

Concept-3™

Automated Closed Package X-ray Inspection System

The **Concept-3™** X-Ray System is specifically designed for the rapid automatic inspection of small to medium sized packaged products.

Using the **HyperSwitch™** processing platform, this system can detect simultaneous product defects such as:

- Foreign Objects
- Shape
- Weight/Mass/Fill
- Item Count
- Pinched-in-seal problems
- Item position
- Cross sectional density/uniformity
- Presence/absence of an item

The unique architecture of the **HyperSwitch™** software enables inspection of multiple product types interspersed on a single conveyor. This gives one machine the capability to serve several product producing streams. Please refer to the **HyperSwitch™** data sheet for a detailed description of the imaging processing and remote access capabilities.

Concept-3™ is optimized for the low intensity, soft X-ray energy range. When coupled with its unique high dynamic range detection system, unparalleled image contrast and small object detection is achieved.



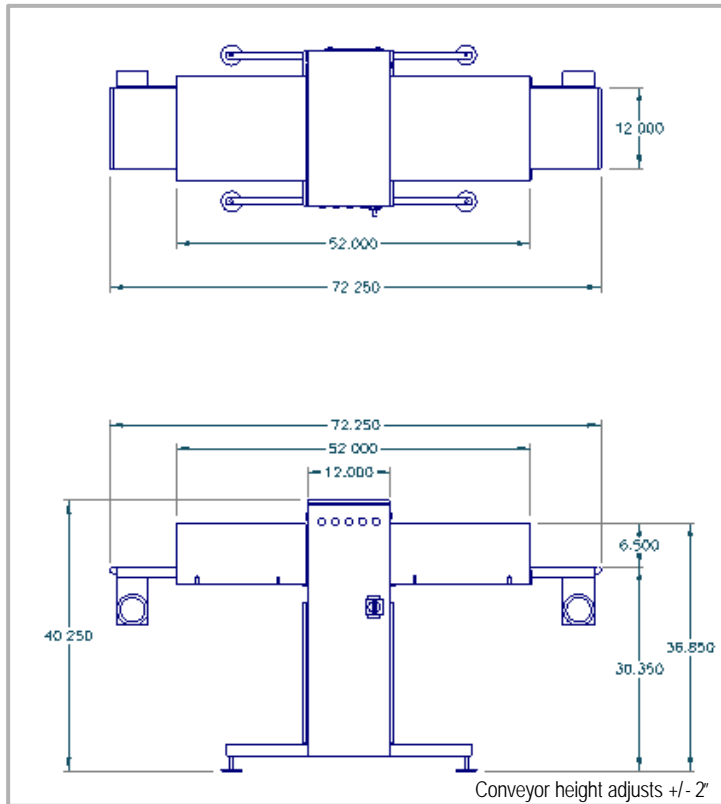
Shown with a left to right product flow.

Concept-3's construction is 100% lead free therefore eliminating any hazardous material consideration. All materials in the product zone are USDA food grade, and no leaded-plastic curtains are required.

Feature Highlights

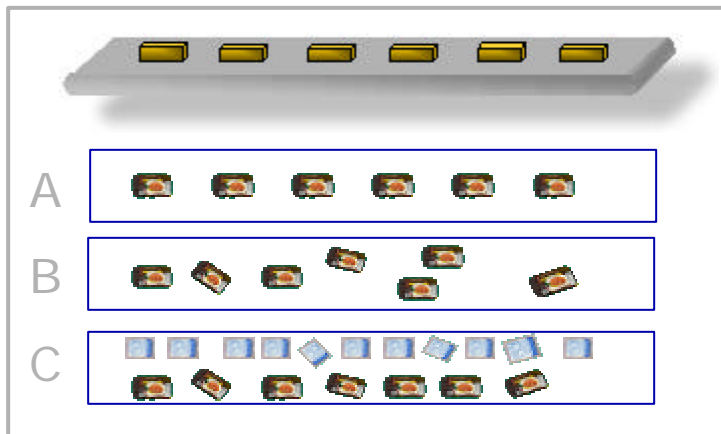
- **HyperSwitch™** allows mixed product and dual lane inspection
- Conveyor and processing speeds up to 200 FPM standard, higher available
- Full tunnel aperture coverage of 10" x 6" (no missed upper corners)
- Time-stamped data/setup archive may be viewed by standard IE browser
- NEMA-12 or NEMA-4 with fan forced room air or A/C cooling configurations
- Conveyor belt easily removed for cleaning, FDA grade belt standard
- Integrated air-blast or add-on drop and push-arm rejecter mechanism
- Small footprint in 100% stainless-steel construction
- Automatic product learning and setup for contaminants and weight

Concept-3™



Technical Specification

Belt Speed	Up to 400 FPM maximum
Belt Width	12 inches/305 mm
Inspection Rate	Up to 1500 packs/min
Contaminant Size	0.7 mm SS sphere
Detection Aperture	10" wide by 6" tall
Power Service	115 – 125VAC 50/60hz 15amp 1Ø service
X-ray Generator	20 to 50keV, 50 watt, or 20 to 80 keV, 160 watt
Display	12" diagonal TFT-LCD touch screen, rated IP-66
Processing System	HyperSwitch™ on QNX O/S
Communication	TCP/IP over Ethernet with standard internet browser
Cabinet	304 stainless steel bead blasted, or #3 polish
Conveyor	12" FDA, medium friction, FDA approved
Temperature	0 to 30°C (32 to 85°F) -10 to 45°C (14 to 113°F)
Rating	NEMA-12 / IP65 or NEMA-4 / IP66
Reject System	Air blast or Push-arm or Drop-out



The Power of HyperSwitch™

Competitors require even product pacing, little or no product rotation, no leading/trailing edge overlap, and uniform position on the belt, as in example "A".

Novus can accommodate all of these conditions, and provide good weighing in all cases, as shown in example "B".

In addition, the Novus system can simultaneously inspect two different product streams with appropriate settings for each (such as underweight setpoints), and with no compromise, as shown in example "C".

Novus X-Ray LLC
243 N. Union Street
Suite 130
Lambertville, NJ 08530

Tel. 215.962.3171
www.NovusXray.com

