

**[ OTS TRANSPORT SECURITY REGULATION NO.  
006-2006 CASS, October 23, 2006 ]**

**STANDARD SPECIFICATIONS FOR X-RAY MACHINE**

Pursuant to Executive Order No. 277 as amended by Executive Order No. 311 and its Implementing Rules & Regulations (IRR) and Section 3.1.1 in the Amendment 10 of the International Civil Aviation Organization (ICAO) Annex 17, this is a regulatory standard, specifications and criteria for x-ray machines used in airport passenger & cargo screening;

**Section 1.** The recommended minimum technical standard of X-ray machine for use in airport personnel and cargo screening should strictly comply with the following standard, specifications and criteria;

X-R AY SPECIFIC ATIONS:	X-RAY DESCRIPTION:
1.1 AUTOMATIC DETECTION OF EXPLOSIVES & DRUGS	The capability of the X-ray Machine to directly indicate and recognize "explosive" and "drugs" automatically at real time. Automatic detection avoids delay in inspection improving operators' performance.
1.2 THREAT IMAGE PROJECTION	Superimpose threat & image with automatic projection capability of fictional baggage items containing threat object.
1.3 AUTOMATIC DENSE AREA DETECTION	The capability of the machine to detect hidden item behind high dense material. The detected area is analyzed by means of special enhancement filter software. The dark area is highlighted locally. The resolution is measured in terms of American Wire Gauge Number (AWG#). Most explosives use wire for blasting.
1.4 PENETRATION	The capability of a machine to penetrate at least 25mm thickness of steel.
1.5 FILM SAFETY	X-ray machine radiation should not damage picture films or like
1.6 HEALTH (AND) SAFETY	X-ray machine should conform to applicable health and safety standards of the country.
1.7 STANDARD STEP-WEDGE	a standard ICAO Combined Testing Piece (CTP) or ASTM Level 1-9 should be supplied by the manufacturer.
1.8 ALARM SYSTEM	The device should be equipped with