Security

Digital Radiography

Who We Are — What We Do

IOR Technology
Digital X-ray and
Imaging Solutions

| producing digital X-ray technology and developing image management systems for radiographic security operations, NDT and medicine

| engineering in-house customised software solutions

| global sales and service network

| large product and accessories portfolio

| represented on all continents and in over 60 countries

| high quality standards:
ISO 13485 : 2003
FDA 510(k)
CMDCAS

Beyond the surface

Advanced
Digital Radiography

The security industry is a globally growing market that includes many business fields, from antiterrorism to road safety, from forensic science to civil defense. Whether public authorities, embassies, municipal bomb squads, airports or corporations, they all use radiography to examine suspicious objects in different locations. In previous years the recording medium was X-ray film.

Radiography today includes Computed Radiography (CR) and Direct Radiography (DR) as digital imaging systems, which represent the latest technology standard. While CR systems use an imaging plate in a cassette as capturing device, Direct Radiography (DR) systems often use Flat Panel Detectors (FPD) that show the X-ray image immediately on a monitor – by a simple click on a button. The digital panels require less time and radiation than traditional X-ray films.

OR Technology was a pioneer when bringing forward the advanced radiographic method in the 90s by developing the medical solution *dicomPACS*®. Our portable digital systems generate images in the highest quality for detecting minimal abnormalities for your safety requirements.

Applications
Scenarios in security industry

IED, EOD

Contrabands: drugs, weapons, cash

Electronic counter measures
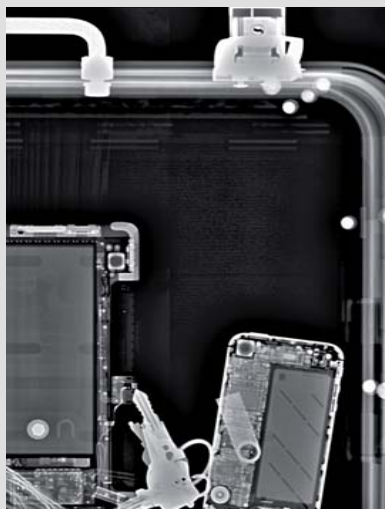
Crime scene investigations

Private security

✵ IED, EOD

Improvised explosive devices (IEDs) will be used often for terrorists acts or unconventional guerilla operations. They pose a more frequent hazard for people, communities, and social life as well as for military forces in a peace mission. Detecting and determining explosives (e.g. regarding detonator or chemical charge) are preconditions for EOD/IEDD.

Workflow optimized portable X-ray systems make a significant contribution to counter-IED capabilities and homeland security.

