

# Ensuring the Ongoing Operation & Performance of X-Ray Machines

It is a legal obligation within the EU to regularly test security X-Ray screening equipment for image quality. A standard for X-Ray penetration and image resolution, the Standard Test Piece (STP) was set by the Department of Environment, Transport and the Regions (DETR) and the European Civil Aviation Conference to replace the Combined Test piece (CTP).



Manufactured to the U.K. Home Office, Department of Environment, Department for Transport and regional specifications, for use in support of the UK Transport Security Programme, STPs are designed to enable an operator to establish whether the X-Ray machine is functioning correctly and that there are no obvious changes that might affect its performance to detect and display different densities of materials. X-Ray equipment may deteriorate over time and so regular testing will allow you to identify such deteriorations and rectify them before they can adversely impact upon security. Regular daily use of the STP prior to any luggage being screened or after the X-Ray has been switched on, ensures that your equipment is working correctly.

Our Standard Test Piece instructional guide (STP) is a CD-based educational course that details the methods of routine testing, and provides users with a clear guide on what to look for and how best to use the STP to test X-Ray machine performance.

## Partnering with the experts

A positive security culture amongst staff is one of the most important aspects of effective security. By completing daily tests of their X-Ray equipment prior to operational duties, your staff will have full confidence in their machine's performance and will be able to focus on the job in hand – the inspection of goods, luggage and other items to be boarded on the plane, and the identification of suspicious, illegal, dangerous or explosive materials.

Developed by Quadratica UK, STP is a comprehensive training and information course to help you ensure the operational reliability and performance of X-Ray machines using STP devices from all manufacturers.



# X-Ray machine operation, function and performance

Our Standard Test Piece course is a comprehensive training and information course, designed to help the user ensure the operational reliability and performance of X-Ray machines, using STP devices from all manufacturers. STPs are designed to ensure the correct functioning of X-Ray machines. Allowing the operator to rectify any issues, before creating an adverse affect on security.

Quadratica UK's STP educational course will familiarise new and experienced X-Ray operators with a comprehensive overview of routine X-Ray machine testing.

## STP course overview

### ■ Test 1 – Single Wire Resolution:

Defines the ability to display a single thin wire

### ■ Test 2 – Useful Penetration:

Determines what level of detail should be seen behind a thickness of known material + enhanced test

### ■ Test 3 – Spatial Resolution:

Defines the ability to distinguish & display objects that are close together

### ■ Test 4 – Simple Penetration - thin material:

Tests the X-Ray machines ability to image thin metal

### ■ Test 5 – Simple Penetration - thick material:

Defines the thickness of steel the X-Ray machine should be able to penetrate + enhanced test

### ■ Test 6 – Material Discrimination:

Ensures that different colours are allocated to organic and inorganic substances



## Quadratica

At Quadratica UK we are continually looking for ways to provide our customers with the best functionality in the most economic format. Training can be expensive and the quality of instruction can vary from trainer to trainer. Our online training courses deliver high quality training every time. Scheduling training for a large work force no longer requires the cost of training rooms or taking staff off the floor. Our courses are available 24 hours a day, 7 days a week, so training can be scheduled around staff availability and convenience.

To keep our clients' training overheads down, we have priced our courses by the unit – if only 2 people require training, our clients only pay for 2 units, whereas a certified instructor will often charge the same amount whether they are training 2 or 20 people.

We provide training managers with the best possible tools to educate their security staff by continually developing ground breaking technologies. Our products are designed with a strong focus on our customers' ever evolving needs and the shifting landscapes of the security industry.

