

HS1313DV IFS™ In-Flight Services X-Ray Inspection System

The **HS1313DV IFS™ (Dual View)** is a purpose-engineered X-ray inspection system developed specifically for the aviation catering industry, delivering a dedicated security screening solution for in-flight service trolleys, catering carts and associated airside logistics equipment. Unlike conventional cargo X-ray systems adapted for trolley screening, the **HS1313DV IFS™** has been designed from the ground up around the unique operational requirements, CONOPS, space constraints and workflow challenges of modern airline catering facilities.

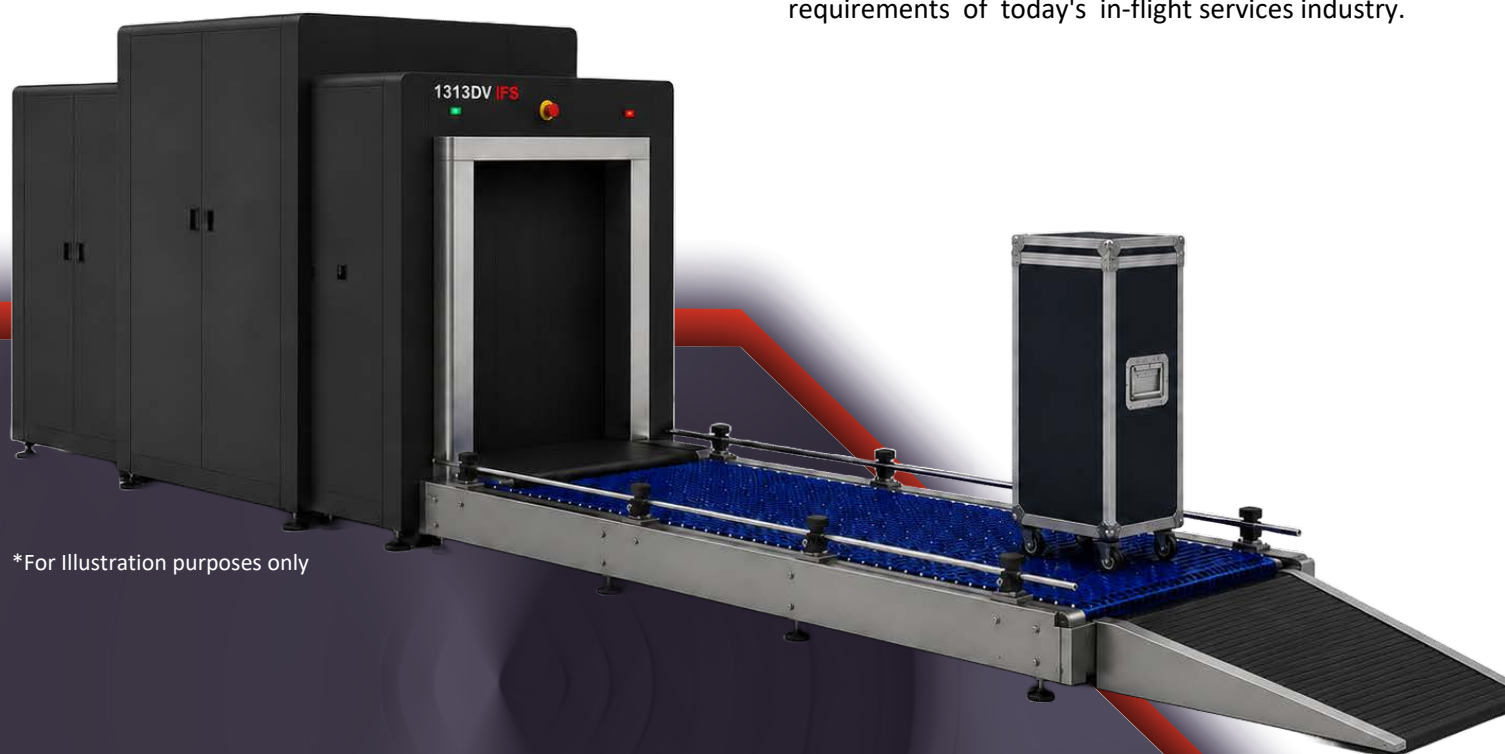
Powered by dual **200kV** X-ray generators and advanced Dual View imaging, the **HS1313DV IFS™** delivers exceptional penetration through densely loaded catering trolleys, allowing operators to confidently inspect complex, high-density loads with outstanding image quality.

