



Orleans Parish Sheriff's Office (OPSO) Technical Capability Statement and System Specification Compliance

PREPARED BY



OD Security North America
707 Texas Avenue, Suite 215-D
College Station, Texas 77840

SUBMITTED

February 20, 2015

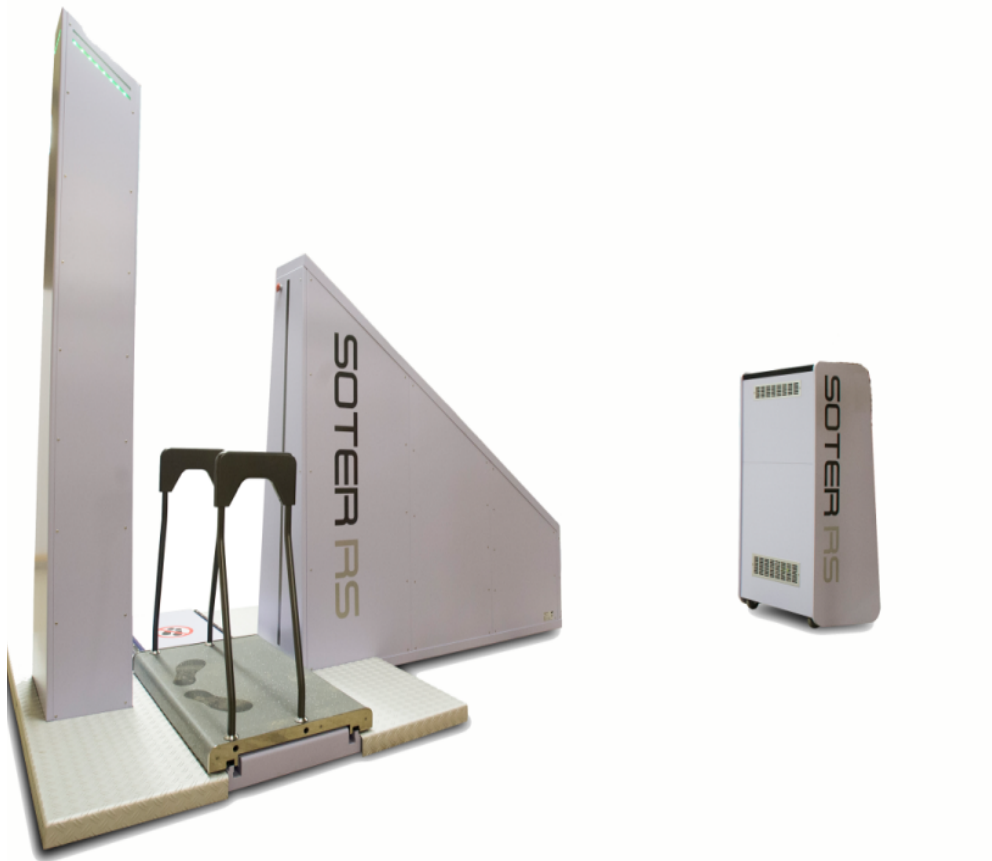
Technical Capability Statement and System Specification Compliance

SOTER RS Full Body Security Scanning System

SYSTEM DESIGN

1. System shall have an open gantry for non-obstructive viewing of inmates during scanning

Yes - Compliant



The SOTER RS design is such that provides for 360-degree visibility for staff to view the inmate screening no matter where they are positioned or their angle of observation.

2. System must use an industrial grade oil cooled monoblock x-ray generator with a hardened steel platform that is certified to support up to 660 pounds.

Yes – Compliant

Monoblock oil cooled design - 600w **bespoke unit** designed and manufactured by **Spellman (US)**.

