#### SGS SCANNER SERVICES

# INTENSIVE IMAGE ANALYSIS TRAINING FOR CARGO SCANNERS



# **CONCEPT**

Nowadays, governments and institutions are looking at ways to meet their objectives by using technical scanning equipment to increase the efficiency of examinations. But the equipment by itself is not enough to gain substantial results because the core activity in a scanner project is image analysis. Using software tools to analyse a radioscopic image enables inspectors to rapidly check for contraband and prohibited items concealed in containers without opening them.

The fraud detection rate depends on the skills and capability of the image analyst. Such analysts must remain completely up-to-date in order to obtain optimum results. Most scanner manufacturers provide their clients with an initial training course that covers the basic and rudimentary use of the scanner image analysis software. However this training does not provide the client with the necessary intensive practice that would guarantee efficiency from day one so that they achieve maximum detection capability.

SGS is convinced that nothing replaces experience and practice. SGS has therefore developed a range of intensive courses, comprising various training sessions, in which the trainee will analyse a range of specific images classified by type of threat. Image analysts will be able to practice and utilise the full range and depth of the software tools whilst analysing a database of authentic suspect and non-suspect images thereby enhancing their detection capacity.

### **MAIN FEATURES**

Every image analyst is intensively trained in order to be proficient with the image workstation software tools as well as in the techniques of image interpretation and the detection of threats.

SGS has image analysis experts, fluent in French, English, Portuguese, Arabic and Spanish, located in various countries. The course lasts 2–3 days and can be adapted to meet specific requirements. It includes

- An explanation of the entire image analysis process consisting of:
  - Document analysis: what to look for, what kind of image to expect...
  - Image analysis: thorough use of the different software functionality, including all menus and sub-menus, and in depth analysis of the density of the goods
- Some practical examples of radioscopic images classified by type of threat
- An evaluation and presentation of an SGS diploma/attestation

All the software tools implemented on site are reviewed and explained. The image analysts also receive refresher training on how to use each function and their consequences. SGS provides effective procedures in order to thoroughly analyse an image.

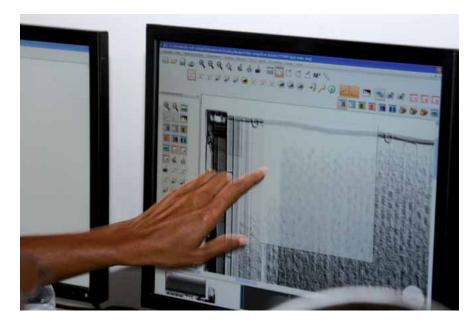


#### **CUSTOMISED TRAINING**

Depending on demands and requirements, the training could also be adapted for the recruitment of operators.

- SGS can provide an assortment of pre-selection tests to assist the client to select the most suitable operators. The following elements would be tested:
  - Personality
  - Spatial perception
  - Colour identification
  - Attention to anomalies
  - Threat object recognition: identification of suspicious objects within complex images
  - Object recognition superimposition: identification of suspicious objects obscured by other objects within multilayered images
  - Sustained attention
  - Mental rotation
  - Visual closure: ability and speed of the operator in detecting anomalies
- SGS can also provide training in X-ray properties, radiation safety basics and X-ray scanner fundamentals, including:
  - The nature of X-rays
  - The principles of X-ray images
  - Penetration and absorption
  - The X-ray machine features
  - Limitations of X-ray imaging
  - Procedures
  - Health and safety

Note that these services can also be provided for baggage and pallet scanners. Please refer to our Baggage and Pallet image analysis training Technical Sheet.



# **BENEFITS**

By choosing SGS image analysis training, the client will:

- Benefit from SGS experience and expertise
- Improve the detection skills of their image analysts
- Increase the probability of detection
- Improve image analysis efficiency and reduce processing time
- Benefit from the transfer of know how

# **AVANTAGES**

Each scanner manufacturer's image analysis software is unique and there is no direct compatibility between each manufacturer's applications. But SGS has the advantage of using the different manufacturers' software across is range of scanning references and operations.

Through its cooperation with governments, SGS' role is not only to provide financing and implement BOT operations but more importantly to ensure efficient, consistent, reliable and sustainable use of the equipment.

SGS has experienced image analysis trainers who have the necessary skills and experience to transfer their knowledge.

SGS intensive image analysis training has been ordered and recognised by several governments worldwide, including United States of America.

