

Pharmaceutical X-ray Inspection System



Advanced inspection of pharmaceuticals

Suitable for pharmaceutical products that cannot be inspected by conventional means.

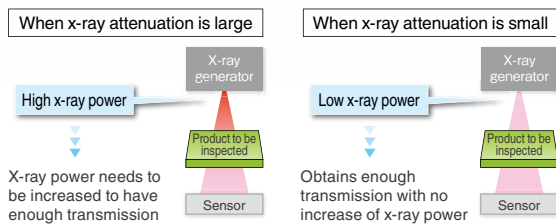
While the pharmaceutical products packaged in aluminum-foil have been increasing, product defects such as missing pieces and products caught within hermetic seals cannot be observed by visual or camera inspection. Anritsu developed an x-ray inspection system designed specifically for pharmaceutical products. Its unique x-ray control technology enables it to inspect transdermal patches caught in sealed areas and broken or missing pieces of orally-disintegrating tablets that were previously undetectable.



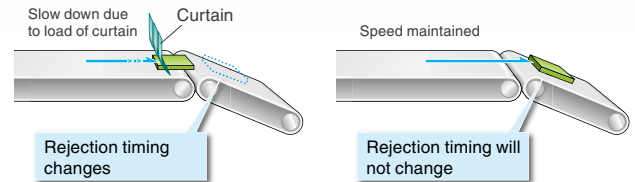
High sensitivity and high stability — X-ray control technology optimized for pharmaceutical applications

- Newly developed x-ray generator and sensor are specifically designed for low density items.
- Achieves high sensitivity inspection with lower power level thanks to reduced x-ray attenuation, delivering a curtain-less design and reduced energy costs.

- The curtain-less design prevents product jam and false detection. It also can maintain rejection timing and thereby minimize false detection.



Note: Actual machine structure may be different.



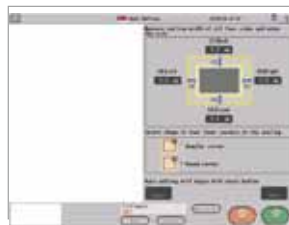
X-ray Inspection — Optimized for pharmaceutical manufacturing lines

- Easy to use 15" touch panel display



- Automatic seal inspection setting

An optimal parameter can be determined automatically by entering seal width. With no complicated procedure required, anyone can perform optimized inspection.

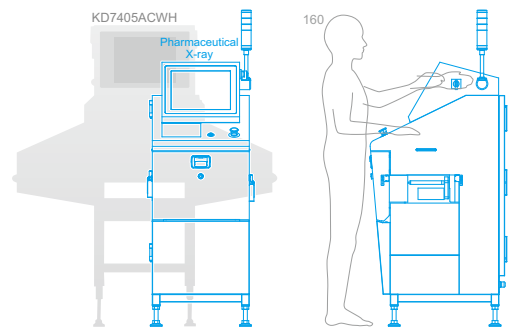


- Full visibility

The pull-out-style conveyor is easy to clean. Its blind-spot-free design prevents product missing.



- 550-mm compact footprint saves valuable floor space.
- Operator-oriented design offers easy operations.
- Chassis with minimized horizontal surfaces will not allow operators to put an object that could cause possible contamination.



Overall system length: 550 mm
(reduced by 60% from conventional systems)

- Offers 70% reduction in operating power.
- Standard features include a printer for statistical data output and a USB port.
- Configured with QUICCA, an overall quality management and control software, it can record inspection data electronically.



Anritsu safety mechanism

Safety in design

Anritsu believes customer safety is of utmost importance. The Anritsu x-ray system incorporates six safety design features to ensure safe operation.

X-ray ON/OFF key

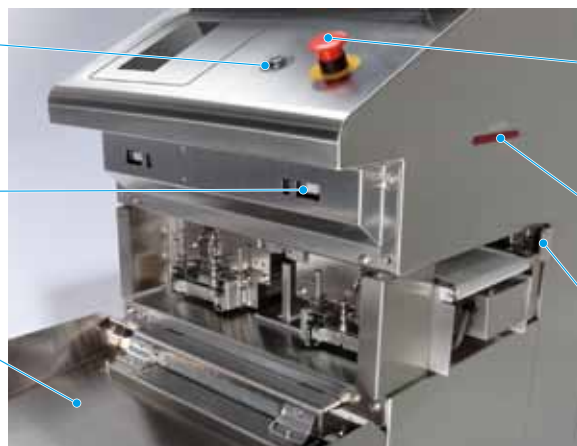
Turning the key to OFF stops x-ray radiation completely.