3. System must have an integrated internal step-up transformer.

Yes – Compliant

4. System must provide a 2.5kW line conditioner.

Yes – Compliant

5. System power requirement: 110-220V, 50/60Hz.

Yes – Compliant

6. System power consumption: <1.5kVA.

Yes – Compliant

7. System shall have the ability to scan an inmate with a dose of 0.25uSv or less per scan

Yes – Compliant

Our SOTER RS is designed to offer OPSO the ability to operate as a **Scanning System (Category 2 – Limited Use)**, a **Screening System (Category 1 – General Use)**, or as **both a Scanning and Screening System**, with **Variable Effective Dose** settings embedded within the System. The System is compliant to **ANSI 43.17-2009 General Use and Limited Use**.

As shown on the screenshot of the Monitor, the Operator has the capability of switching between Screening and Scanning Mode as a touch-screen function without the assistance of a Service Engineer. This functionality provides OPSO with the capability of correctly matching detection process with risk, all within the control and safety parameters of ANSI/HPS 43.17-2009 with the ability for settings to be adjusted to meet new and future detection requirements.

Our Software program provides the ability to store and track scans/screenings per individual, with all requisite audit and investigative options.

As detailed later with this Technical Capability section, the embedded Dosimeter provides an automatic safety control, whichever mode the System is operating in to always ensure OPSO operate within recommended individual dose levels as detailed below on the ANSI 43.17-2009 Table of Recommended Screenings:

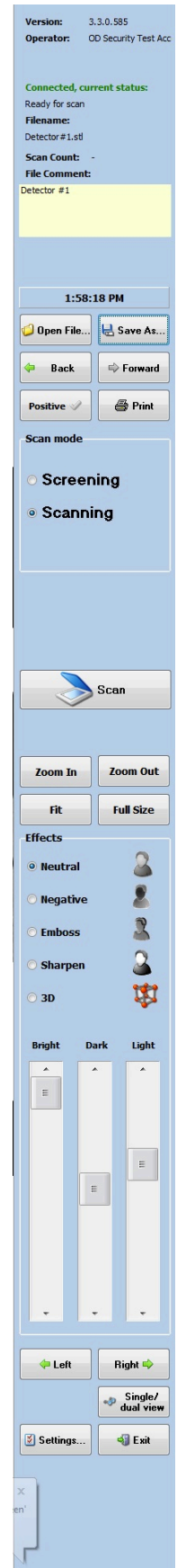


Table 1. The number of allowed screenings for one individual.

Reference effective dose per screening (μSv)	Reference effective dose per screening (μrem)	Standard is met if number of screenings per year does not exceed	Standard is met if number of screenings every month does not exceed	Standard is met if number of screenings every week does not exceed	Standard is met if the number of screenings every day does not exceed
0.05	5	5,000	416	96	13
0.10	10	2,500	208	48	6
0.15	15	1,667	138	32	4
0.20	20	1,250	104	24	3
0.25	25	1,000	83	19	2
0.5*	50	500	41	9	
1.0*	100	250	20	4	
2.0*	200	125	10	2	
3.0*	300	80	6	1	
4.0*	400	62	5	1	
5.0*	500	50	4		
10.0*	1,000	25	2		

*Applies to limited-use systems only.

8. Imaging time: < 8 seconds.

Yes – Compliant

9. Must provide an Uninterrupted Power Supply (UPS) with a battery back-up for the System Computer.

Yes – Compliant

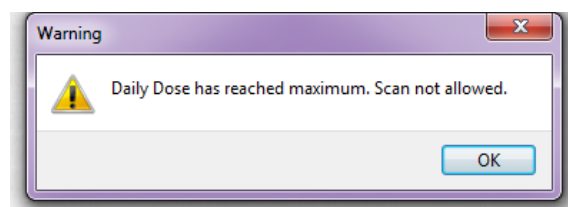
FUNCTIONALITY

10. System shall have the ability to self calibrate prior to every scan ensuring image quality and accurate dose measurement

Yes – Compliant

After each scan or screening, the dose accompanied by person's name, ID number, date/time and operator, is stored in the System database. With the data in the database, the accumulative dose is calculated. All Operators can open images by name/ID number, by period, by Operator or "positive" screenings.

