

# Mammography/Technical Notes

- **X-ray** - the anode is made of molybdenum or rhodium, thanks to which mostly **lower energy photons are produced**. In addition, photons with higher energy are filtered out' = **advantageous spectrum of radiation**. Small foci in roentgence allow to capture even very small structures' (**e.g. microcalcifications**).
- **Mammographic films** - consist of a single-sided emulsion and an intensifying film that contains rare earth compounds (lanthanum, gadolinium), which will allow to reduce the radiation dose while maintaining resolution.
- **Compression plate (tube)** - breast compression makes it possible to reduce radiation dose, increase contrast, reduce motion blur and summation negatives.
- **Special negatoscope** - contains a high brightness aperture.
- **Digital mammography** - makes it possible to eliminate the disadvantages of conventional mammography (noise, lower contrast, higher dose of radiation, combination of film-enhancing film). Image editing and storage on a computer is an indispensable part of modern radiology.