



MICRO-X Ltd

ACN 153 273 735

Carbon Nanotube X-Ray Stationary Gantry CT

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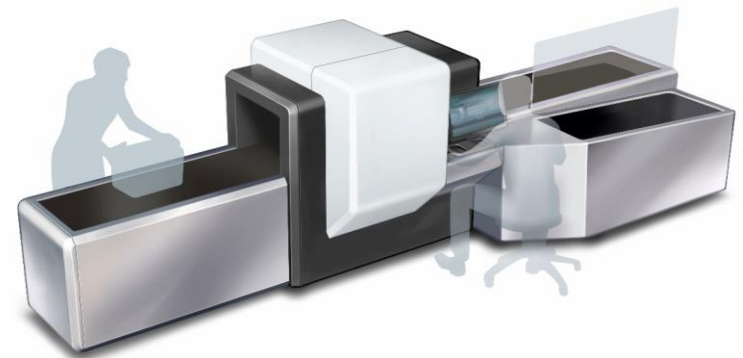
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So What, Who Cares?

Why Purchase a Stationary Gantry CT and Why Purchase from a New Vendor?

- Why Purchase a Stationary CT?
 - Stationary CT implemented with CNT x-ray tubes enables high-speed high-resolution CT imaging in an AT-2 footprint.
 - Can upgrade or extend capability beyond Dual-Energy CT through additional scatter detectors on stationary gantry.
- Why Purchase from a New Vendor? In the Southern Hemisphere?
 - Good Question!
 - Small Australian business
 - Listed company - ASX:MX1
 - World's first and only CNT x-ray tube in the market
 - 5-Eyes and ADF/US DoD connections and projects
 - Micro-X's path to bring CNT CT into the market is through collaboration and partnership.

