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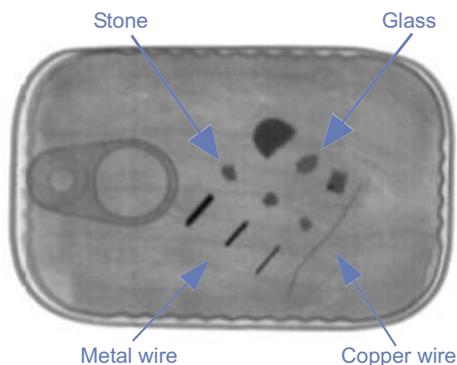
XRAY SHARK®

**Compact x-ray device
with high detection sensitivity**

XRAY SHARK® - the better solution

The XRAY SHARK® is an x-ray device with an integrated conveyor belt which is to be integrated in an existing production line. It analyses x-ray patterns automatically.

The linear x-ray camera is the best in speed and sensitivity. It sends x-ray data of packaged, not packaged or bulk products to the computer which then analyses the pictures fully automatically. It detects contaminants, as well as optionally other individual attributes like e. g. completeness, form, mass, etc. of the product. It classifies and sorts out faulty products automatically.



Detectable contaminants

The size of the detectable contaminants depends basically on the consistence, density, thickness and structure of the product. Therefore we can only quote exact sizes of detectable contaminants when we have tested the product.

Very good price-performance ratio

The XRAY SHARK® is a high-end device, which stands out due to its high detection sensitivity and dependability.

High detection sensitivity

The high-performance line array x-ray camera has a very high photosensitivity. Therefore, it is able to detect very small contaminants and bigger contaminants more likely.

Huge through-put

The high scan rate of the camera enables x-rays without distortion. Thus, you can see more details, even when producing at very high speed.



Very easy handling

You can adjust the software ideally to your product so that you can use the x-ray pattern in its entirety.

The software adjusts all complex settings by itself. It computes the "Normal x-ray" of the product and checks it automatically for anomalies.

With only a few parameters you can increase or decrease the tolerance towards anomalies.

Detailed HACCP/IFS documentation

The software documents your quality control in detail saving all x-rays of faulty products, as well as product and system data.

Compact, robust design

You can use the XRAY SHARK in the production line, offline or mobile at various places. The solid construction made out of stainless steel suits every surrounding.

Easy, thorough cleaning

The frame made out of stainless steel and the conveyor belt, which you can order with a quick release, allow a quick and thorough cleaning.

High durability

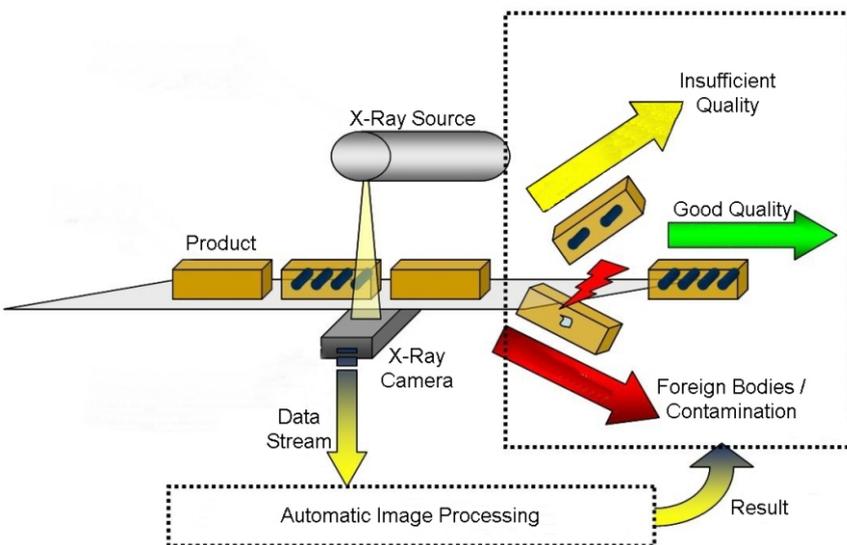
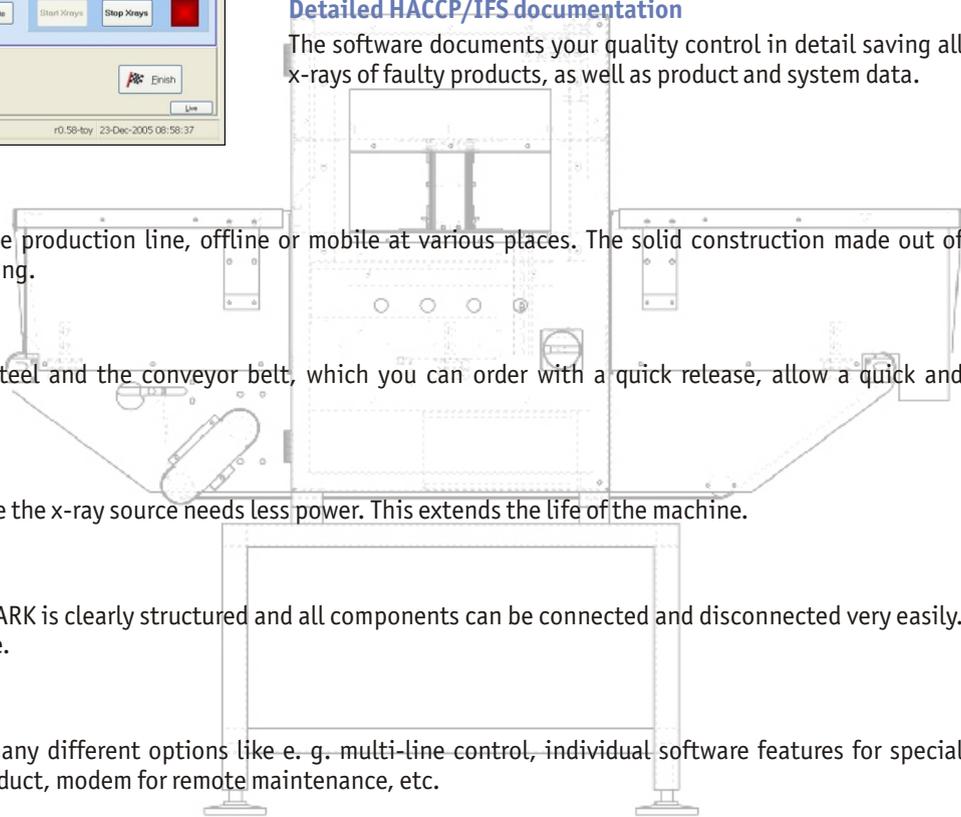
Due to the high camera performance the x-ray source needs less power. This extends the life of the machine.

