

# Concept-3™

## Automated 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 simultaneously detect product defects such as:

- **Foreign Objects (Metal/Glass/Stone)**
- **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.

### Feature Highlights

- **HyperSwitch™** software allows mixed product and multilane inspection
- **HyperSwitch Bene™** software automates product setup for contaminant and weight
- **Random product spacing and orientation**
- **Conveyor and processing speeds up to 200 FPM standard, higher available**
- **Full rectangular tunnel aperture coverage with no missed upper corners**
- **USB memory stick for spreadsheet formatted reports and software upgrades**
- **Ethernet interface for Internet Live support, software maintenance, and diagnostics**
- **NEMA-4 or IP65 rating with closed system A/C cooling**
- **Conveyor belt is FDA approved and can be easily removed for cleaning with no tools**
- **Air-blast, push-arm, drop chute and retractable nose conveyor rejecter mechanisms**
- **Small footprint in 100% stainless-steel construction**
- **Infrared touch screen and laser etched labeling for full pressure cleaning**



Model C3.3-1006 Shown.

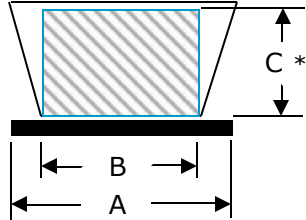
**Concept-3's** low energy system construction is 100% lead free therefore eliminating any hazardous material consideration.



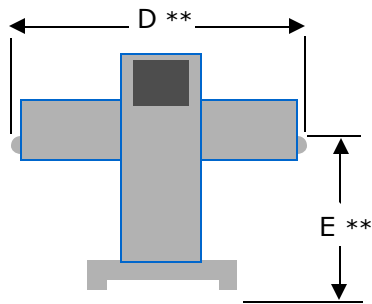
**Novus**  
X-Ray

# Technical Overview

## Inspection Size



## Conveyor size



Model Number	A	B	C	D	E
<b>C3-1006-XXXX</b>	11.25	10.0	6.0	60.0	31 - 35**
<b>C3-1203-XXXX</b>	11.25	12.0	3.0	60.0	34 - 38**
<b>C3-1408-XXXX</b>	16.0	14.0	8.0	60.0	33 - 37**
<b>C3-1604-XXXX</b>	16.0	16.0	4.0	60.0	37 - 41**

- \* Active area is completely square, no missing corners
- \*\* Custom conveyor heights and lengths available. Add 16" for standard integral rejecter option.
- \*\*\* Model number (XXXX) is the x-ray power, e.g. 5002 for 50Kv/2ma

## Key Technical Specifications

Belt Speed	Up to 200 FPM maximum
Belt Width	12 to 16 inches
Inspection Rate	Up to 1500 packs/min
Contaminant Detection	0.6 mm SS sphere minimum Metal/Stone/Glass
Detection Aperture	Full tunnel coverage
Power Service	230VAC 50/60Hz 10Amp 1Ø
X-ray Generator	20 to 80 keV, 160 Watt
Display	12" Infrared touch screen rated IP-65
Processing System	HyperSwitch™ on QNX O/S
Communication	TCP/IP over Ethernet
Cabinet	304 stainless steel bead blasted
Conveyor	Medium friction, FDA Compliant, Polyurethane
Temperature	0 to 30°C (32 to 100°F)
Environment	NEMA-4 / IP65
Reject System	Air blast or Push-arm, Drop Chute, or Retracting Nose
Automatic Setup	Contaminant and Weight
Report / Archive	USB Memory Stick and SQL Database over Ethernet



Tool-less conveyor disassembly



USB for archive report and software upgrades

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