



Applications

Single Photon Emission Computed Tomography Radiation monitoring imaging system Proton therapy dose 3D imaging system

Features

99.9% pure tungsten layers

: thickness 1mm, diameter 170mm

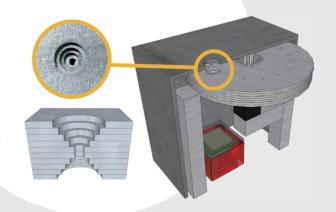
Variable pinhole diameter: 0.4mm - 2.0mm

Variable acceptance angle: 15° – 50°

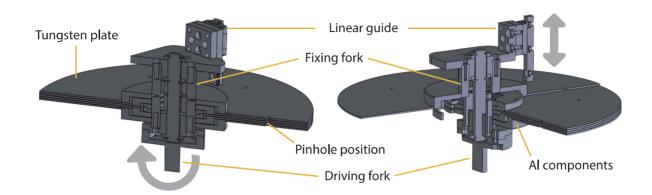
Composed of various holes on different layers

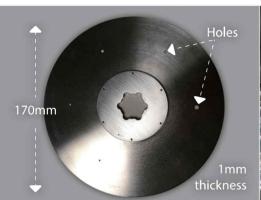
Performance parameters are optimized to region of interest (ROI)

Arranged by using a driving and fixing fork

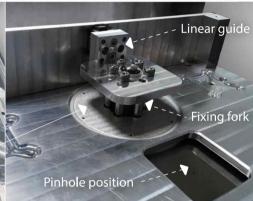


VP collimator design and its components



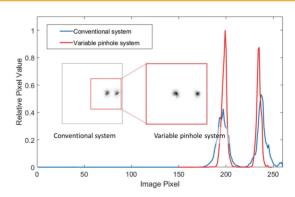






A variable pinhole (VP) collimator is a novel collimator with an adjustable acceptance angle and hole diameter. It is composed of several thin tungsten layers to form a pinhole shape. In the VP collimator, the shape of the pinhole can be optimized to the region of interest (ROI) for each detection environment by overlapping several sheets of collimator layers.







Medical Information Processing Laboratory

Rm457, Hana Science Hall Korea University, Seoul, Korea P. +82 (02) 940-2753 mipl.korea.ac.kr



ARALE Laboratory

Rm636, Korea University R&D Center Seoul, Korea P. +82 (02) 929-1711 www.aralelab.com