

# **OTS Xtrain**<sup>™</sup>

# OPERATOR TRAINING HEIMANN X-RAY INSPECTION SYSTEMS

#### Computer based training

Computer assisted induction and further training of X-ray inspection system operators can be considered as essentially a two step process:

- a) Transmitting new topics to increase the knowledge base.
- b) Practical training using the knowledge acquired.

The objective of training sessions is to exercise the acquired knowledge so that routines and safeguards are fixed in mind before they are used in real security control situations. It is only possible to assess the actual level of knowledge of security personnel if training is conducted under controlled conditions. The results of objectively verifiable training sessions reveal valuable information on possible gaps in knowledge and therefore, enable planning of better targeted and more effective training measures.

The success of training programmes

crucially depends on the degree of reality present in the exercise and training environment.

Computer based training systems (CBT) can only produce permanent improvements in the reliability of security monitoring if the training environment reflects real-life conditions at an X-ray inspection system as closely as possible.

#### **OTS Xtrain**

The OTS 1 and OTS 2 modules from Heimann Systems offer powerful training systems that are specifically matched to HI-SCAN X-ray inspection systems. **Xtrain** extends the OTS system, making it a training and testing module that corresponds almost exactly to reality.

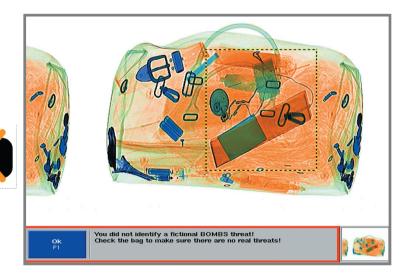
OTS **Xtrain** is based on the HiTraX system platform of the HI-SCAN X-ray

inspection systems and therefore contains all the prerequisites for optimal operator training and effective monitoring of its success.

Unlike conventional training tools, the OTS Xtrain module does not try to imitate the real-life system, more or less realistically, using PC based software. Instead, OTS Xtrain accesses the actual hardware and software resources of the real X-ray inspection system. This ensures that there is absolutely no difference between training and live operation in terms of system behaviour and control features.

OTS Xtrain is not a real-life system simulator. OTS Xtrain  $\underline{\textbf{is}}$  the real-life system.





# Operating modes

The training module can be used in two different operating modes.

- a) On-the-job training, directly at the X-ray inspection system.
- b) Off-line training sessions, at a **VIEW:X** workstation.

In On-the-Job training, a pushbutton on the X-ray system is pressed to switch it into training mode. The operator can work through predetermined training and testing tasks. If need be, the system can be switched back to normal operation at any point, without any loss of time.

Used in conjunction with a VIEW:X workstation, **Xtrain** also becomes a stand-alone training facility. The **VIEW:X** workstation contains all the components that drive the operator controls and image processing functions of the X-ray inspection system. This means that even as a separate training facility, OTS Xtrain works with the real X-ray inspection system software and image processing hardware. By incorporating the OTS 1 and OTS 2 modules, "classroom" training systems with networked trainer and trainee workstations can be implemented.

# System up-dating

A major problem of all training systems is keeping them up-to-date. Each additional function or version upgrade of the X-ray inspection system has to be incorporated into the training system. Training in the new functions of the real system can then only be provided when they have been developed and programmed into the training system. There is a further problem when simulation software is applied, in that, standard PCs either cannot or can only inadequately simulate High-end image processing functions, especially the latest generation (e.g. X-ACT,

HI-SPOT). Realistic training in these functions using a simulator is, therefore impossible or severely restricted.

This problem does not exist with **OTS Xtrain**.



Every additional function or X-ray system up-grade is immediately available in OTS Xtrain without any extra work needing to be done. The same is true for OTS Xtrain equipped with VIEW:X training workstations. Each software update to the X-ray system can be downloaded 1:1. The real-life software and training software releases are always identical. Subsequent development of the training software is not necessary. Training is provided in new functions, that are based on hardware and software components only available in the real-life system, without any compromises in terms of functionality and the degree of realism.

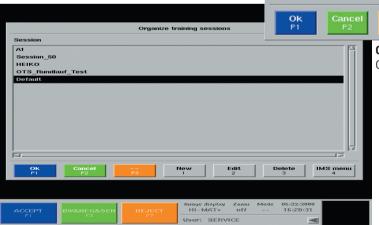
# System configuration

Menu driven configuration puts the system administrator in the position to create and modify training modules. When doing so, he can make use of both the image data bank supplied with the software and introduce new picture objects.

All the important interpretation parameters, e.g. sentencing time or image display rate, can be individually defined.

#### Reporting system

Individual users are allocated reporting forms, from which conclusions can be drawn, in terms of the effectiveness of the security checks. Analysis of the reports gives valuable insights into gaps in individual knowledge and therefore enables planning of targeted and effective training measures.



Configuration menus