The System keeps track of the daily/weekly/monthly/annual dose of inspected persons. After a person has been selected, the System checks that the maximum exposure



limit will not be exceeded. If the maximum exposure has been reached, the System will show a message and will not allow the screening to proceed.

The System is designed to auto-calibrate before each scan or screening to ensure the System does not exceed the recommended limits on exposure rates for ANSI 43.17-2009 on any given scan/screening.

11. System shall have the ability to detect metal, non-metallic, organic and inorganic contraband; and
12. System shall have the ability to detect contraband in internal body cavities; and
13. System shall have the ability to detect contraband externally and have the ability to image subjects wearing outer garments; and

Yes – Compliant

The System provides the capability to detect contraband either externally or internally concealed.

The System provides OPSO with the ability to efficiently and safely process inmates with outer garments and footwear on.

The SOTER RS is designed and manufactured with unique detection capability. The Detector Unit is constructed with 1344 Detectors (compared to, for example the Belorussian Manufactured Adani RadPRO SecurPass which has only 832 Detectors).

This design offers OPSO the ability to operate industry leading detection capability.

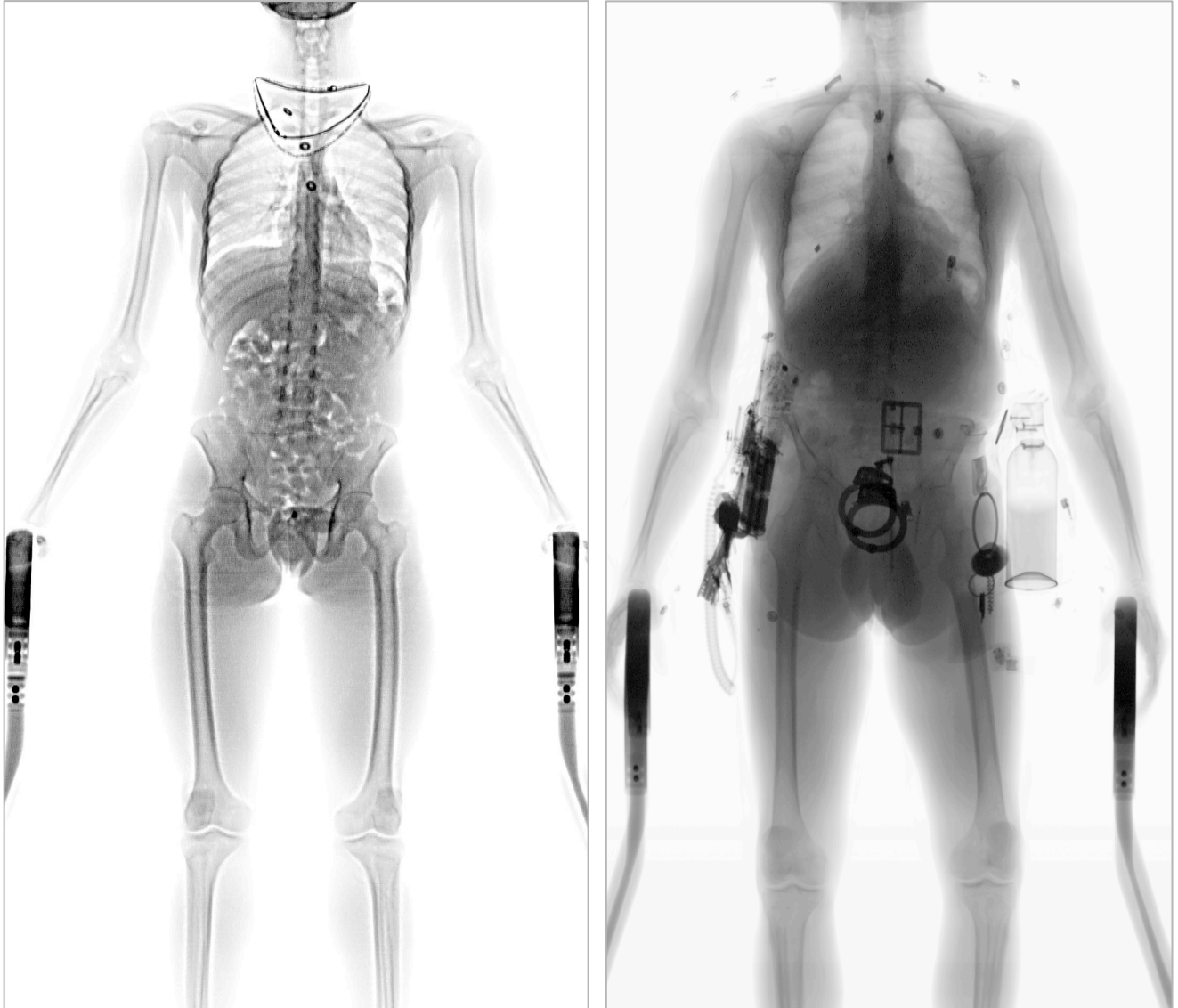
The SOTER RS also offers a Full High Definition Monitor - 1920x1080 pixels (compared to the RadPRO SecurPass offering of 1388x768 pixels).