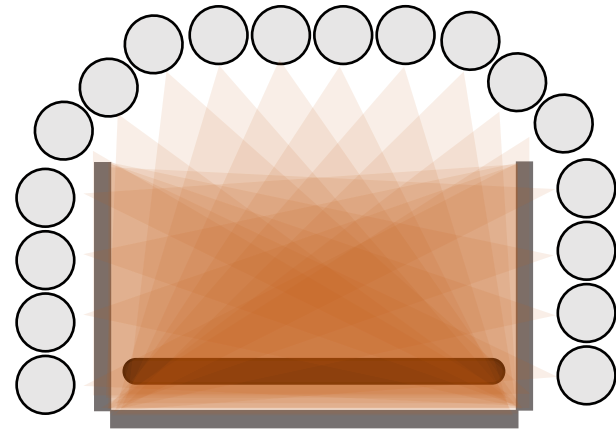


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Stationary Gantry CT

High Speed CT Designed for EDS

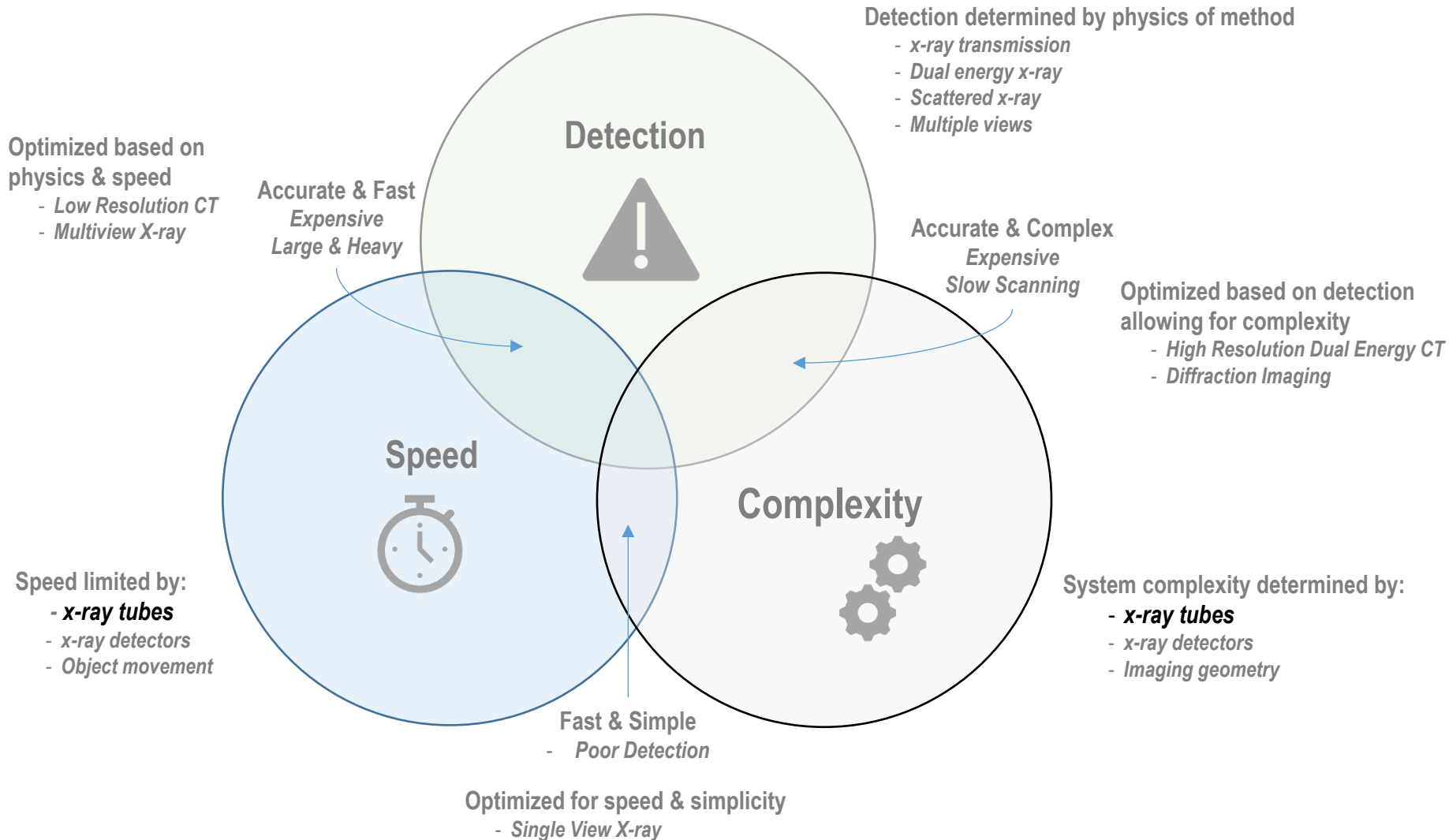
- Designed specifically for high speed explosives detection.
- Simpler system design makes maintenance easier and lowers cost of ownership.
- Multiple possible design configurations because image geometry is not restricted by rotating gantry.
- Multiple certified EDS stationary gantry systems exist.
- Challenging to implement at checkpoint due to:
 - Size of system – multiple x-ray tubes makes system large and heavy.
 - Power of system – multiple x-ray tubes simultaneously draw power.



Example Stationary CT System

Improved Detection Limited

Trade-offs in Conventional X-ray Detection

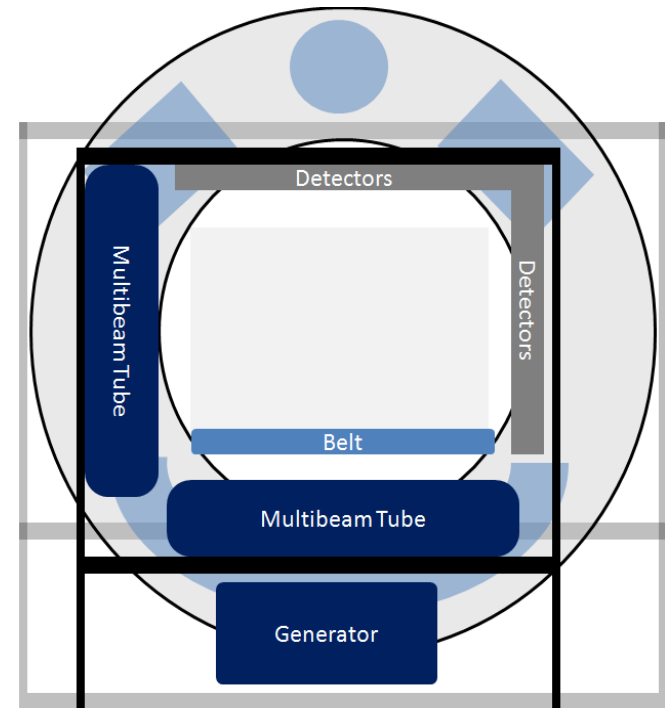


Micro-X Technology Advantage

CNT Applied to Stationary CT

- CNT X-rays are **electronically controlled**
 - Efficient use of power
 - High speed “flash photograph” imaging
- CNT emitter **miniaturizes** the x-ray tube
 - High resolution CT in AT-2 footprint
- Enables CT to be deployed to a wider range of checkpoints.
- Stationary gantry can be easily upgraded by expanding technology beyond dual energy CT.
 - Increased explosives detection capability with addition on other detection techniques.

