X-RAY TECHNOLOGY

X-ray technology is an invaluable screening tool used by Customs to inspect cargo, mail and passenger baggage.

It is an extremely fast, effective and cost-efficient method of examining both large volumes and a wide variety of goods.

X-ray technology is used by Customs to detect both the movement of prohibited and restricted goods across our borders and the avoidance of duty payable to the Commonwealth.

HOW X-RAYS WORK

The machine produces x-rays in a tube and directs them at the article being inspected. Some of the beam passes through the item. This depends on the density and thickness of the article.

The machine then uses image processing software to produce an image. The machines used by Customs produce a multi-coloured image differentiating between metal and organic goods. This provides Customs officers with a clear picture of the goods being examined.

HOW CUSTOMS USES X-RAYS

Specially trained Customs officers interpret the images produced from an x-ray for any indication of prohibited goods or other anomalies. If inconsistencies are detected, the item is referred for further examination.

Customs uses several different types of x-ray machines depending on the location, size and density of the items to be inspected. In total, Customs has more than 80 x-ray machines in use at ports, mail processing facilities and airports around the country.

Using these machines, Customs can inspect articles of any size - from entire sea shipping containers, in its container x-ray machines, through to envelopes and smaller parcels at international mail centres.

In addition, a fleet of custom-built mobile x-ray vans ensures that Customs is able to employ x-ray technology wherever it is required.

X-RAY MACHINES ARE SAFE

Australia has among the most stringent radiation safety standards in the world. The Australian Radiation Protection and Nuclear Safety Agency licenses Customs x-ray machines for operation.

Customs ensures that each machine satisfies the Agency's strict regulations concerning safety standards, maintenance and operating procedures.

X-rays do not affect the articles being inspected, including sensitive camera equipment and film below 1600 ASA. The item does not become radioactive or retain radiation.

FOR MORE INFORMATION

For information on any other Customs matter, contact the Customs Information and Support Centre on 1300 363 263 or email information@customs.gov.au or browse the website www.customs.gov.au