The Operator interface experience is also uniquely enhanced by the only “Touch-Screen” functionality available in the marketplace, which offers the Operator much greater image manipulation and interrogation, and enables OPSO to offer Staff access to a user-friendly function compatible with modern Smartphones and Tablets.



Two Sample Images are detailed provide an indication of the System detection capability whether items are externally or internally carried

Image 1 is a “positive contraband image” from another US Detention Facility where drugs (cocaine balls) were being internally concealed;
Image 2 is an Operator Training image offering an indication of externally carried items:



14. System must be able to support inspection privacy software (Blurring Software) for the privacy areas of both male and female employees, arrestees and inmates

to comply with PREA standards.

Yes – Compliant

The SOTER RS Imaging Software has been designed to deliver no privacy issues for OPSO. We are also able to offer OPSO our exclusive 2015 PREA Compliant Operating Program, allowing only same-sex Operator/Subject processing if required (see later section – OD Security North America Additional Functionality)

15. The scanning platform must have adjustable speeds.

Yes – Compliant

16. System must have the ability to provide multiple scanning directions (right to left, left to right, and bi-directional)

Yes – Compliant

17. System shall have the ability to provide Remote Access Diagnostics (RED) via the Internet.

Yes – Compliant

18. System shall have the ability to utilize six (6) independent KVP and MA pre-set scanning techniques

Yes – Compliant

Our SOTER RS Full Body Scanner provides Orleans Parish with six (6) pre-set scanning techniques.

19. Must have the ability to provide 16,000 gray scales for image review.

Yes- Compliant

Our SOTER RS delivers industry leading image quality with **65,000 gray scales** per image.

20. Must have ability to store approximately 940,000 images on the resident hard.

Yes – Compliant

The SOTER RS provides the ability to store **960,000 images** on the resident hard drive.

21. Must have the ability to provide a 1 Terra-byte hard drive and a 1 Terra-byte internal back-up drive.

Yes – Compliant

22. Must have the ability to save images to JPG and BMP formats and to be capable of printing images on a Windows 7 supported printer

Yes – Compliant

Images can be exported in .BMP or .JPG format. The System is also DICOM compatible to facilitate the exporting of images to Orleans Parish Medical Facilities if required.

