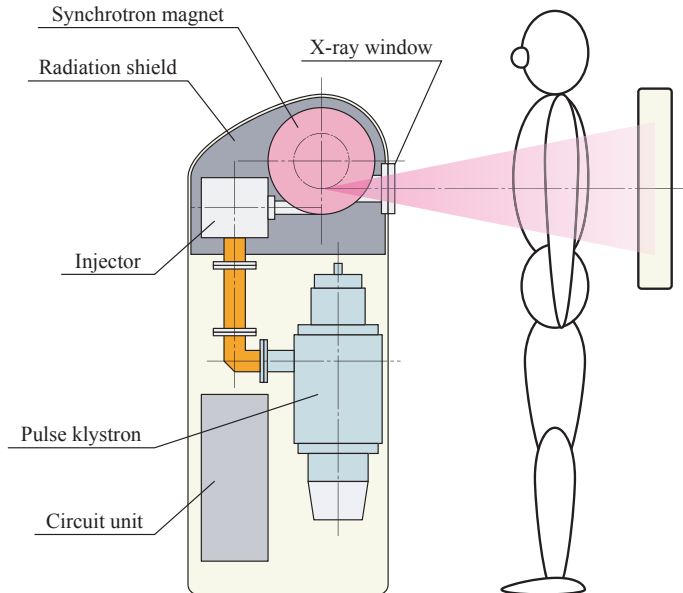


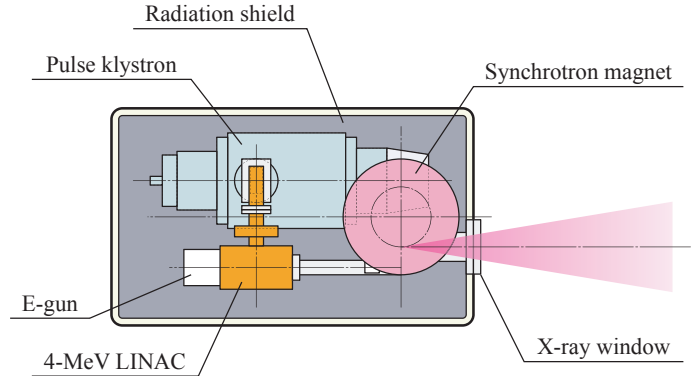
MIRRORCLE-CV series : for High Precision Non-Destructive Testing

The Portable Synchrotron MIRRORCLE-CV

We are developing the MIRRORCLE-CV series as a conventional machine, and represent a miniaturization of MIRRORCLE-6X from 60 cm magnet OD to 30 cm, and with a corresponding reduction in cost. The MIRRORCLE-CV series lineup currently consists of MIRRORCLE-CV1 and MIRRORCLE-CV4. This flexibility will make these machines practical for NDT of bridges, engines, containers, security control at airports, and medical applications at a reasonable price.



- ▲ The MIRRORCLE-CV1 for medical diagnosis.
 Electron energy: 1 MeV
 X-ray energy range: 10 - 1000 MeV
 Injector: 1 MeV RF gun
 Dimensions: H: 150 x W: 45 x D: 60 cm
 Weight: 1 t (including the radiation shielding)



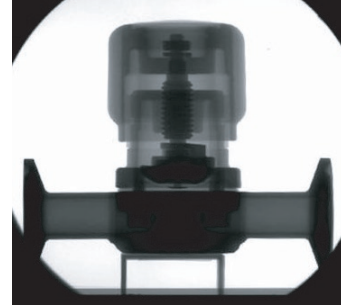
- ▲ The MIRRORCLE-CV4 for NDT.
 Electron energy: 4 MeV
 X-ray energy range: 10 keV - 4 MeV
 Injector: 4 MeV Linac
 Dimensions: L: 120 x W: 45 x H: 45 cm
 Weight: < 1 t (including the radiation shielding)

MIRRORCLE-6X NDT of valve

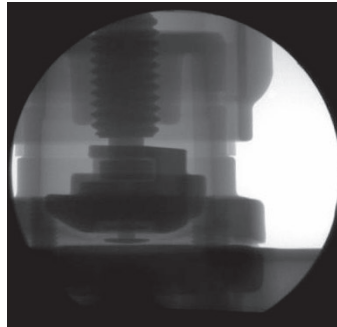
Valve image



2 times magnified



4 times magnified



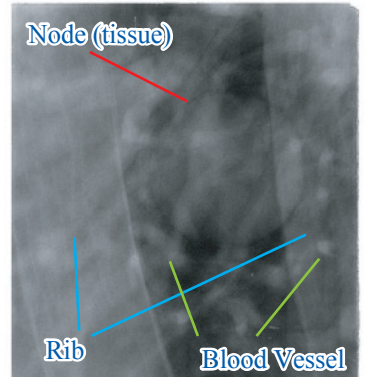
X-ray image of valve. Various materials such as SUS and PTFE can be identified clearly. Air gap of screw can be observed. Target: Pb 0.1 mm rod, Exposure time: 18 s, Detector: Imaging Plate.

MIRRORCLE-6X medical X-ray image

Picture of chest phantom



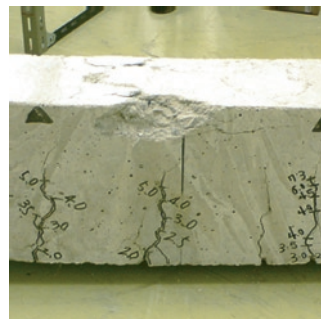
10.8 times



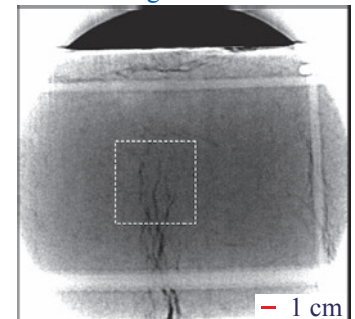
Ribs, Blood Vessel and Node can be clearly observed by phase contrast. Target: Cu 25 μ m rod, Exposure time: 5 min, Detector: Imaging Plate.

MIRRORCLE-6X NDT for heavy structures

Concrete



Contact image



X-ray image of concrete structure. Not only crack of concrete but also uniformity of it can be observed. Target: Pb 1 mm ball, Exposure time: 30 s, Detector: Imaging Plate.