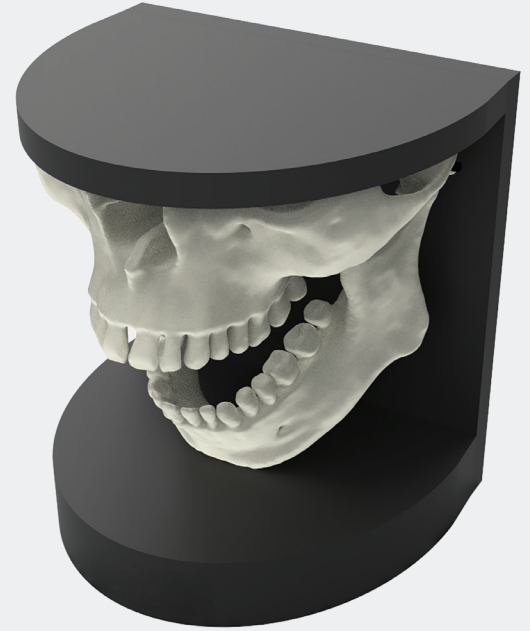




# Phantom for Intraoral Radiography Assessment, Testing & Evaluation

134200

- Articulated maxillofacial phantom for intraoral and dental imaging
- Reference standard for training, selection, monitoring, and verification of scanning parameters
- Supports commissioning of intraoral X-ray devices



The Phantom for Intraoral Radiography Assessment, Testing & Evaluation (PIRATE) is a reference standard for diagnostic dental radiology of the jaw. It supports clinical staff in the selection, training, verification, and ongoing monitoring of scanning parameters used in intraoral radiographic imaging and other common dental imaging procedures.

The PIRATE phantom is constructed from tissue-equivalent materials representing the maxilla, mandible, and teeth, and is housed in a durable plastic holding fixture. For flexible positioning, it can be mounted on the included tripod with a ball head adapter. A hinged mandible allows technicians to place bitewing film or other intraoral imaging devices, making it suitable for realistic imaging workflows.

Proprietary tissue-equivalent materials mimic reference human tissues within 1% linear attenuation across dental X-ray and related dental imaging modalities.

The PIRATE phantom approximates the average adult male human jaw in size and anatomy, and features detailed anatomy for bone, sinus, maxilla, mandible, mandibular nerve, and teeth. The bone tissue incorporates cortical and trabecular regions. The teeth include distinct dentin, enamel, root canal, and crown structures, with one tooth featuring a simulated fracture and another containing a cavity for diagnostic evaluation.

## Key Benefits

- Hinged mandible accommodates bitewing film or other intraoral devices
- Tissue-equivalent materials support imaging from 50 keV to 25 MeV
- Supports personnel training and evaluation during implementation of new equipment or techniques
- Supports evaluation of reconstruction techniques and algorithms for implant planning and maxillofacial reconstruction
- Includes a tripod with six degrees of freedom movement and a soft-sided carry case

# Phantom for Intraoral Radiography Assessment, Testing & Evaluation

A reference standard for diagnostic dental radiology of the jaw

## Specifications

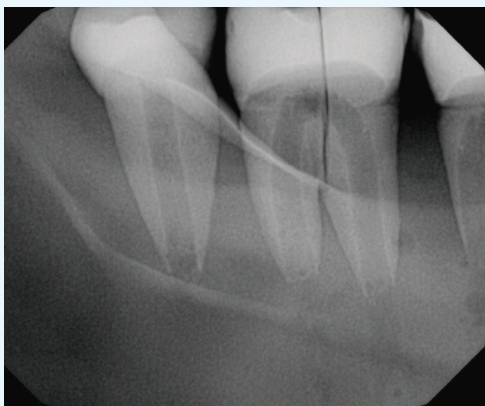
Approximate Dimensions	17.5 x 12 x 14 cm (6.9" x 4.7" x 5.5")
Weight	2.7 kg (6 lbs)
Materials	Epoxy resin



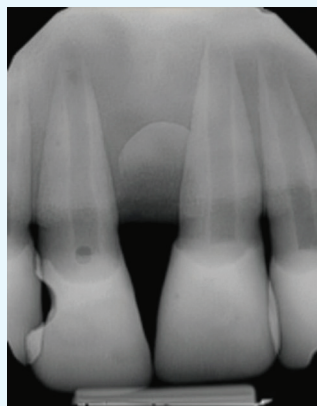
PIRATE phantom with closed jaw



PIRATE phantom with open jaw



Tooth with a fracture



Tooth with a cavity