23. Must have the ability to operate on the Windows 7 Operating System

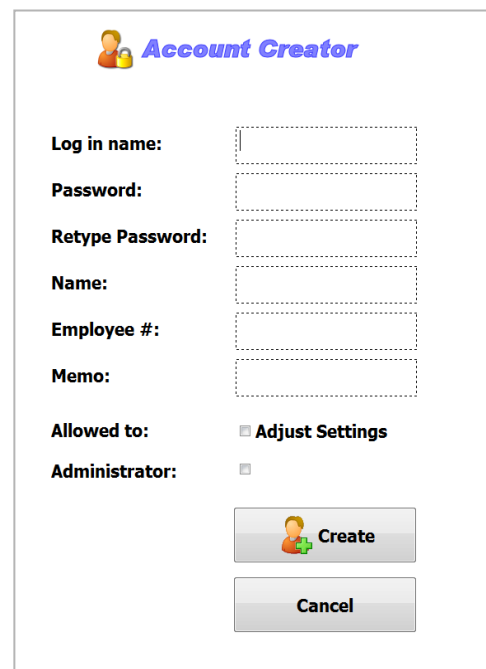
Yes - Compliant

24. System shall have the ability to have the System be User password protected; and
System shall have the ability to provide separate passwords to the System for Service Personnel, Standard Operators and system Administrators; and
25. System shall have the ability for the System Administrator to quantitatively audit images and data

Yes – Compliant

A password-protected account is standard for all users (Service Personnel, Operators, Administrators). For user set-up there is an “Account Creator” program. During the creation of the account there is an option to select whether a user is an Administrator or an Operator; and/or is allowed to adjust the variable dose settings within each mode (Scanning or Screening). A password-protected account is standard for all users.

The SOTER RS is a **Password Protected** login system. The OPDC Administrator and all Operators will have their own individual passwords; whilst only the Administrator can set-up new or delete Operators from the System, and only the Administrator can audit each Operator’s



