

# Phantom for Intraoral Radiography Assessment, Testing & Evaluation

Model 134200



## ARTICULATED MAXILLOFACIAL PHANTOM FOR INTRAORAL IMAGING

The CIRS Phantom for Intraoral Radiography Assessment, Testing & Evaluation (PIRATE) is a standard of reference for diagnostic radiology of the jaw. The phantom is designed to assist technical and clinical staff in the selection, monitoring, training and verification of scanning parameters common to intraoral radiological imaging procedures and other common dental procedures.

The PIRATE phantom consists of maxilla, mandible and holding device. The phantom can be mounted to included tripod with ballhead fitting for flexibility in positioning. The maxilla and mandible are hinged to allow a dental technician to place a bitewing film or other intraoral devices with a holder and image the phantom.

The phantom is constructed of proprietary tissue-equivalent materials that mimic reference tissues within 1% by linear attenuation for the dental x-ray and other dental imaging procedures.

The Model 134200 approximates the average male human jaw in both size and structure. The phantom features

detailed 3D anthropomorphic anatomy including bone, sinus, maxilla, mandible, mandibular nerve and teeth. The bones contain both cortical and trabecular separation. The teeth include distinct dentine, enamel, root canal and crown. One tooth includes a fracture and a second includes a cavity.

### Features

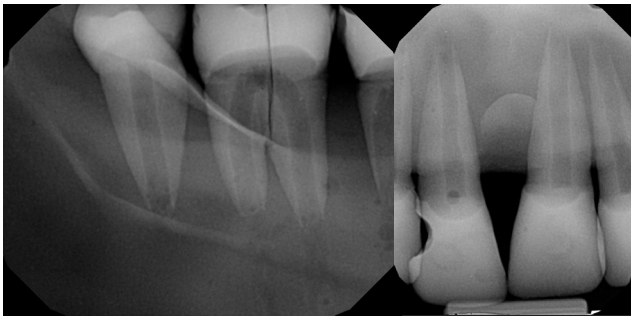
- Detailed anatomical features
- Tissue Equivalent from 50 keV to 25 MeV
- Functioning Mandible
- Tripod with six degrees-of-freedom
- Soft-sided carry case
- 48-Month warranty



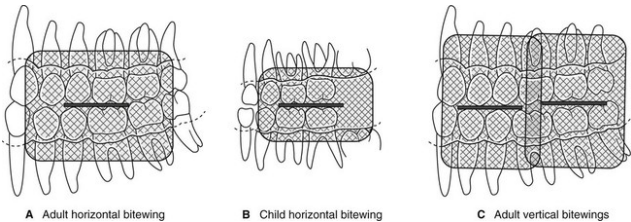
PIRATE Phantom with closed jaw



PIRATE Phantom with open jaw



Teeth with a fracture (left) and cavity (right)



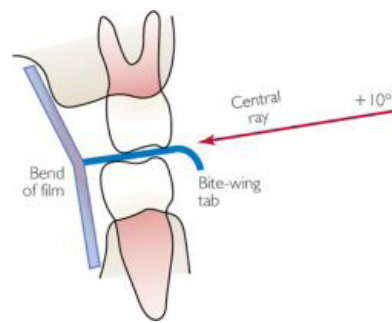
A Adult horizontal bitewing

B Child horizontal bitewing

C Adult vertical bitewings

### CAPABILITIES AND APPLICATIONS

- Commission intraoral X-ray devices
- Learn how to properly position for optimal images
- Test reconstruction techniques and algorithms for implant planning and maxillofacial reconstruction
- Train and evaluate personnel during implementation of new equipment and techniques
- Validate consistency of image quality



### SPECIFICATIONS

APPROXIMATE DIMENSIONS	17.5 cm x 12.0 cm x 14.0 cm (6.9" x 4.7" x 5.5")
APPROXIMATE WEIGHT	2.7 kg (6 lbs)
PHANTOM MATERIALS	Epoxy Resin

### MODEL 134200 INCLUDES

QTY	DESCRIPTION
1	Phantom for Intraoral Radiography Assessment, Testing & Evaluation
1	Tripod w/ ballhead & quick release connector
1	Soft-sided carry case
-	User Guide
-	48-Month Warranty