

# 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.



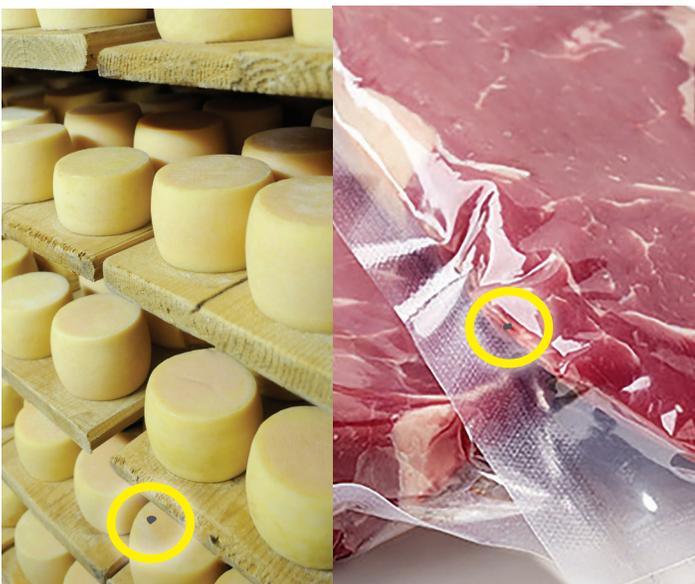
## Features

All of the Xpert HD systems have the following features:

- Very high X-ray power (900W - 90 kV/10mA)
- 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

## Options

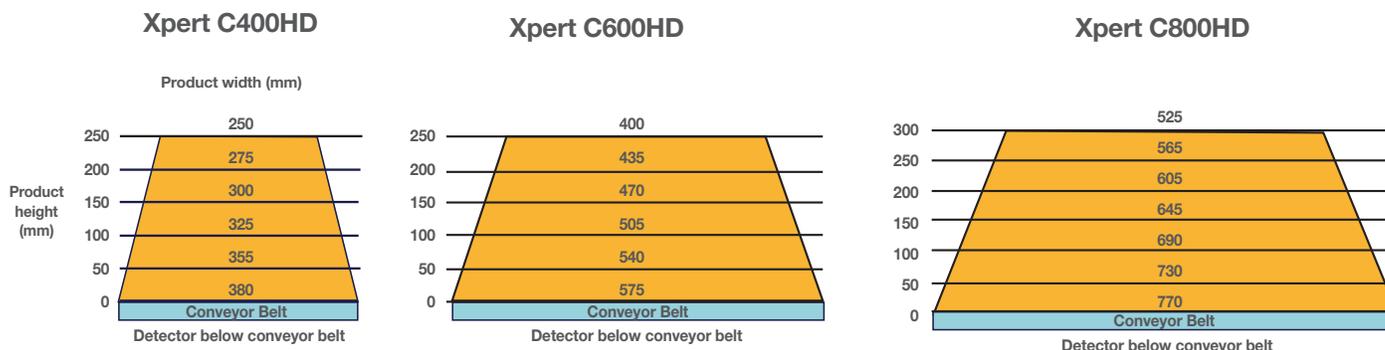
- External chiller for X-ray tube and cabinet cooling
- High resolution detectors (C400 model only)
- Integrated or stand-alone rejection systems
- Customized inspection software
- Frames for taller line heights



## Thermo Scientific Xpert HD X-ray Detection Systems Specifications

Application and X-ray specifications	
X-ray Power	90kV, 10mA (900W)
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
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. <i>Note: See X-ray beam diagrams below for details</i>	
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	IP65 standard

### Xpert HD X-ray Beam Geometry



Find out more at [thermofisher.com/XpertHD](https://thermofisher.com/XpertHD)