HXP

Technology of Tomorrow

ABOUT THE HXP

Goods are imported and exported all over the world every day. In order to protect our ports, airports and border crossings against threats, government entities need to be able to quickly search through trucks and containers without delaying commerce.

Astrophysics is dedicated to helping agencies such as border patrol, customs, and police, to detect contraband, weapons, explosives, fraudulent trade items, and other security threats. Our HXP is used to inspect trucks, containers and vehicles for these threats as well as the verifications of manifests. With an easy drive-through process, automated operation and high throughput, the need for manual inspection is reduced and high-volume cargo inspection locations will not be set back.

The HXP allows drivers to safely remain in their truck cabin, as the scanning process does not start until after the driver has passed the point where the X-ray has emitted. The automated scanning procedure provides simplicity and speed, allowing staff to focus on other important duties, therefore increasing productivity.

Astrophysics is committed to global safety and providing superior imaging technology. Because our systems are designed in the US, we offer flexibility to meet customer requirements, while providing the highest quality and value.

BENEFITS

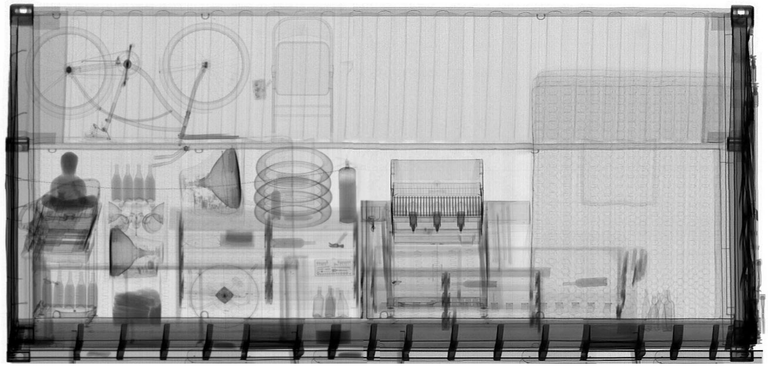
While there are other cargo and vehicle inspection solutions available such as a Gantry or Mobile Scanner, the High Energy X-ray Portal Scanner has the least cost of ownership, easy maintenance, and highest throughput among several other major benefits.

High Throughput & Simple Operation

The HXP Scanner is capable of scanning 150 trucks an hour. Although most users will never need to scan that many trucks, the HXP Scanner alleviates bottlenecks and delays. Drivers simply drive through the system, and the scanning process starts after the driver's cabin has passed through the portal, keeping the driver from getting scanned. The truck's speed is displayed to make it easy for the driver to maintain the correct speed through the scanner. With a tunnel height of 5 meters, even oversized cargo can be easily scanned.

Minimal Manpower

The scan process is fully automated. Typically, an operator monitors the passage of trucks through the portal while an inspector examines the images being generated. In a low throughput situation, one person can essentially carry out both roles, however, when operating that way it is recommended to only allow one truck to be scanned at a time, so that the operator can thoroughly analyze the image before the next scan. With both an operator and inspector, scans can continue even if previous images are still being analyzed. The automated process helps speed up inspection, while increasing staff productivity.



A scanned image example of mixed cargo. Pictured here is a container filled with household items.

BENEFITS

Customizable Solutions

Astrophysics' High-Energy product development and testing facility.

Minimal Impact on Flow of Goods

Unlike other scanners, the portal only takes seconds to scan a truck, minimizing any delay caused by the scanning process.

Reliability

The portal is more reliable than other scanner types. With almost no moving parts to wear out, the stationary nature of the portal decreases the chance for mechanical failures.

Safety

Redundant sensors are used to ensure that the driver has safely passed the X-ray beam before it is switched on. These sensors can also determine if a truck is moving too slowly or has stopped. In addition, the system is equipped with light curtains that monitor the entrance and exit of the vehicle and detect when personnel enter the scan tunnel. The operator has a complete CCTV view of the entire scan tunnel.

To put the X-ray dosage into familiar terms, any stowaways inside the cargo will be exposed to less radiation than the lowest dose of medical X-ray and the driver of the truck being scanned will be exposed many times less than that. The driver could potentially go through the portal 10,000 times before reaching the annual dose recommended for members of the public, which is less than normal background radiation experienced every year.

Cheaper to Operate

Portals need less power than other scanner types. They are also simpler and have fewer parts, which reduces maintenance and repair costs.

OPTIONS

Your Security Experts

Effective Imaging

All cargoes can be examined effectively with high resolution imaging and impressive penetration equivalent to over 300 mm of steel.