The screenshot shows a window titled "Account Creator" with a user icon. It contains several input fields: "Log in name:", "Password:", "Retype Password:", "Name:", "Employee #:", and "Memo:". Below these are two checkboxes: "Allowed to: ☐ Adjust Settings" and "Administrator: ☐". At the bottom are two buttons: "Create" (with a user icon and a plus sign) and "Cancel".

scanning history (images and data).



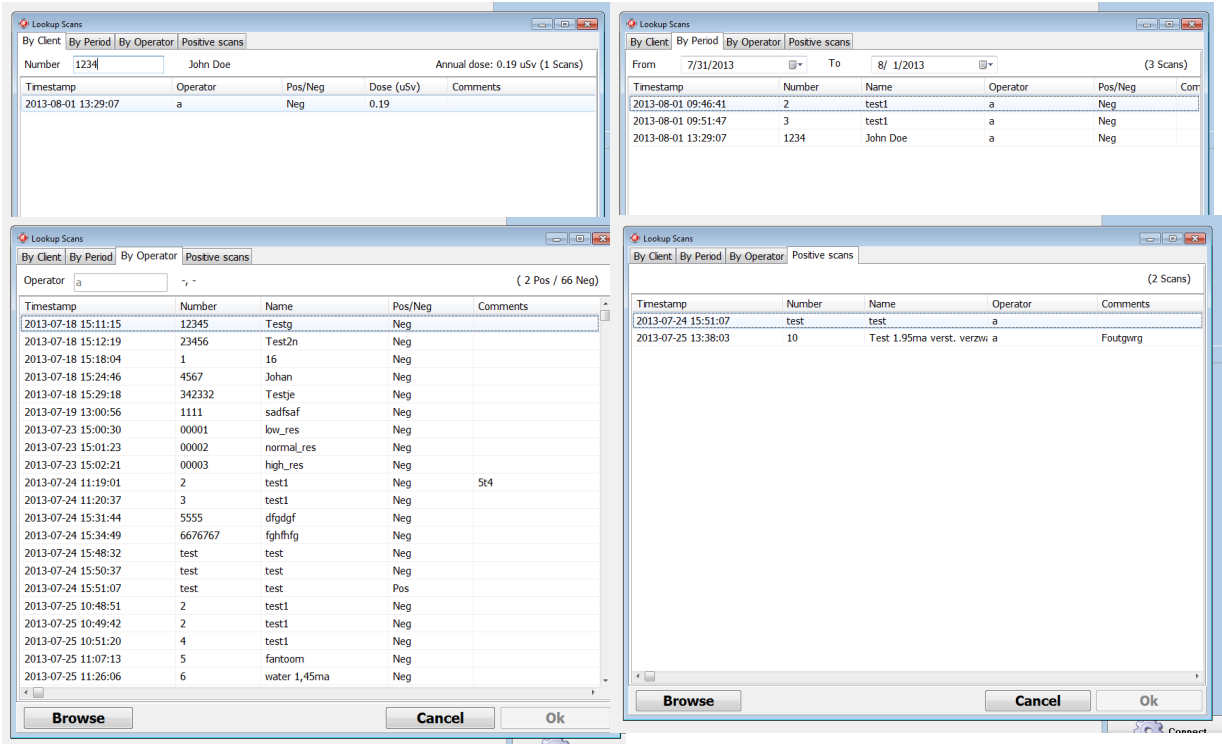
26. System shall have the ability to have every scan electronically stamped with the time, date, operator name and a unique scan sequence number; and
27. System shall have the ability to retrieve inmate database and individual inmate folder creation, storage and quantification; and
28. System shall have the ability to provide Comprehensive Image Review and Manipulation Software to include: magnifying the entire image by mouse or individual stepping, multiple pre-set viewing densities, regional “spy-glass”, image polarity inversions, image color density filter, panning, zooming, auto filtering, split screen comparison, save training scans, annotate and highlight contraband on saved images; and
29. System shall have the ability to store every inmate in a single daily folder with unique scan numbers that are retrievable