Contrabands: Drugs, Weapons, Cash

Customs and members of border security protect frontiers to land, air, and sea (ports of entry) as home of cities, communities, and as vital economic gateways.
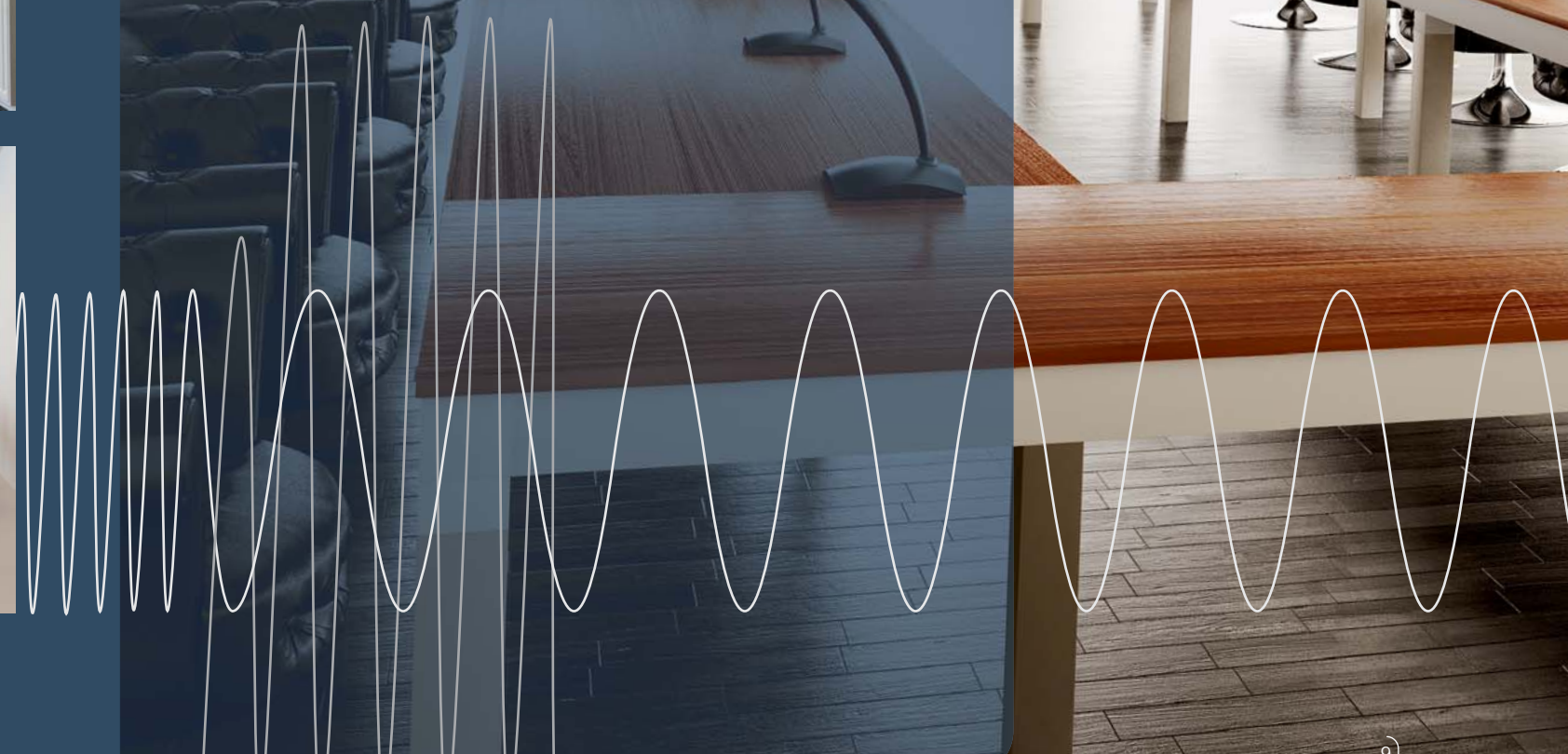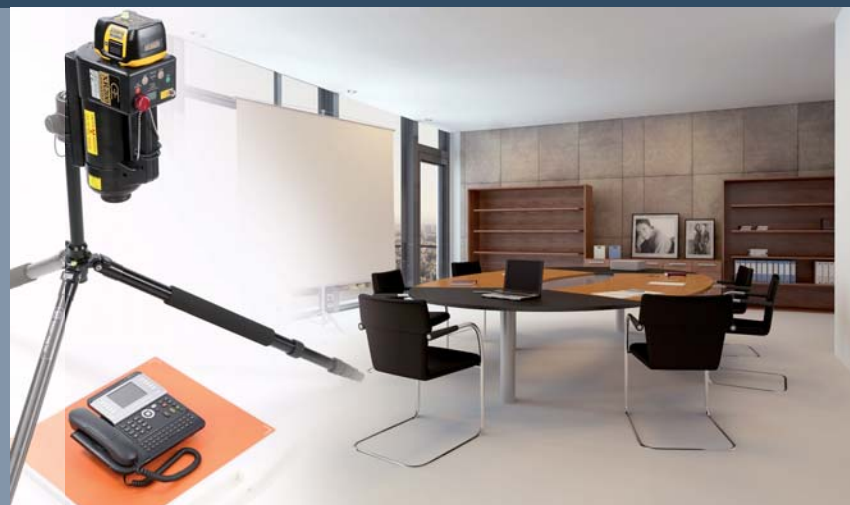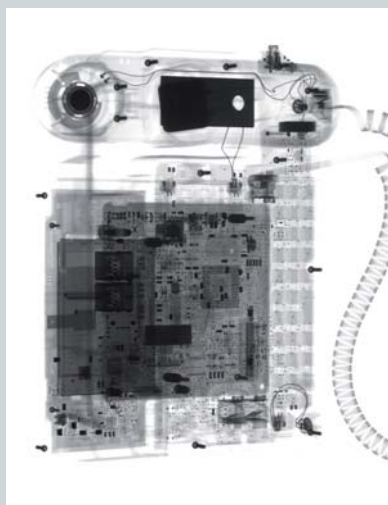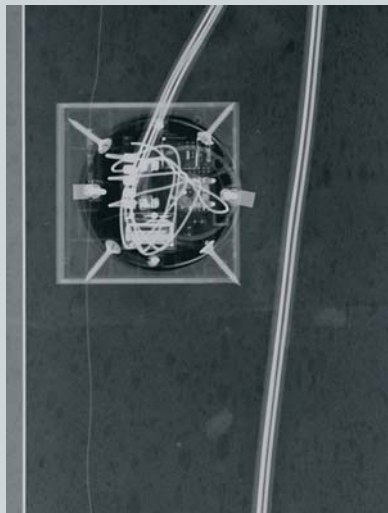
They identify, disrupt and dismantle criminal organizations and individuals by using rapidly deployable DR units for non-destructive customs or border inspections. Special software tools by OR Technology enhance the detection of relevant material-classes and make work easier.