X-ray shield cover open/close sensor

Opening the cover stops x-ray radiation completely.

X-ray shield cover

Opened/Closed using x-ray irradiation ON/OFF key. Opening the cover stops x-ray radiation due to the x-ray shield cover open/close sensor.



Emergency stop switch

Cuts power to x-ray and drive circuits, stops the conveyor and x-ray radiation.

X-ray irradiation display

The lamp is lit during x-ray radiation.

Hand insertion sensor

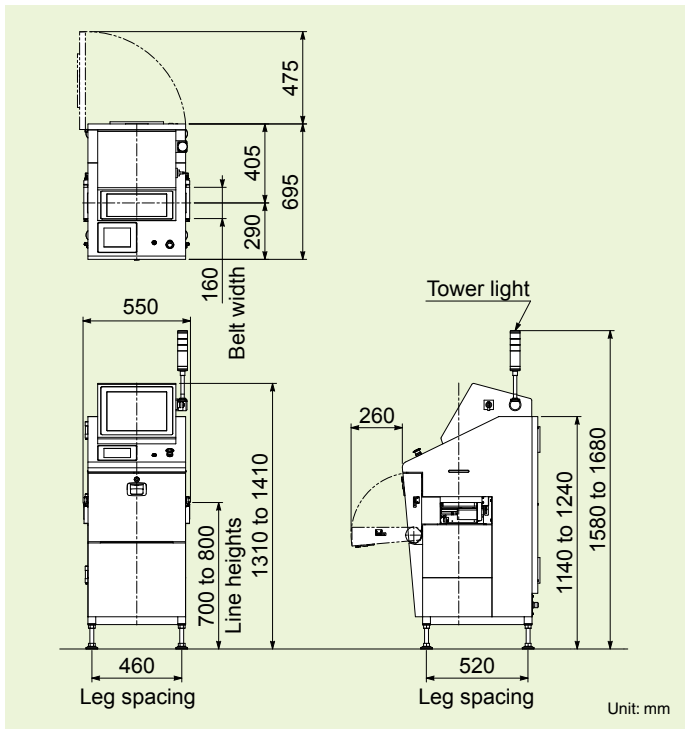
Interrupting the sensor for a certain period of time stops x-ray radiation.

Safety management

It is your responsibility to check and ensure that you comply with all applicable laws and regulations of your country or region regarding the effect of x-ray exposure on pharmaceutical products. Anritsu conducted a research with the Nagoya City University about the effect of x-rays on the pharmaceutical quality of drug tablets and found that exposure to x-rays did not affect pharmaceutical quality of the drug content.

We exposed commercially available non-steroidal anti-inflammatory drugs (acetaminophen, loxoprofen and mefenamic acid) to x-rays of various doses from 0.34 mGy to 300 Gy, and evaluated the quality of the tablets using pharmaceutical tests. We found the samples exposed to x-rays exhibited almost the same profile in the tests as control samples (0 Gy). We also investigated the influences of heat and humidity on drug tablets after x-ray exposure, and confirmed that the combination of x-ray exposure with accelerated temperature and humidity tests (40°C, relative humidity 75%) also did not affect the pharmaceutical quality. For more details, refer to the full report at <http://informahealthcare.com/ddi>

External View



Specifications

Model	KD7490LYN
Application size ¹	Width: max. 100 mm, Height: max. 30 mm, Length: max.230 mm
Safety	X-ray leakage: Max 1 μ Sv/h or less, Prevention of x-ray leakage by safety devices
Display	15-inch color TFT LCD (unified image monitoring screen and operation screen)
Operation method	Touch panel (with buzzer)
Preset memory	Maximum 100
Belt speed ² Maximum product weight ³	10 to 40 m/min, Maximum 0.5 kg
Power requirement ⁴	100 to 120 Vac, or 200 to 240 Vac, single phase, 50/60 Hz, 300 VA
Mass	160 kg
Environmental conditions	Temperature 10 to 30°C , relative humidity 30 to 85%, air pressure 700 to 1060 hPa, non-condensing
Protection class	IP30
Exterior	Stainless steel (SUS304)

1: Width of 160 mm is available as an option.

2: Variable depending on Product No.

3: Sum total of product weight on the conveyor.

4: Allowable power fluctuation range is $\pm 10\%$.

Note: Noise level does not exceed 70 dB(A).



Anritsu

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ISO 9001 CERTIFICATE No.JQA-0566

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• Some products shown in this catalog may not be available in your country or region. Contact our sales representatives for details.

• To ensure proper operation, read the Operation Manual before using the machine.

• In addition to daily inspection, an annual maintenance check should be carried out.

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