



## X-Line

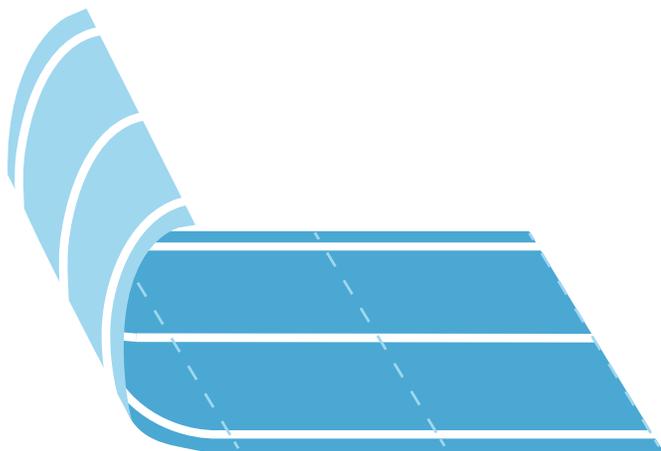
For Radiotherapy

"X-Line allows more accurate delineation of external body contour in the extended field of view (eFOV) by simply connecting the dots on the CT image".



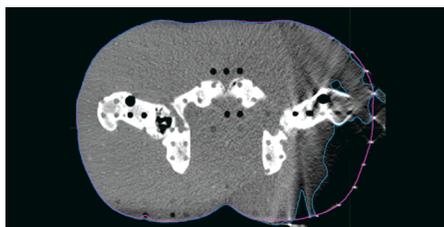
Dr. Kirpal Kohli,  
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X-Line™ allows for easy and accurate body contouring of CT images within the extended field of view.



### Three radiopaque lines on an adhesive strip

- The lines are spaced 1" apart on a transparent skin adhesive roll with perforations every 2".
- Adhere to regions that may fall within the eFOV, orienting the lines along the patient longitudinally.
- The lines create hyperdense dots in the CT slices; connect-the-dots™ to highlight the body contour.



X-Line™ is useful for imaging patients within the eFOV of CT simulator.



X-Line™ is applied to regions that are likely to protrude into the eFOV.



More than 100,000 obese cancer patients in Canada and the United States cannot be accurately contoured with most CT simulators.



## Clinical Support

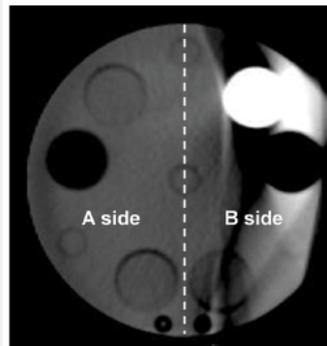
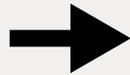
Numerous studies have proven that body contour distortion negatively affects treatment dosage

Dosimetric impact of image artifact from a wide-bore CT scanner in radiotherapy treatment planning

Wu V, Podgorsak M, Tran T, Malhotra H, Wang I  
Published in Medical Physics, June 2011

**"...artifacts from eFOV reconstruction are inevitable, with image distortions spreading out laterally..."**

**"The SSD distortion alone can cause a target dose calculation reduction of 2%–3%"**



**Figure 6:** Image of the mini CT phantom located in the vicinity of the outer region of 65 cm eFOV where the "A" side was completely within the sFOV and the "B" side was within the eFOV.

Increased Radiation Dose to Overweight and Obese Patients from Radiographic Examinations

Yanch JC, Behrman RH, Hendricks MJ, McCall JH  
Published in Radiology, July 2009

**"...radiographic examinations in the extremely obese... should be minimized to the extent possible."**

**"[There are] exponential dose increases for increased subcutaneous fat thicknesses."**

**"...for extremely obese subjects, these dose increases can reach factors of 70–80."**

