# Fact Sheet XRE-D pro 200



# Discover the new XRE-D pro! The intelligent X-ray system for the inspection of packaged products sets standards in terms of detection accuracy and application flexibility.



**More information** High performance with a wide range of solutions and options.

Specifications	Facts	Details
Inspection area	330/200	All dimensions in mm
	450/250	
	600/120	
Use	Foreign body detection	– Magnetic, non-magnetic metals
		– Glass
		<ul> <li>Nonmetallic minerals</li> </ul>
		– Bones
		– Rubber
		– PVC
	Detection of product defects	<ul> <li>Masking functions (hiding of disturbing effect from packaging components such as clips)</li> </ul>
		<ul> <li>Completeness check / fill level check</li> </ul>
		<ul> <li>Total weight (accuracy depending on the product)</li> </ul>
		<ul> <li>Breakage control</li> </ul>
		– Deformation
		– Air pockets
		– Clumping

Product		
Shape	Packaged	e.g. plastic or aluminum tray, films
Temperature	-20 °C to +70 °C	
	-4 °F to +158 °F	
Weight	Maximum belt load:	
	– 15 kg	
	– 529.1 oz	
Minimum weight	100 g	Note: Minimum weight required to open the radi- ation protective curtains
Throughput	approx. 150 ppm	Depending on product dimensions and product distance
Minimum distance	Single product length	
Maximum length	250 mm	In case of deviating product length > 250 mm – max. 300 mm product test necessary
	300 mm	At a conveyor belt speed of up to 0.5 m/s
Maximum width		Inspection area
	300 mm	330/200
	450 mm	450/250
	600 mm	600/120

#### Mechanical design

Surfaces	Covers and conveyor belt frame made of stainless steel 1.4301 (AISI 304)	Glass beaded finish
	Drive, guide and tension rollers made of stainless steel 1.4301 (AISI 304)	
Conveyor belt height	900 mm ± 50 mm	
	35.43 in ± 1.97 in	
Guide roller diameter	Ø 34 mm	
	Ø 1.34 in	
Material	Conveyor belt in white FDA quality made of polyester (PES)	
	Conveying side made of polyurethane (PUR)	
	Running side made of impregnated polyester fabric	
	Wedge bar for belt guidance on running side	
Belt width	360 mm	330/200
	660 mm	450/250
		600/120
Drive	3-phase drum motor including thermal con- tact monitoring	140 W
		IP rating: IP69
Conveyor belt speed	0.8 m/sec (0.32-1.04 m/sec = 19.2-62.4 m/ min)	Optional: 1.05 m/s (0.42 – 1.37 m/s = 25.2 - 81.9 m/min)
	157.5 ft/min (63.0-204.7 ft/min)	Optional: 206.7 ft/min (82.7 – 268.7 ft/min)
		Adjustable via frequency converter from -60 % to +30 % of the nominal speed (more speeds upon request).
		(depending on the product, product test neces- sary)
		Maximum belt load: 12 kg; 423.3 oz
Electrical design		
Operating voltage	230 VAC (± 10 %)	US/CAN 208-240 VAC (±10%)
	50/60 Hz	
	single phase	
Power consumption	Max. 8 A/230 VAC	US/CAN max. 10 A
External fusing	10 A, delay-action	
Mains cable	3 pin CEE connector	Blue (L1 + N + PE)
Cooling	Cooling device	
Signal elements	Horn	ВК
Signal lamp	X-rays ON	Red
	System failure	Orange
	Normal Operation	Green
	Audit check	Blue
Operating elements	Combined control and operating unit for conveyor belt and X-ray system	Rotary main switch
		Key switch
		Emergency stop
Potential-free outputs	"Machine Inspecting"	Ready to operate
	"Machine Error"	Error status
	"Machine X-Ray ON"	X-rays ON

Prepared for connec- tion of	Rejection system incl. preparation for Higher Level Compliance	Max. 2 rejection systems
Inspection system		
X-ray tube	100 kV/2.0 mA	200 W
Detection accuracy	High resolution X-ray detector	Accuracy: as from Ø 0.3 mm (product-specific)
Peripherals	Industrial PC with 15" touch screen	Resolution 16:9
Radiation protection	Radiation protection curtains (0.5 mm Pb equivalent value) including wear protection	Light grid (option specified in drawing), for spe- cial legal requirements, on request IP65 Temperature range -26 °C to +65 °C
Safety switch	All housing parts required for radiation pro- tection are secured with magnetic safety switches.	Double evaluation
Weight	Approx. 450-590 kg	
IP rating	IP55	Cooling device
	IP65	Housing, operating elements, etc.
	IP66	Conveyor belt with drum motor
Storage / transport conditions		
Temperature	-10 °C to +40 °C	
	+14 °F to +104 °F	
Humidity	5-90%, non-condensing	Relative humidity
Ambient conditions		
Place of installation	Indoor areas, no direct sunlight	
Temperature	+5 °C to +40 °C	330/200
	+41 °F to +104 °F	
	+5 °C to +35 °C	450/250; 600/120
	+41 °F to +95 °F	
	+5 °C to +30 °C +41 °F to +86 °F	Dual energy option
		The maximum and typical temperature indica- tions correspond to an indication at 500 meters above sea level. Derating of the maximum/typi- cal ambient temperature typically 1 °C per 1000 meters as from 500 meters above sea level.
Cleaning conditions		
Complete device	Dry cleaning	Wiping/dusting, vacuuming, drying etc. IP rating: IP55
Discharge conveyor	Dry cleaning and water jet cleaning	IP rating: IP66
Water jet pressure	Pmax< 0.3 bar; 30 kPa at a distance of 3 m	
Cleaning and disinfec- tion agents	Cleaning agent must be suitable for cleaning of stainless steel 1.4301, stainless steel 1.4305, stainless steel 1.4057, PTFE, POM, polyamide, PE-UHMW, TPU, silicone and	
	EPDM.	