Electronic Counter Measures

Surveillance has become easier in the age of high technology and networking. To ward off spying activities in offices or conference rooms via fingernail sized electronics – often hidden in communication devices resp. things that you cannot physically dismantle for checking (e.g. foam seats) - portable DR systems are the most conclusive (i.a. non-destructive) technology that deliver instant results on site to counteract.
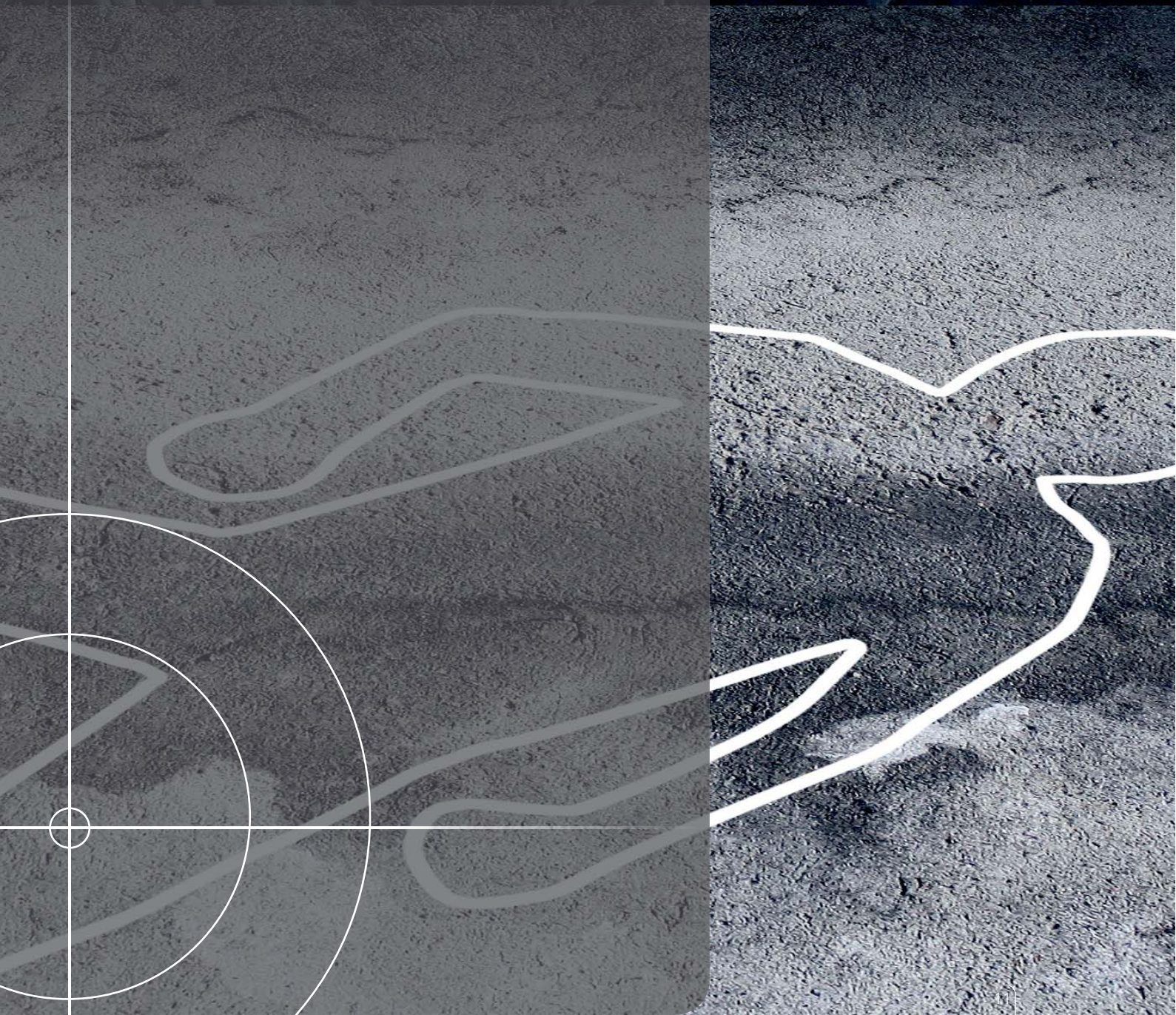
Crime Scene Investigations

