



# Dental & Diagnostic Head

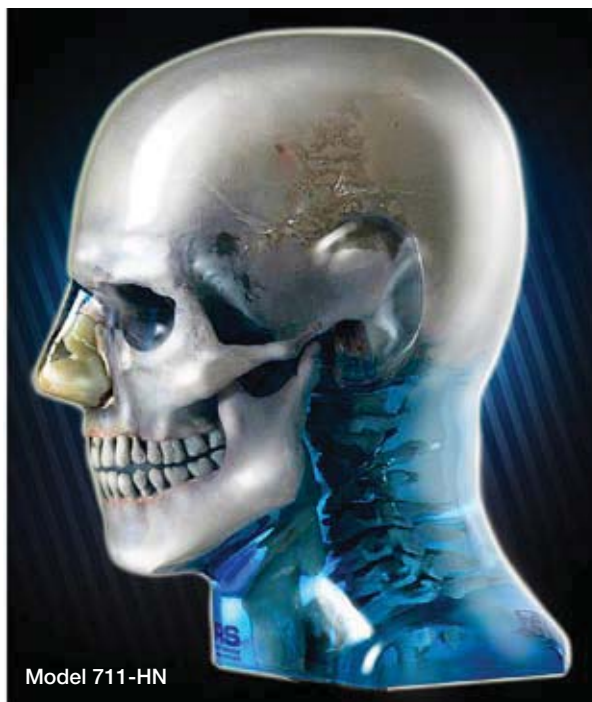
*Our Most Realistic Maxillofacial Phantom for Dental Cone Beam CT & Panoramic X-ray*

The CIRS Dental and Diagnostic Head Phantom is a standard of reference for diagnostic radiology of the head. The phantom is designed to assist technical and clinical staff in the selection, monitoring, training and verification of scanning parameters common to most radiological procedures requiring fine anatomical details.

The Model 711-HN provides a consistent tool for researchers, clinicians and technologists. It is ideal for determining optimum system settings, commissioning new equipment, monitoring system performance and training in dental X-ray, panoramic X-ray, CT and cone beam CT procedures.

The phantom includes an adjustable stand for positioning within a cone beam CT or panoramic X-ray system. The jaw of the phantom is slightly opened and front teeth are vertically aligned to replicate correct positioning with a bite guide. Please note that an actual bite guide can not be positioned in this product.

The phantom is constructed of proprietary tissue equivalent materials. ATOM<sup>®</sup>MAX is made of tissue simulating resins that mimic the X-ray



Model 711-HN

## Features

- Includes detailed anatomical features
- Frankfurt plane identified to ensure proper alignment
- Tissue Equivalent from 50 keV to 25 MeV
- Positioning stand with six degrees-of-freedom
- Foam lined carrying case included
- 4 year warranty

attenuation properties of human tissue for both CT and therapy energy ranges (50 keV-25 MeV). The Model 711-HN approximates the average male human head in both size and structure. The phantom includes detailed 3D anthropomorphic anatomy

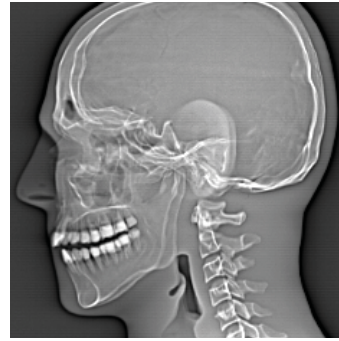
including brain, bone, larynx, trachea, sinus, nasal cavities and teeth. The bones contain both cortical and trabecular separation. The teeth include distinct dentine, enamel and root structure including the nerve. The sinus cavities are fully open.



Model 711-HN phantom



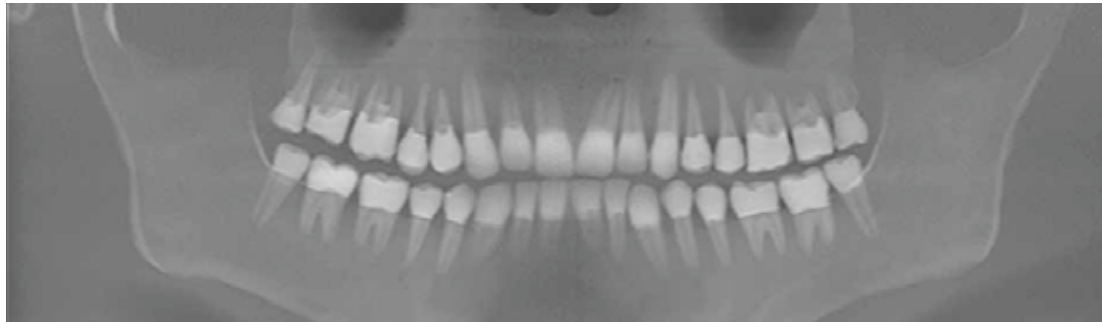
3D CT reconstruction



Sagittal view



Lateral, Anterior Posterior, Superior Inferior, and Orthopantomogram 3D cone beam CT reconstructions



## Simple To Set Up and Easy to Use

The Model 711-HN stand allows accurate phantom positioning. The included stand is adjustable in the x-y-z axes as well as allowing rotations about each of these axes. The head easily screws onto the stand and locks into place.



## Capabilities and Applications

- Commission X-ray, panoramic X-ray, CT and cone beam CT systems
- Learn how to properly position head 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

Overall Size (phantom only)	9" x 9" x 11.5"
Phantom Weight	11 lbs.
Stand Weight	7 lbs.
Shipping Weight	29 lbs.

## Ordering Information

Part No.	Qty	Component Description
711-HN	1	ATOM <sup>®</sup> MAX Dental & Diagnostic Head Phantom
	1	Positioning Stand w/ soft sided carrying case
	1	Phantom Carrying case