



# Dose Insight

Virtual dose mapping for radiation sterilization

[www.doseinsight.com](http://www.doseinsight.com) | [info@doseinsight.com](mailto:info@doseinsight.com)



## Sterilization process optimization

You've designed your device and packaging and figured out how to manufacture it. Congratulations! You are ready for sterilization validation... but not so fast! Sterilization validation requires answering many questions:

**Beam energy?**

**One/two sided?**

**Device orientation?**

**Dosimeter positioning?**



**Shipping box size?**

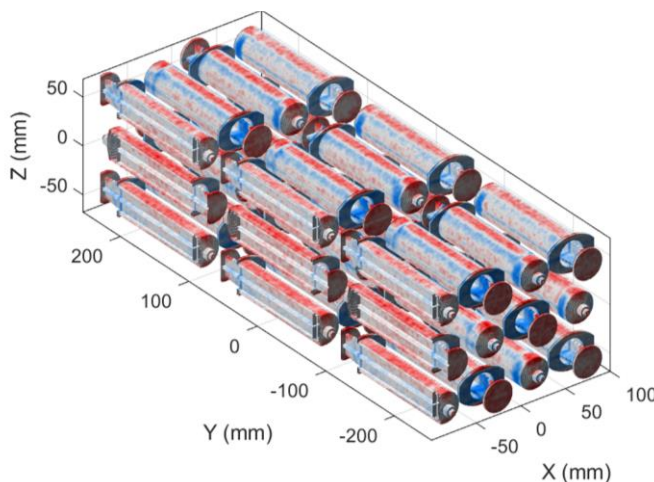
**Packing configuration?**

**Spacing between devices?**

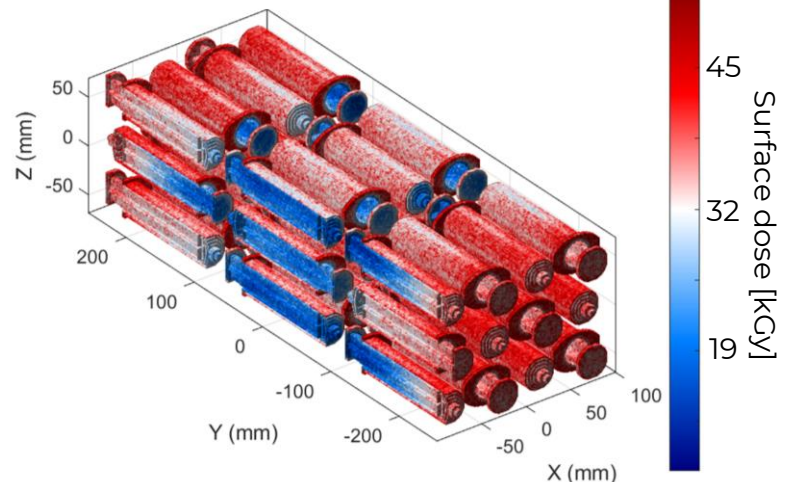
**Number of shipping boxes?**

To show how complex this can get, we used virtual dose mapping to study two different orientations of a box of syringes during e-beam sterilization:

Perpendicular beam  
DUR =  $2.15 \pm 0.07$



Parallel beam  
DUR =  $3.09 \pm 0.08$



Working with Dose Insight can answer these questions and more, so that your sterilization validation process can proceed without a hitch!