Crime scene inspection intends crime reconstruction to convict the perpetrators finally. Forensic radiology is widely used in victim's identification (e.g. if disfigured, charred or wrapped), age estimation, establishing a cause of death, or even causes of fire/explosion and art fraud.

Private Security

The private security market grows in the same measure as the general risk of attacks increases. Protecting critical infrastructure (e.g. corporate buildings, business events) and single persons or groups from terrorist actions is a complex challenge for private security teams today. Portable digital radiography systems help security staff to counteract harmful intentions with quick response.
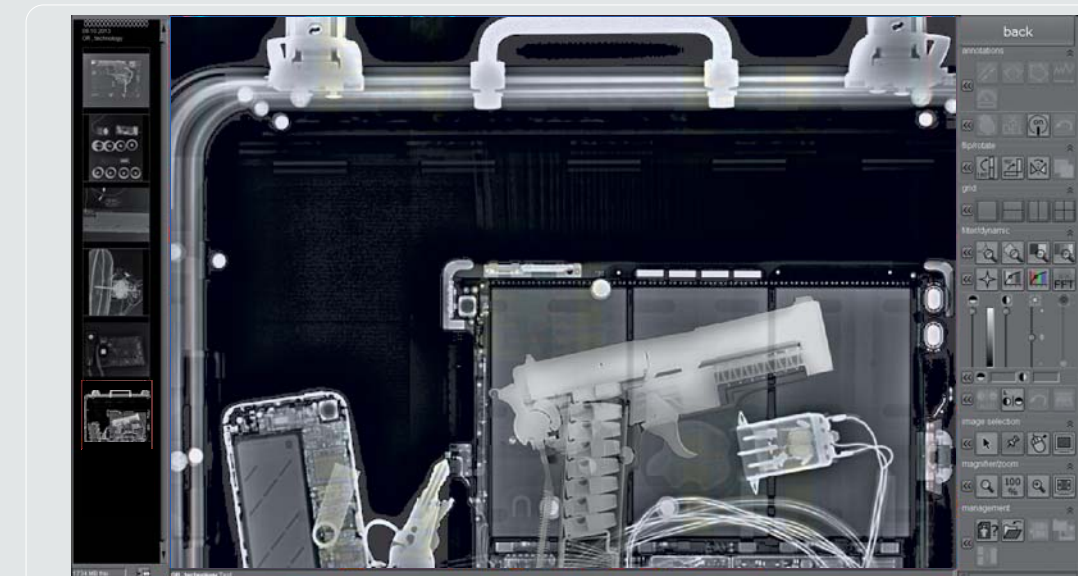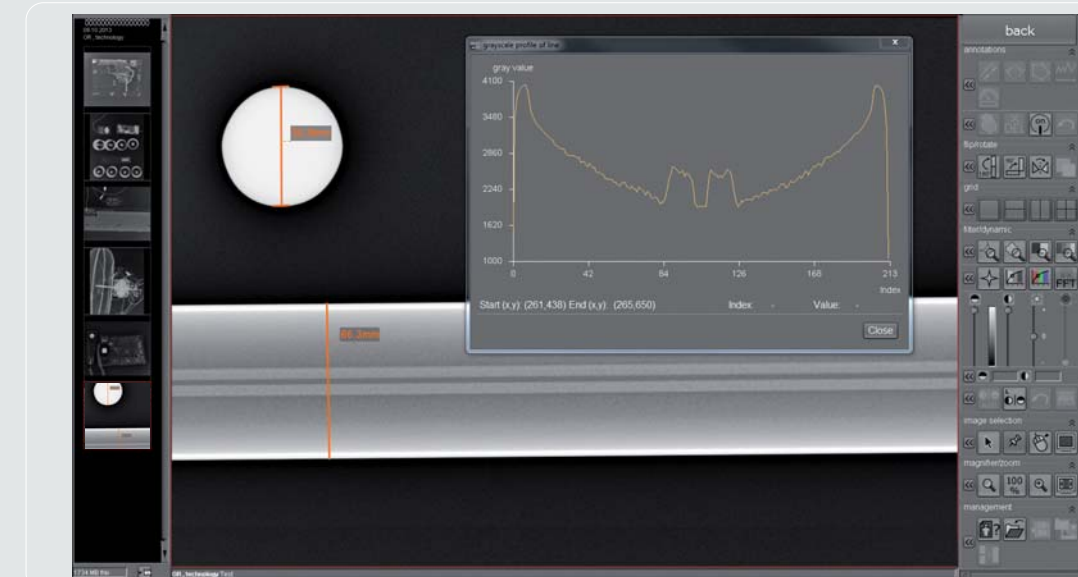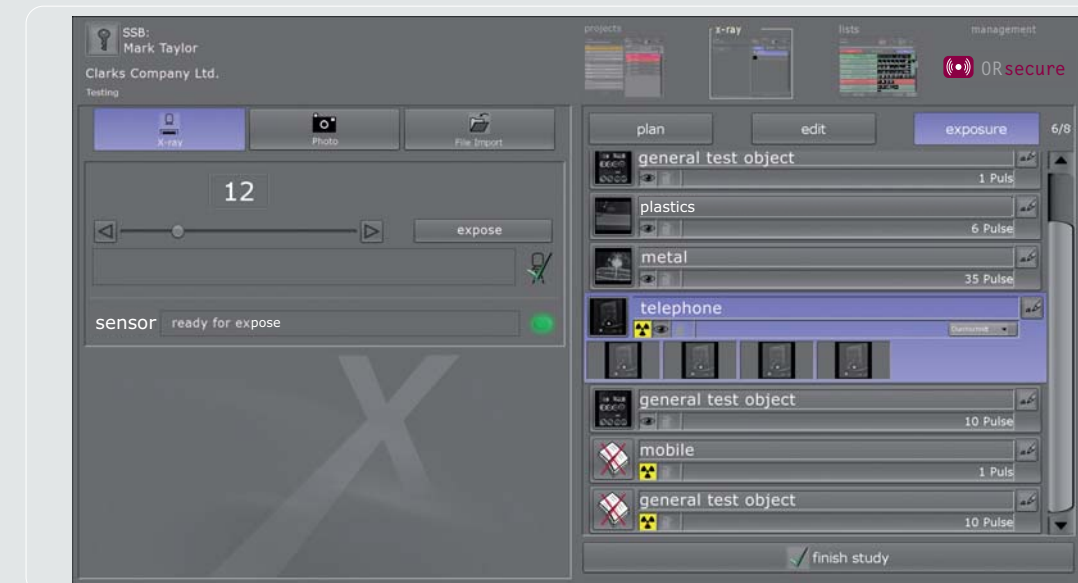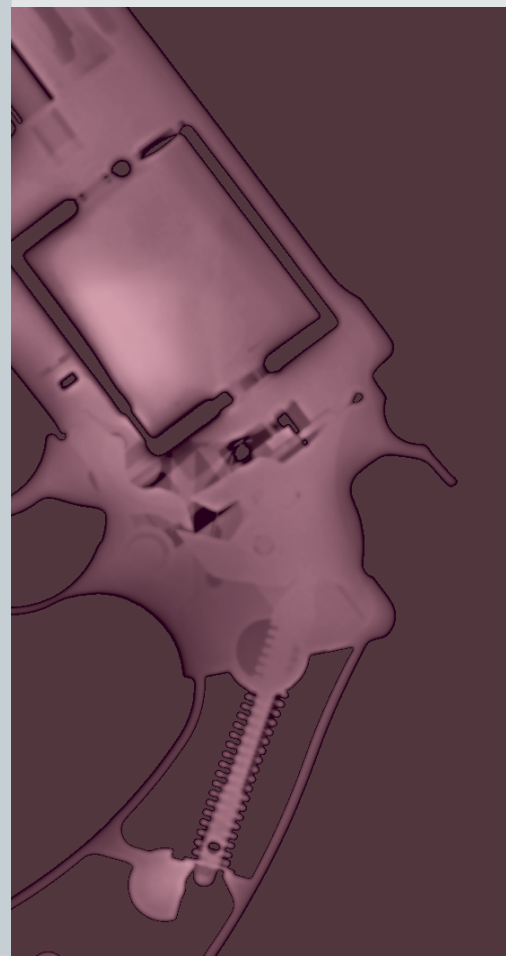
Software