Compact

Nothing large enough to drive a truck through can be described as small but when installed within simple concrete walls the portal has the smallest operating footprint of the three main scanner types.

Usage

Portals are optimized for containers on the back of trucks and are most suitable for use in container ports. The trucks carrying the containers are not particularly of interest as their sole purpose is to transport the items being imported or exported. As a result, the driver's cab does not typically need to be scanned.

OPTIONS

When combined with optional features, our portals can be customized for a wide range of cargo inspection requirements.

Radiation Detection System

X-ray portals operate in a similar manner to Radiation Detection portals so it can simplify operations to couple them together. A Radiation Detection System can be installed at the entance of the portal and both scanning functions can then be carried out at the same time. In addition, if any radiation is detected, the X-ray system can immediately be used to help identify what might be causing it.

Camera Readers

Every shipping container has a unique identity number on it. This will be linked to the manifest of the cargo currently declared to be in that container. Cameras can be fitted to the portal which read the container number so that the manifest data can be accessed by the operator. If the manifest information is available in a digital form, the portal can use the container number to download it and display it to the operators automatically.

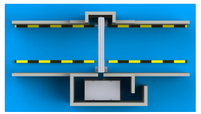
Cameras can also be used to scan vehicle license plate numbers. These camera readers are available to read multiple alphabets, including Arabic.

Additional Workstations

In a high throughput scenario extra image analysis workstations can be added so that the inspectors can still thoroughly analyze images without slowing down the scan rate. It is also possible to locate image analysis workstations remotely from the scanner. A central analysis station can be used to analyze images from a number of scanners thus making even better use of manpower.

Layout

Layouts can be designed to be optimized for inspection and site requirements. Weatherproof housing structures and radiation shielding walls are just a few options that can be added to our portals.



Bird's eye view illustration with optional concrete walls.

SERVICE

Quality Assured

Internet Call Center

We know that in security, every minute counts. Astrophysics has a comprehensive approach to service. We work to provide a courteous, helpful and prompt response to your service inquiries and to ensure all your concerns are effectively addressed. Astrophysics products have high rates of reliability, however if problems arise, our service team is committed to providing a quick response.

Astrophysics is the only company in the industry to offer an Internet Call Center, a comprehensive and efficient approach to customer service. The ICC features direct video conferencing, remote system connectivity, and facilitates fast service support and expedited parts ordering. The development of the ICC demonstrates Astrophysics' ongoing commitment to improve response time and customer service.

We recognize that great service is the cornerstone of productive long term relationships with our customers and we are dedicated to providing a positive customer service experience.

For all your service needs, contact our Service Department at +1 (909) 527-6750 or e-mail us at service@astrophysicsinc.com.

On-Site Service

Astrophysics systems are serviced only by factory certified Field Service Technicians. Astrophysics certified Field Service Technicians are locally placed in more than 100 countries to provide an immediate customer service response. Our technicians undergo a complex technical training program and are thoroughly tested on their knowledge prior to being deployed in the field. The curriculum includes classroom instruction, demonstrations, and hands-on sessions to ensure understanding of system equipment, common troubleshooting issues, service parts, repair and more. We also work to find new ways to improve our service response times and create service friendly systems that make servicing your system faster and more efficient. Astrophysics is dedicated to ensuring your on-site service is fast, efficient, and effective.

LOCATIONS

Always Connected

US LOCATIONS

Astrophysics Inc.

Astrophysics Inc. is headquartered in Los Angeles, California. This is the primary location for manufacturing, research and development, engineering, customer service, sales and marketing. Our manufacturing warehouse and corporate offices operate a combined space of approximately 66,000 sq. feet. We provide sales, service and customer support for the US, Canada, Latin America & The Carribeans.

AstroFab Factory

AstroFab is a subsidiary of Astrophysics which procures all the metal work used on our systems. By producing our own metal we are able to control our costs and in turn deliver unbeatable prices to our customers. Astrofab shares 23,000 sq. feet of new, state of the art factory space in Ontario used to develop the next generation of high energy scanners.

Washington DC

Our D.C. location affirms Astrophysics' continued commitment to working with the Department of Homeland Security and the US Government.

INTERNATIONAL LOCATIONS

Hong Kong Office

Our Hong Kong office provides support through sales and customer services for clients located in the Asia Pacific region.

Lebanon Office

Our office in Beirut is the head office for Europe, Middle East, Africa and the Russian region. We provide sales, service and customer support throughout the region

Philippines Office

Astrophysics' Philippines office assists with sales, customer support and service calls for India, South and Southeast Asia.

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Certified Organization

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CARGO AND VEHICLE INSPECTION
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