The Dual View architecture simultaneously captures two independent inspection perspectives during a single scan, significantly reducing blind spots, enhancing image interpretation and improving the detection of prohibited items concealed within densely packed service trolleys.

A defining feature of the **HS1313DV IFS™** is the bespoke **Trolley Flow System™ (TFS™)** a fully integrated, low-profile motorised conveyor solution engineered specifically around each customer's operational environment. Every installation is individually designed to suit the customer's available footprint, trolley dimensions, loading heights, facility layout and operational workflow. Conveyor length, orientation, transfer configuration, bends and overall system geometry can all be customised, enabling seamless integration into both new and existing airline catering facilities where space restrictions, height limitations and operational efficiency are critical considerations.

By allowing airline service trolleys to be transferred directly from floor level onto the integrated motorised conveyor, the **HS1313DV IFS™** minimises manual handling while delivering a smooth, controlled and repeatable inspection process from loading through to discharge.

The result is a purpose-built screening platform that combines Dual View imaging, dual **200kV** high-energy performance and bespoke engineering to provide airports, airline caterers and aviation security providers with an efficient, high-throughput solution designed specifically for the demanding operational requirements of today's in-flight services industry.



*For Illustration purposes only

HS1313DV IFS™ In-Flight Services X-Ray Inspection System

SPECIFICATIONS

GENERAL

Construction:	Steel Based
Tunnel Size:	1310 mm (W) x 1310 mm (H)
Length / Width / Height (mm)	3750 (L) x 2090 (W) x 2190 (H)
	1650 Kg (uncrated)
	2000 Kg (crated)
Conveyor Height:	300-350 mm
Conveyor Speed:	>0.22 meters per second
Maximum Conveyor Load:	330 Kg (evenly distributed)
System Noise Level:	<65 dB

PERFORMANCE INDEX *

Penetration:	48 mm Steel (guaranteed)
	50 mm Steel (typical)
Resolution (wire gauge):	40 AWG (guaranteed)
	42 AWG (typical)

X-RAY GENERATOR

Tube Voltage:	200kV (adjustable) sealed oil bath
Tube Current:	0.6 - 1.0mA (adjustable)
Cooling / Duty Cycle:	Sealed oil cooling / 100%
Beam Launch Angle:	80 degrees
Beam Direction:	(1) Vertically Downward and (2) Horizontal

OPERATIONAL INDEX

Storage Temp/Humidity:	-20°C to 50°C
	10% - 95% non-condensing
Working Temp/Humidity:	0°C to 45°C
	10% - 95% non-condensing
Working Voltage:	AC 220V (± to 10%)
	50 Hz / 60 Hz ± 3 Hz
Power:	1.5kVA / 3 KVA (motorized)
Leakage:	<0.5µ Sv / H
Dose Per Inspection: Duty Cycle:	<3 µ Sv (typical)
	100% (no burn in necessary)

IMAGING

- Image resolution: 1280 x 1024 x 24 bits
- Zoom 2x - 64x dynamic, smooth and continuous
- Full screen zoom one click
- High, low penetration
- Organic / inorganic stripping
- Picture Pure screening technology
- Super edge enhancement capability
- Threat Image Projection Library TIP
- Operator Assist OA, automatic threat and density alert
- High Organic Mass Alert HOMA
- Automatic 100x screen image recall, last in first out
- Dual-energy technology
- Colour, black, white and inverse display

IMAGE RECALL

- 500,000 Images storage capacity (standard)
- Image conversion and export to jpg, png and bmp
- Image search and simulated playback
- Printer Ready

ADDITIONAL FEATURES

- 2 x 21" high resolution touchscreen interface
- Input / exit rollers to any length required
- Multi-language support
- Network capable
- CIRTSTM Computer Item Recognition Training Software
- 5 Years Parts Inclusive Warranty Only
- Extended Belt Speed to 0.50 meters per second
- Operator Table

COMPLIANCE STANDARDS

- Complies with film safety ISO 1600 / 33 DIN high-speed photographic film
 - All equipment is CE Europe certified and manufactured to ISO 9001:2015 TÜV standards, FDA 21 CFR Part 1003 / 1004 approved for use in the USA, UK CAA.
 - Radiation safety: Meets all applicable laws and regulations with respect to X-ray emitting devices, including directives 2014/30/EC, 2014/35/EC, 2006/42/EC, FDA 21 CFR and SAHPRA.
 - Proprietary quality management test piece: steel step wedge, CU wires, shims, organic / inorganic test pieces, belt speed 0.20 m/s.
- *Approximate values adjustable where applicable. Dimensions, weight and final design specifications are subject to design change.