Options	Facts	Details
Integrated rejection system	Product weight up to 5 kg	Only for 330/200
Version	Conveyor belt extension +500 mm	Package length 250 mm max.
	Total length therefore 1,900 mm	
Rejection system	Pusher	
	Pusher shield	
	Higher Level	
Reject bin	Plastic reject bin	Removable
Maximum product weight	5 kg	
Minimum height	≥ 6 mm	
IP rating	IP65	
Electrical design	Supply and control happen via plug connec- tion to the inspection system	No additional control required
Pneumatic version		
Compressed air sup- ply	6-8 bar	Coupling plug NW 7.2
Compressed air qual- ity	Minimum requirements must be met by cus- tomer	Residual dust: Class 1
		Residual moisture: Class 7
		Residual oil: Class 2
FRL unit	Main switch (lockable)	
	Filter regulator with manometer (lockable)	
	Switch-on valve	
	Pressure build-up valve	
	Pressure switch	
	Safety switch-on valve	
Rejection system sep- arated	Long products	330/200
Version	Conveyor belt extension +800 mm	Package length 400 mm max.
	Total length therefore 2,200 mm	
Rejection system	Pusher	
	Pusher shield	
	Higher Level	
Reject bin	Plastic reject bin	Removable
Maximum product weight	5 kg	
Minimum height	≥ 6 mm	
IP rating	IP65	
Electrical design	Supply and control happen via plug connec- tion to the inspection system	No additional control required
Pneumatic version		
Compressed air sup- ply	6-8 bar	Coupling plug NW 7.2
Compressed air qual- ity	Minimum requirements must be met by cus- tomer	Residual dust: Class 1
		Residual moisture: Class 7
		Residual oil: Class 2

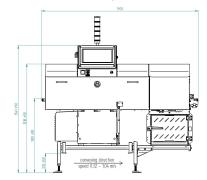
FRL unit	Main switch (lockable)	
	Filter regulator with manometer (lockable)	
	Switch-on valve	
	Pressure build-up valve	
	Pressure switch	
	Safety switch-on valve	
Rejection system sep-		450/250
arated	51	600/120
Version	Conveyor belt extension +800 mm	Package length 400 mm max.
	Total length therefore 2,200 mm	5 5 5
Rejection system	Pusher	Roller conveyor
.,	Pusher shield	,
	Higher Level	
Reject bin	Plastic reject bin	Removable
Maximum product	5 kg	
weight	<u> </u>	
Minimum height	≥ 6 mm	
IP rating	IP65	
Electrical design	Supply and control happen via plug connec- tion to the inspection system	No additional control required
Pneumatic version		
Compressed air sup- ply	6-8 bar	Coupling plug NW 7.2
Compressed air qual- ity	Minimum requirements must be met by cus- tomer	Residual dust: Class 1
-		Residual moisture: Class 7
		Residual oil: Class 2
FRL unit	Main switch (lockable)	
	Filter regulator with manometer (lockable)	
	Switch-on valve	
	Pressure build-up valve	
	Pressure switch	
	Safety switch-on valve	
Quick belt change system	Conveyor belt frame and quick belt tensioner for fast belt change	Only in combination with option rejection system separated
Rejection system sep-	Heavy products	450/250
arated		600/120
Version	Conveyor belt extension +800 mm	Package length 400 mm max.
	Total length therefore 2,200 mm	
Rejection system	Pusher	Roller conveyor
		Modular belt
	Pusher shield	
	Higher Level	
Maximum product weight	15 kg	
Minimum height	≥ 6 mm	
IP rating	IP65	
P rating	IP65	

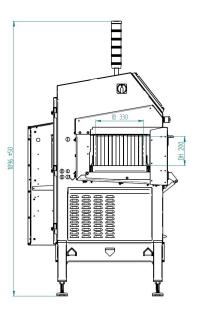
Electrical design	Supply and control happen via plug connec- tion to the inspection system	No additional control required
Pneumatic version		
Compressed air sup- ply	6-8 bar	Coupling plug NW 7.2
Compressed air qual- ity	Minimum requirements must be met by cus- tomer	Residual dust: Class 1
		Residual moisture: Class 7
		Residual oil: Class 2
FRL unit	Main switch (lockable)	
	Filter regulator with manometer (lockable)	
	Switch-on valve	
	Pressure build-up valve	
	Pressure switch	
	Safety switch-on valve	
Quick belt change system	Conveyor belt frame and quick belt tensioner for fast belt change	Only in combination with option rejection system separated
Dual energy	Proof of soft impurities (bones, gristle)	Using a dual energy sensor increases the accuracy in detecting foreign substances in determined applications by contemporaneous evaluation of two line scan cameras. Device operation and design are almost identical to the standard device with single energy detector.
Software package 1	Completeness check	
	Weight deviation	
	Clip detection	
	Shape deviations	
Software package 2	Multi Lane-Software	
	Multi Product-Software	
	Zone Analyser-Software	
Software package 3	Sensibility forecast and self-monitoring	not combinable with software package 2
Login package	User login with RFID chip	Compatible with Mifare ISO 14443 and ISO 15639
		inclusive 4 RFID transponder chips (Mifare ISO 14443)

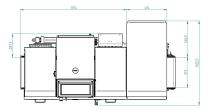
### Info graphics



#### **Dimensional drawings**







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