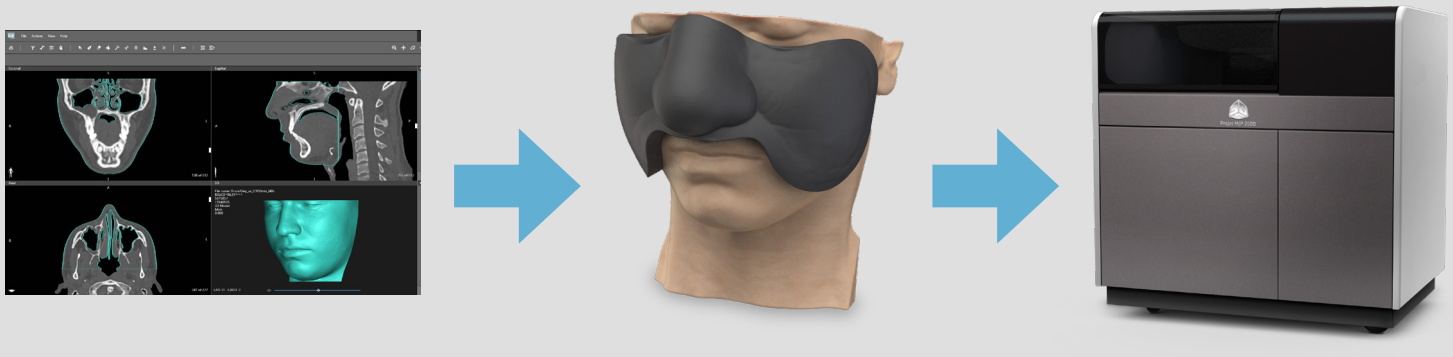


3D printed Bolus to conform to your patient's anatomy

CCSP Bolus is an FDA 510(k) cleared patient-specific solution to help optimize radiotherapy targeting by overcoming the skin-sparring effect and target appropriate tissues with intended dose. With a complete workflow from design to delivery, CCSP Bolus makes personalization easy. We use 3D printing technology to produce a bolus that conforms to each patient and to the contours of broad range of anatomies.

3D SYSTEMS

Advanced Technology



CCSP Bolus is printed on the ProJet® MJP 2500 Plus, a multi-jet printer with a large build platform to accommodate a broad range of anatomical features. This printer delivers high accuracy, repeatability and quick turnaround.

The VisiJet® M2E-BK70 material is used for manufacturing CCSP Bolus for its elastomeric and biocompatible properties, which include density that is close to water at 1.15 g/cc and has an optimal shore A hardness of 70 which is pliable enough to wrap around tissues and durable enough to maintain the fit.

Achieve personalization without the hassle

- Improves patient comfort, fit and pliability with our biocompatible elastomeric material
- Reduce potential air gaps for improved treatment
- Eliminate the need for barriers; the material can be applied directly to the skin
- Reuse the device throughout the course of treatment
- Wrap the bolus 360 degrees around the patient anatomy, if needed, enabled by the elastomeric properties of the material

CCSP Bolus Workflow Process

STEP 1: Case Submission

Submit your bolus design from your TPS in RTSTRUCT or STL format or alternatively submit patient CT images with an indication of the treatment site, desired bolus thickness and any margin or wrap notes. The following inputs are acceptable:

- CT SPOT® with physical indicators used during the patient scan
- PTV or treatment volume(s) to design the bolus over
- A bolus reference you design using a treatment planning system

STEP 2: Design and 3D Printing

Bolus is designed and verified as per the treatment plan and indication and 3D printed in an elastomeric and biocompatible material.

STEP 3: Shipment

Bolus is shipped in either of two options preferred

- Expedited Manufacturing shipped within 3 days
- Standard Manufacturing shipped within 5 days

Start A Case Today.

Submit a case at
https://3dlabatclarksoncollege.enhatch.com/

Start the Conversation

Reach out to us via **3dlab@clarksoncollege.edu** if you want to:

- Request material samples
- Consult with a 3D Lab Expert
- Discuss the benefits of using this product in your practice
- Get pricing information

Indications for Use – CCSP Bolus product is a device that will be placed on the skin of a patient as a radiotherapy accessory intended to help control the radiation dose received by the patient. CCSP Bolus is generated using input from radiation therapy professionals and medical imaging data to produce a bolus that is specific to the patient being treated. The CCSP Bolus product is verified and approved by the radiation therapy professional prior to use on the patient, and is intended for patients of all ages receiving radiotherapy treatment. CCSP Bolus was evaluated using 6 MV photons but has not been assessed for use with protons, electrons, or at orthovoltage X-rays.

Distributed by:

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The 3D Printing and Training Center at Clarkson College
101 South 42nd Street, Omaha, NE 68131 USA
+1 402 552 -3569
3dlab@clarksoncollege.edu

Manufactured by:

3D SYSTEMS

5381 South Alkire Circle, Littleton, CO 80127
USA+1 720 643 1001
healthcare-customerservice@3dsystems.com
www.3dsystems.com

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