Yes – Compliant

The software functionality allows for the creation of a variety of stored image groups such as one that allows for the positive (contraband detected) images to be stored by the Operators in a separate group for quick access, intelligence gathering, and auditing -

Images can be selected on:

- Person/Client
- Operator
- Date/Time
- Positive scan
- “Browse” through the database

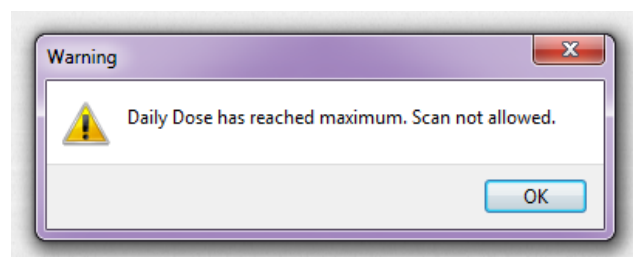


After each scan, the dose accompanied by person's name, ID number, date/time and operator, is stored in the System database. With the data in the database, the accumulative dose is calculated.

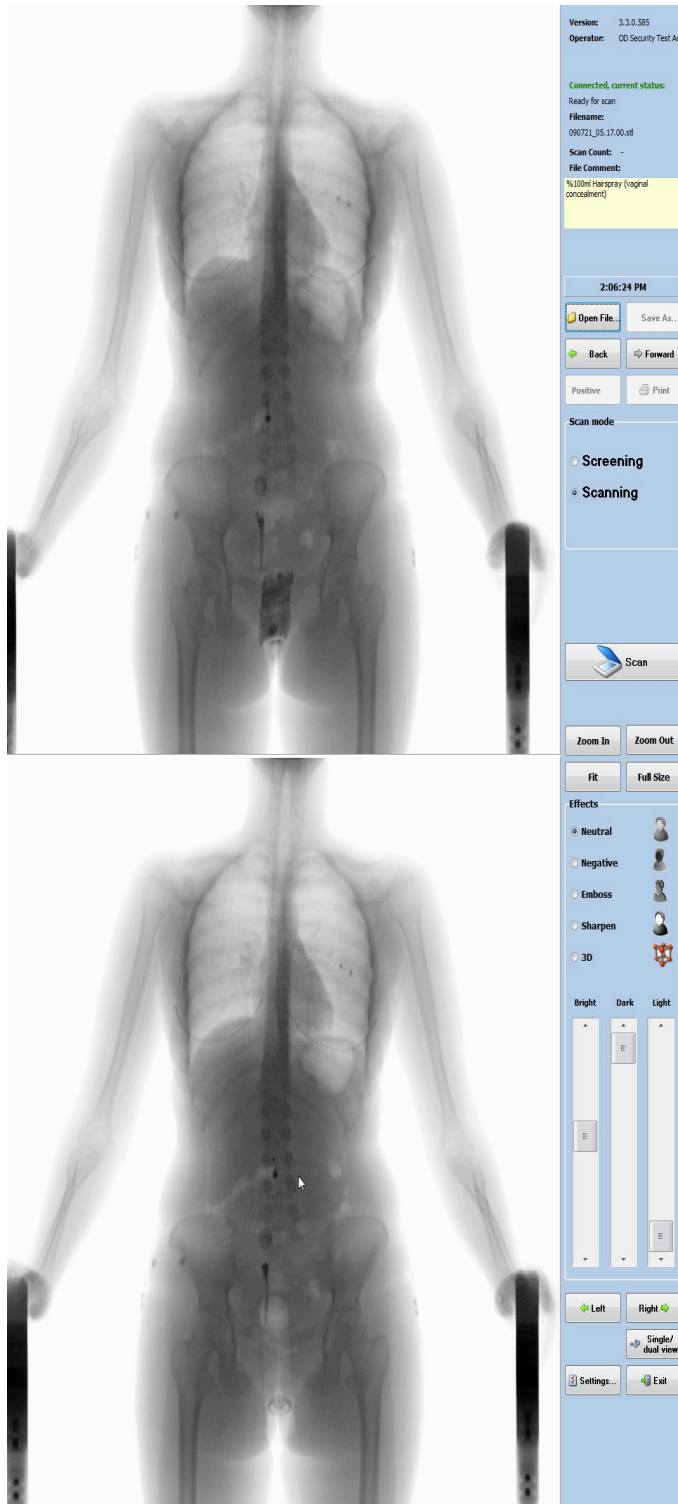
All Operators can open images by name/ID number, by period, by Operator or "positive" screenings.

The System keeps track of the daily/weekly/monthly/annual dose of inspected persons. After a person has been selected, the System checks that the maximum exposure limit will not be exceeded.

If the maximum exposure has been reached, the System will show a message and will not allow the screening to proceed.



The System is designed to auto-calibrate before each scan or screening to ensure the System does not exceed the recommended limits on exposure rates for ANSI 43.17-2009 on any given scan/screening.



Operators have the ability to use the “Dual View” function, which allows archived images of a person to be retrieved and compared immediately with the current image of that same person in case of anomalies, without requiring an additional database/storage device and/or access to an outside server.

ADDITIONAL REQUIREMENTS

30. Must provide documentation of ISO Accreditation

Yes – Compliant

Our manufacturing processes are International Quality Systems certified to ISO 13485:2012

31. Must provide documentation of ETL (Intertek) Certification

Yes – Compliant

The OPSO Systems will be Intertek Certified

32. Must be able to provide a FDA Accession Number.

Yes – Compliant

FDA Accession Number - 1380011-000

33. Must be able to provide documentation of multiple successful installations exceeding one (1) year.

Yes – Compliant.

