

The principle goal of quality assurance of X-ray machine is minimization of radiation exposure and obtains high image quality. Quality control in diagnostic radiology is essential to ensuring accurate diagnostic information at optimal radiation doses, thereby making it possible to reduce unnecessary radiation hazard to patients, workers and the public. This can be assessed by performance of the X-ray machine by optimum operating parameters such as reproducibility of tube voltage, dose output, time, X-ray tube efficiency, Accuracy of kVp, mA, time, focal spot size and half value layer (T.M. Taha et al). AAPM report * describes quality assurance protocol for diagnostic x-ray equipment at the radiologic technologist level. also The World Health Organization (WHO) defines a quality assurance (QA) program in diagnostic radiology as an organized effort by the staff operating a facility to ensure that the diagnostic images produced are of sufficiently high quality so that they consistently provide adequate diagnostic information at the lowest possible cost and with the least possible exposure of the patient to radiation (Stephen Inkoom et al). QC is normally part of the QA programme and quality control techniques are those techniques used in the monitoring (or testing) and maintenance of the technical elements or components of an X-ray system. Quality assurance actions include both quality control (QC) techniques and quality administration procedures. Certain essential quality control tests have greater effect on the final diagnostic image quality.