

# SCALPEL. WHERE'S MY SCALPEL?

## OVERVIEW

Sterile surgical kits provide critical consumable tools that surgeons rely on while performing often life saving operations. It is essential that these kits consistently contain their full complement of tools. When a manufacturer of these kits discovered multiple production runs were potentially missing key components, they were faced with the prospect of scrapping 200,000 units.

## CHALLENGES

Because the packaging of surgical trays in question are opaque, visually inspecting the kits would require opening, and sterilizing again once validated. This cost of doing this exceeded the trays value. Manual X-ray inspection provided excellent inspection results without compromising sterilization, but was still too time consuming and costly. The only solution was to automate inspection and incorporate artificial intelligence engine to provide autonomous validation.

## RESULTS

- Automating the inspection process resulted in rapid (2.5 s/unit) validation, and quarantining of suspect trays, with operators simply introducing product on a conveyor.
- Artificial intelligence engine was trained to reliably identify each component of the trays, and note their presence/absence regardless of position or orientation within the package.
- Fast and highly accurate, autonomous decisions making eliminated the need for slow, costly, and fallible human inspectors.
- Upon completing the recovery of the suspect units, the custom TruView™ Fusion X-ray system was incorporated into the manufacturing process, insuring ongoing product quality.



# TRUVIEW™ PRODUCT LINE

The TruView™ product line is a platform of X-ray systems that enables us to offer you off-the-shelf and custom solutions made in USA. No compromises.



## TruView™ Fusion X-ray System

The TruView™ Fusion X-ray Inspection System is the most versatile X-ray machine on the market today. Capable of inspecting samples up to 20"x48" the TruView™ Fusion is available with a variety of sources to get the power and focus required to match your application. When powered with a transmissive X-ray source, the TruView™ Fusion can achieve magnifications up to 2,000x.

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## TruView™ Prime X-ray System

For years, technical teams had to make a compromise: buy a large, powerful X-ray inspection system to get high quality images or settle for a smaller, low quality system that fit into their space. The TruView™ Prime breaks this paradigm by offering outstanding image quality in a system that fits on a standard bench. It is proof that power comes in many sizes.

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	TruView™ Prime	TruView™ Fusion
Source	90, 130kV	90kv, 130kv
Conveyor	✗	✓
Artificial Intelligence	✓	✓
Automation Option	✓	✓
ISO Barcode Grading	Handheld	Auto
Measurements	✓	✓
Check Weight	✓	✓
Defect Detection	✓	✓
Cycle Time	100 units/hour	150 units/hour

## ✓ CUSTOMIZATION



Looking for something that fits your unique application? We manufacture 100% of the systems in San Marcos, CA from software development to design and manufacturing. Conveyors, grippers, robots, and cobots, can be incorporated for material handling. Software tools can be upgraded to assist with or fully

automate the inspection process with image analysis and artificial intelligence. Our team is ready to assist in customizing your system, no matter how unique the application. Visit our website to see some examples and give us a call to discuss your project.