岡田正彦, 医用電子と生体工学, 18(6), 441-442, (1980).

23130, 23131

Flood Replenishment: A New Method of Processor Control.

Frank ED, et al, Radiologic Technology, 52(3), 271-275, (1980).

Summary

In mechanized radiographic film processors that process medium to low volumes of film, roll films, and those that process single-emulsion films from nuclear medicine scans, computed tomography, and ultrasound, it is difficult to maintain the developer solution at a stable processing level. We describe our experience using flood replenishment, which is a method in which developer replenisher containing starter solution is introduced in the processor at timed intervals, independent of the number of films being processed. By this process, a stable level of developer activity is maintained in a processor used to develop a medium to low volume of single-emulsion film.

23210

Storage and Display of Information in Roentgen Films.

Reichmann S, et al, Acta Radiol. Diagnosis, 21(5), 673-677, (1980).

Summary

Roentgen images of high density, without actually being overexposed, tend to leave small details of low contrast unrecorded. Still, these details may be reproduced by the same film if the density is lower, even if the gamma value is kept constant. The present report is concerned with how information is stored in the film and the information stored is displayed to the inspecting eye. It appears that films of high density contain information which is invisible, so that the disappearance of image details to a certain extent reflects defect of display.

24111

Pinhole Cameras: Artifacts, Modifications, and Recording of Pinhole Images on Screen-Film Systems.

Gray JE, et al, Radiologic Technology, 52(3), 277-282, (1980).

24111, 21111

診断用X線管陽極角度の出力と半価層に与える影響のコンピューター・シミュレーション.

速水昭宗, 他, 日医放会誌, 40(10), 977-982, (1980).

21442, 24257, 21321

X線映画法による大動脈 Compliance 測定について.

菅原徹雄, 他, 日医放会誌, 41(2), 168-170, (1981).

24310, 21330

An Aid to Barium Meal Examination Infants.

Hyde I, et al, Brit. J. Radiol. 53(634), 997-998, (1981).

24320

Improved Contrast in Special Procedures Using a Rotating Aperture Wheel (RAW) Device.

Rudin S, et al, Radiology, 137(11), 505, (1980).

Summary

A new scatter control technology consisting of multiple rotating aperture wheels (RAWs) is being developed to provide improved radiographic contrast and/or reduced patient dose in both single frame and dynamic procedures. The unique geometry of this system allows the conventional source-patient-image receptor geometric relationship to remain unchanged so that the device can be added to existing radiographic, fluoroscopic, and conventional tomographic installations. A prototype RAW device has been used with a rapid film changer for simulated abdominal angiography. The resulting images show improved contrast over those obtained with a standard 12:1 fixed grid.

311, 34130

Standards for Performance Measurements in Scintillation Cameras.

Muehllehner G, et al, J. Nucl. Med., 22(1), 72, (1981).

Summary

Performance measurements of scintillation cameras are made (a) by the manufacture to test and specify the equipment he sells, (b) by the customer as part of his acceptance testing, and (c) by the user as part of a periodic quality-control program. This paper describes the NEMA (National Electrical Manufacture's Association) standard, which was developed to provide a uniform criterion for the measurement and reporting of performance parameters