engineered by OR Technology

 OR secure

Specifications of **OR**secure®

- completely integrated viewer for image analysis
  (processing, manipulation, storage, export etc.)

- measurement of distances/thickness, angles, areas and densities

- image annotations (arrows, ellipses, free text etc.)

- stepless zoom, PAN, **magnifier**, ROI, rotation, mirror, crop etc.

- adjustment of window/level options and gamma correction,
  sharpening filters, **high pass filter, noise suppression**

- advanced **inverse** (black/white), **colour LUT**

- multi exposure (SNR improvement)

- **image comparison** (optional)

- automatic or manual stitching

- printing of images both on Windows printers and laser imagers
  via DICOM Basic Print

- export of images to JPEG, TIFF, BMP and DICOM/DICONDE formats

- worldwide **image distribution via Web Server** (optional)

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RT Components
and Accessories

Whether for harsh field operations or sophisticated indoor applications – OR Technology's portable DR solutions are tailored individually

Various industrial sources

e.g. voltage, weight, continuous/pulsed, battery operation

Different flat panel detectors

e.g. size, wired or wireless

Multiple variety of cases

e.g. material, size, design

High resolution monitors (lab option)

Configurable laptops

e.g. ruggedised, sunlight readable display

DR Accessories

Sometimes it is the little things that make the difference.
OR Technology is aware of this fact.
That's why we offer a big variety of additional equipment and accessories.

OR Technology
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