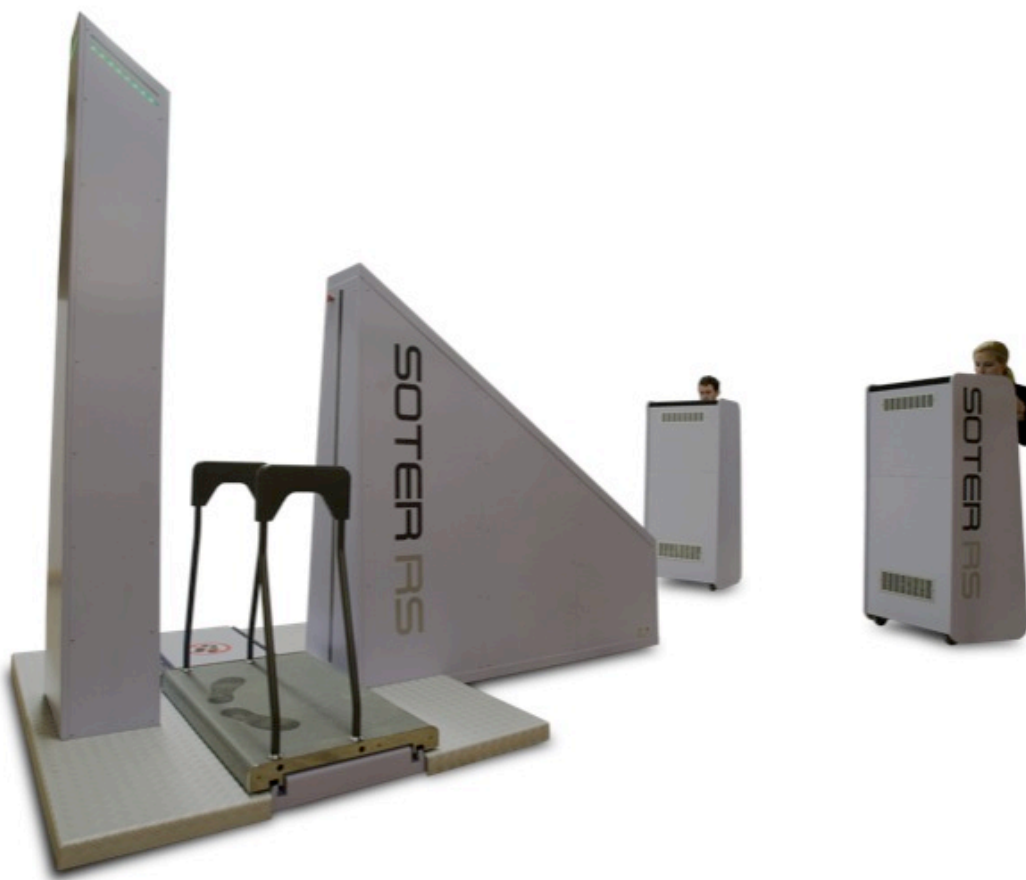
OD SECURITY NORTH AMERICA ADDITIONAL FUNCTIONALITY –

1. System has the ability to be integrated with Fingerprint Reader/Barcode Scanner/Digital Photography functionality -

The SOTER RS will be provided to OPSO with embedded functionality to integrate/upgrade ID recognition such as Fingerprint Reader and Digital Photography hardware and software

2. Multiple Operator Desks

The SOTER RS will be provided to OPSO with unique Multi-Operator capability. OPSO have the ability to select two (2) or more Operators per System, which would provide the capability to process a minimum of four (4) individuals per minute. In addition, two Operator Desks per System would allow OPDC with the ability to have a “sole” Observer function.



3. “SmartScan”™ Operating Software

The SOTER RS will be provided to OPSO with our unique “SmartScan”™ Operating Software Program embedded, offering OPSO the ability to randomly scan discreet processing populations (Staff; Inmates; Visitors). This software was specifically developed for Agencies where Staff Scanning is performed.

4. PREA Compliant Operating Software

The SOTER RS will be provide to OPSO with our unique 2015 PREA Compliant Operating Software Program embedded offering OPSO the ability to set up, manage and report same-sex Operator/Subject processing if required.