

Product inspection

Thermo Scientific Xpert Heavy Duty (HD) X-ray Detection Systems

X-ray inspection with maximum penetration for large, dense products

The Thermo Scientific™ Xpert™ Heavy Duty X-ray Inspection Systems detect a wide range of foreign materials. They are robust solutions for larger cases, bags, and trays. Seeing through thick, dense products is not a problem with these high-power systems. Three inspection widths are available to optimize performance in your production environment.

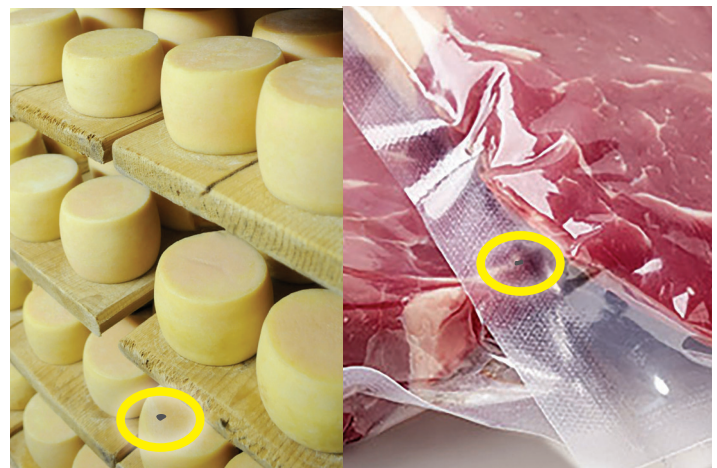
Features

All of the Xpert HD systems have the following features:

- Very high X-ray power: 1000 W (90kV/9ma)
- Optimal performance with easy setup and use
- A belt width and aperture height to accommodate most large package sizes
- Robust design to meet stringent washdown procedures
- Shielding to meet radiation requirements anywhere in the world
- (AI) Artificial Intelligence guided software

Options

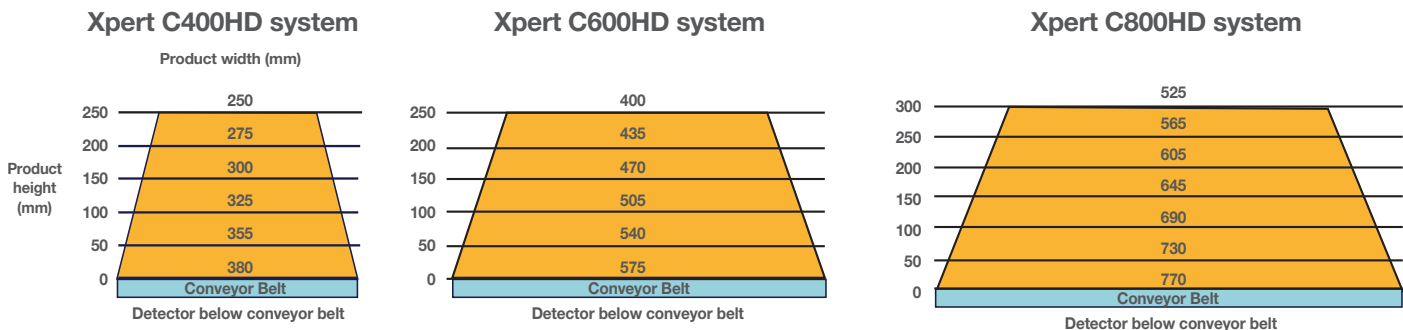
- External chiller for X-ray tube and cabinet cooling
- High resolution detectors (C400 model only)
- Integrated or stand-alone rejection systems
- Customized inspection software
- Frames for taller line heights



Thermo Scientific Xpert HD X-ray detection systems specifications

Application and X-ray specifications	
X-ray power	1000 W (90kV/9ma)
Detector scan rate	Up to 2800 lines/second
Detector resolution	0.8mm standard C400HD, C600HD, C800HD; 0.4mm optional C400 only
Detection algorithms available	Binary, Contrast, Gradient, Groups, Morphology
Inspectable belt width*	C400HD: 355mm wide at 50mm high to maximum of 250mm wide at 250mm high C600HD: 540mm wide at 50mm high to maximum of 400mm wide at 250mm high C800HD: 730mm wide at 50mm high to maximum of 525mm wide at 300mm high
Belt speed range	10m/min to 60m/min (33ft/min to 196ft/min)
Multilane operation	Single lane or 8 lanes with separate reject gates
Maximum conveyable product weight	C400: 30kg (66 lbs), C600 & C800: 40kg (88lbs)
Standard line height	900mm (+/- 100mm), optional frames for higher production lines
System length	C400 & C600 2.1m (82.7"), C800: 2.25m (88.6")
X-ray shielding	Lead free, FDA approved curtains
IP69K model features	Additional Features Include: Stainless steel air conditioner with stainless steel spray cover, special chassis with blind holes and sealed beam cover and hygienic design feet. IP69K drum motor, compression latches, door gasket, monitor, power on button, e-stops, tower lamp, main switch and USB port.
Safety/security features	X-ray power key, emergency stops, radiation curtains, LED X-ray imminent/on lights, all doors have magnetic interlocks
Human machine interface (HMI)	15-inch diagonal touchscreen with protective cover
Interface languages available	English, Spanish, Italian, French, German, Chinese, Hungarian, Norwegian, Polish, Korean; Others available on request
Environment, electrical and operational specifications. Note: See X-ray beam diagrams below for details	
Operating temperature	+5°C to +38°C (+41°F to +100°F)
Machine cooling	External water chiller
Relative humidity	0% to 90% non-condensing
Electrical input	190 to 240 VAC, 50/60 Hz Single Phase, 16 amp service
USB port	2.0, watertight port on outside of machine
Network port	Ethernet
Machine weight (standard model)	C400: 850 kg (1870 lbs), C600: 1040 kg (2290 lbs), C800: 1200kg (2645 lbs)
Conformance tests and certifications	
Radiation safety conformance	FDA CFR 21 part 1020.40 (contact factory for other regional certifications)
Export/safety	CE, UL 508A
Intrusion protection rating	Standard IP54 base model for dry environments; optional IP65 or IP69K wash down options

Xpert HD X-ray beam geometry



Learn more at thermofisher.com/XpertHD

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