Size Comparison
Stationary CT vs. Rotating CT



Combined Transmission And Scatter

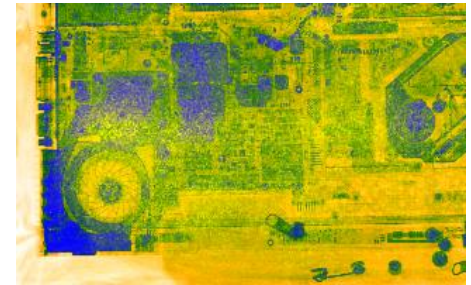
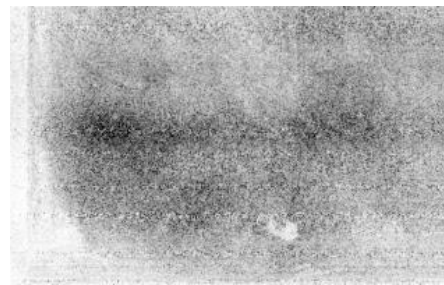
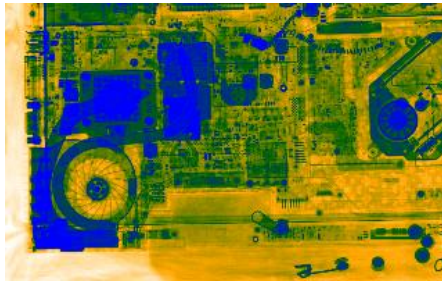
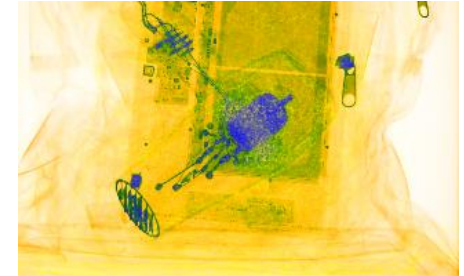
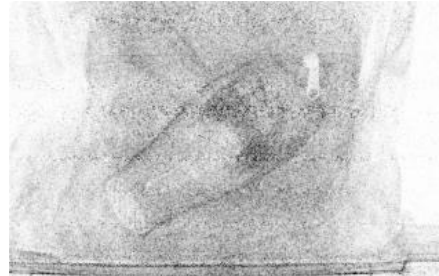
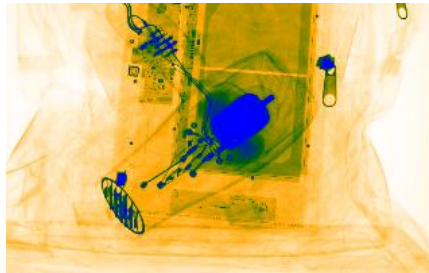
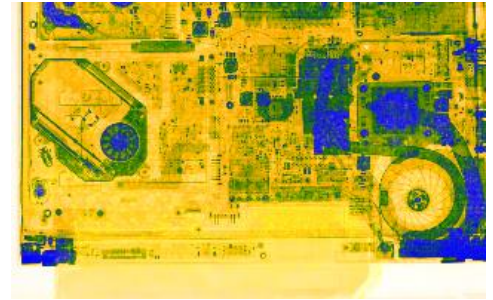
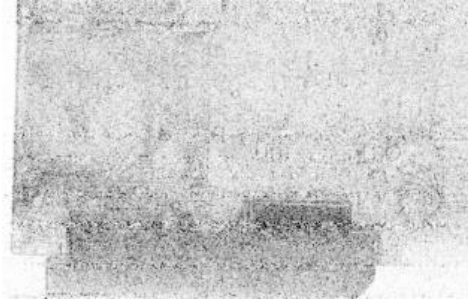
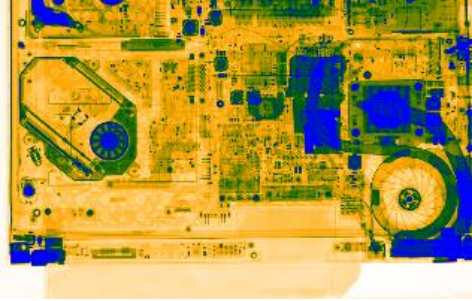
First Imaging Tests Results