Easy maintaining

The inner workings of the XRAY SHARK is clearly structured and all components can be connected and disconnected very easily. This allows a very easy maintenance.

A full load of options

The device can be supplied with many different options like e. g. multi-line control, individual software features for special tasks, proper rejecters for every product, modem for remote maintenance, etc.



Product classification

The XRAY SHARK also checks the products for their quality classifying and, if desired, sorting them in different categories. This also works when running two products at the same time.

What do you have to consider when buying an x-ray device?

Is it necessary to x-ray a product?

Natural products are usually contaminated with for example stones, stone splinters, glass splinters, ceramic splinters, bone splinters, lumps of earth, metal parts, etc... These contaminants can cause heavy injuries or damage to one's health. Today, the only possibility is to x-ray the product in order to really "look into it" and consequently protect the consumer effectively from contaminants and thus from injuries.



HACCP

HACCP

Is it allowed to x-ray food?

Yes, it is. (Do not mistake: radioactive exposure is prohibited!) X-ray light is natural. A check with an x-ray device is equivalent to only a few days of natural radiation.

Does the law demand an x-ray device?

No, x-ray is not demanded. However, there are regulations like the IFS (International Food Standard) and laws demanding the HACCP standard (Hazard Analysis and Critical Control Points). Both demand a quality control and a detailed documentation of the production process.

Where is the difference between x-ray devices?

They differ in the following points:

- Quality of the construction e. g. meeting the hygiene standards of the food industry.
- Quality of the used components

There are big differences in the detection of contaminants due to

- the used camera system
- the performance of the automatic software
- the speed
- the throughput
- the performance of the computer



Attention:

X-ray devices differ in which contaminants they find. One has to consider that size is not the most important thing. The most important thing is whether and how probable the x-ray device detects different forms of contaminants. Thus, it is not very useful if an x-ray device detects test balls with a certain size in 98% of the cases but other forms only in 40% of the cases. Therefore it is very important that you find out the real detection performance in a product test!

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Technical data

Model	XRAY SHARK® System G10	XRAY SHARK® System G20	XRAY SHARK® System G40
Characterisation	The low cost one for standard tasks	The versatile one for complex tasks	The broader one for bigger products
System			
Max. product size (W x H)	300 x 150 mm	300 x 150 mm	450 x 200 mm
Scan width	< 307 mm	102 to 307 mm	307 to 461 mm
Height of the outlet	200 mm	200 mm	250 mm
Dimensions (L x B x H)	1150 x 690 x 1280 mm	1440 x 630 x 1400 mm	1740 x 800 x 1450 mm
Weight	ca. 180 kg	ca. 200 kg	ca. 230 kg
X-ray source	60W	100W	100W
Connection data	200-240 VAC, 50 Hz, 16 A		
Surrounding conditions	+5 to +35°C. with a relative humidity up to 90° not condensing		
Material (case)	stainless steel V2A		
Protection class	IP 65 except for cooling slots (Option: complete IP65 with air condition)		
Technology	Computer regulated "Low Energy" technology		
Safety	in compliance with x-ray regulation and CE		
Connection performance	0,4 kW / 2 A		
Cooling system	air cooling		
Rejecter	Rejecter depends on the product (surcharge)		
Camera			
X-ray camera	High-end linear-array, 0,8 mm resolution (others optionally)		
Max. scan rate	4000 lines/sec.		
Max. inspection speed	120 m/min 1200 units/min		
Conveyor belt			
Length	ca. 1150 mm (variable)	ca. 1440 mm (variable)	ca. 1740 mm (variable)
Belt speed	0 - 120 m/min (depending on features)		
Belt height	ca. 800 mm ± 50 mm		
Optional	Quick release		
Computer and monitor			
Operating system	WINDOWS XP PRO, network compatible		
Product memory	1000 settings and more		
Display	Built-in 15"LCD colour monitor		
Control	Touchscreen		
Optional	Remote maintenance via modem		

Technical changes reserved