Object

Transmission

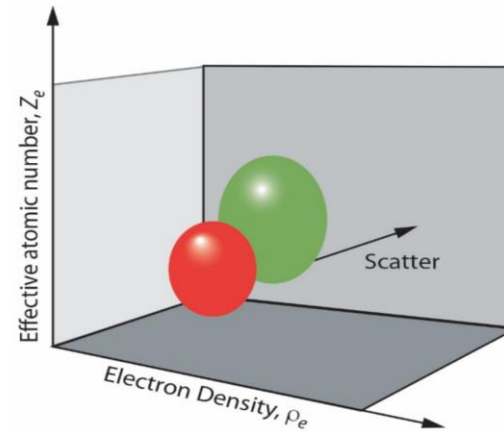
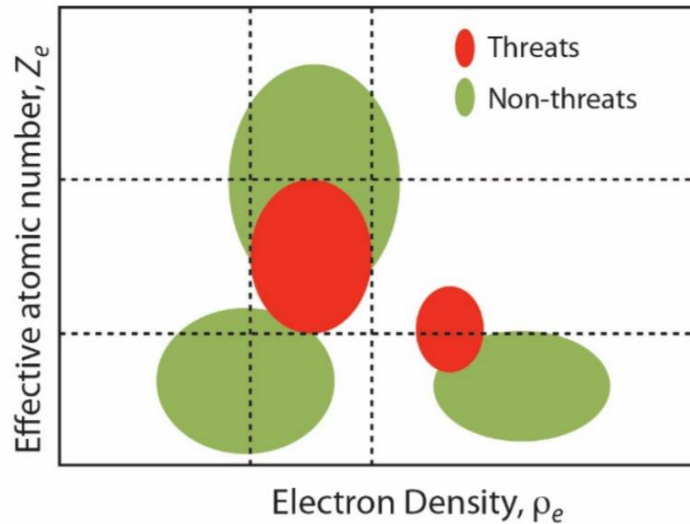
Backscatter

Combined



Dual Energy CT and Scatter

Combining X-ray Transmission and Scatter



- X-ray Scatter provides orthogonal detection signal to conventional dual energy 3D imaging
- When combined with CNT x-ray tubes can deliver a combined dual energy stationary gantry CT with scatter imaging system.

MICRO-X Locations

Adelaide, South Australia
Headquarters, Design &
Manufacturing
(Micro-X Ltd. ASX:MX1)

Seattle, WA
Imaging Research
(Micro-X Inc.)



Micro-X Ltd

Benefits and Challenges of Being Small and Australian

- Small, but listed - ASX:MX1 (access to capital)
- First CNT x-ray system in the world to go on sale.
- Innovating simultaneously in both medical and security markets.
- Benefits of being small and Australian
 - The 'Tyranny of Distance' encourages a global outlook
 - Micro-X Inc. a US wholly owned subsidiary
 - Global partnerships in USA and Europe
 - Won UK Department of Transport FASS contract
 - Australian innovation in technology
 - Strong government support for innovation and small business
 - Close relationship between US and AUS in security (5-Eyes)
- Challenges of being small and Australian
 - Overcoming the prejudices of distance
 - Recognition on a global stage

Barriers to Entry

Barriers to Entry for a New Vendor

- Established and Competitive market
 - Multiple solutions exist with a range of capabilities (from single view through CT)
 - Multiple rotating gantry CT solutions in testing and initial deployment
 - Existing CONOPS for AT-2
- Multiple Established Vendors
 - Have access to large data sets for ATR development
 - Have years of real experience with CT and EDS
- Highly Regulated Market
 - Long certification process
- Security-Sensitive Customer
 - Requires existing Government relationship to start development

Future Airport Security Solutions in UK

How the UK is breaking down barriers of entry to new technologies

- UK Department of Transport:
 - Questioned paucity of innovation in aviation security technology;
 - Commissioned study to identify barriers to innovation;
 - Found innovation required government intervention: leadership, investment, direction, and support
 - Looked at the way the global defense agencies develop bespoke solutions to anticipated competitive needs.
 - Sought to specifically engage smaller and more diverse companies and organizations.
 - Borrowed a Ministry of Defence Technology Accelerator program model.
 - Recognized the importance of joint government/industry capability planning workshops



Thank You

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