

Genuine One - the Heart of a Solution

# INDUSTRIAL SOLUTIONS

ray Inspection Systems

Metal Detectors

Checkweighers

Automatic Combination Weighers

Rejector

5 E

Ant and





In this era of growing demands for product quality and safety—

Anritsu would not allow contaminated products to be in the hands of consumers.



0.2 mm diameter sphere detectable

## X-ray Inspection Systems







### Simplified operation



Anyone can achieve high sensitivity and stability

# Metal Detectors









Much more than just weighing; The SSV series provides valuable process control information.



Prevents unnecessary rejection due to double product errors, while improving accuracy.

# Checkweigher





### **X-ray Inspection Systems**

X-ray inspection identifies foreign bodies in products. Simultaneous to contaminant detection, shape analysis, missing items and package integrity issues can be closely monitored to assure overall product quality.



### Enhanced sensitivity, 0.2 mm diameter (KD74-h series)

Anritsu UltraHD technology can detect even the most minute contaminants — 0.2 mm diameter ferrous, non-ferrous and stainless steel spheres<sup>\*</sup>. Meanwhile, the Anritsu HD systems detect low density contaminants such as bones and plastics. \* Using our in-house test piece



Test piece inspection image (500g pork loin). High-accuracy detection of small nylon sphere **1** and SUS sphere **2**.



### For overlapping products or those with uneven thickness

#### **DualX X-Ray Inspection System**

With dual energy sensor technology this system performs reliable and accurate inspection of overlapping and randomly oriented meat products without negative effects.

### **IP69K Protection**

### **Poultry X-ray Inspection System**

The DualX system is optimal for use in the poultry industry, detecting low density remaining bones in poultry meat, which were difficult to detect with conventional systems. Designed to withstand high pressure washdown.





### High accuracy X-ray inspection system

### **KD74-h Series**

This high sensitivity model has high power and high accuracy for food inspection. Hard and soft contaminants can be detected in packaged products, such as whole cheese, pasta and meat.



### Standard high definition X-ray inspection system

### **KD74 Series**

A wide range of packaged goods can be inspected with this versatile X-ray inspection equipment. Simultaneously with contaminant detection, product integrity can be inspected.



### Economy type for dry products

### KD74-f Series

Products in packaged goods, lightweight dry products and products in small bags can all be inspected by this economy but high definition X-ray inspection system.



### For unpackaged meat and fish

### Bulk Fresh Food X-Ray Inspection System

With no protection curtains, this system is perfect for unpackaged fresh meat and fish.



### For lightweight products and those in small bags

### Lightweight X-Ray Inspection System

A unique X-ray shield mechanism supports stable conveyance for small/ lightweight products without being caught by protection curtains.



### For shrink packages, large bags and cartons

### Large Product X-ray Inspection System

A large aperture infeed system allows for the inspection of large cartons, cases and bags, as well as those containing multiple small packs.



### For pumped products

### Pipeline X-Ray Inspection System

Suitable for the inspection of fluids and semi-solid products flowing in a pipe, such as sauces and fruit preparations.



### For standing products

#### Tall Products X-ray Inspection System

A side view system with a different X-ray direction is specifically designed for tall, upright containers including plastic bottles and milk cartons.



#### IP69K Sanitary Design X-Ray Inspection System

Equipped with an air conditioner and IP69K-protected cabinet and conveyors, this system is suitable for the inspection of unpackaged meat.

### **Metal Detectors**

Anritsu's metal detectors detect metal contaminants including ferrous, stainless steel and aluminum. Anritsu's exclusive technology and expertise deliver highly accurate, reliable, easy to clean metal detection solutions.



#### Dual wave technology (duw, duw-h series)

Anritsu has patented a dual-frequency inspection system, which automatically determines the best frequencies to maximize sensitivity for both ferrous and non-ferrous metals simultaneously. Stainless steel fragments dropped from a production equipment can be also detected.

1 Sensitivity

Frequency for Fe detection

High

High

Frequency for SUS detection

### **Metal Detectors**



### Dual wave high sensitivity metal detector

### duw-h

Higher sensitivity and stability was achieved by High Sensitivity Setting (HIS) function and a detection head featuring vibration and electric noise resistant.



### For standing products

### Tall Product Metal Detector duw

Suitable for tall products in containers, such as beverages and seasonings in glass and plastic bottles.

#### For large bags and boxes

#### Large Aperture Metal Detector duw

The large aperture infeed is suitable for products in bulk flow or large bags and cartons.



### For aluminum packaged products

### **M Series Metal Detector**

The unique magnetoreflection method can detect metals in aluminum-packages with high sensitivity.



### For aluminum packaged products

### Aluminum Package Metal Detector

Suitable for aluminum packaged products including retort pouch foods and snacks.

### Checkweighers

Checkweighers play a vital role in food and pharmaceutical manufacturing by ensuring consistency of product weight. Anritsu's checkweighers not only weigh products at a high speed and with a high accuracy but also respond to diverse customers' needs ranging from feedback control for filling machines to HACCP and GMP support.



### SSV Series Checkweighers offer operator-oriented features

- E-Daily Report makes log management simple and efficient.
- SMART Guide navigates daily operations and avoids operator errors.
- Product Registration Navigation simplifies setting procedures with illustrated instructions.





### **High accuracy**

#### SSV-h Series

Equipped with a high speed and high accurate force balance. This line of weighing systems meets the quality control requirements of various production lines.

### Waterproof

### SSV-i Series

A waterproof and dustproof stainless exterior is suitable for food production lines that require stringent sanitary control.

### Versatile

### SSV-f Series

Equipped with a highly versatile strain gauge load cell for balance. A wide range of applications including heavy products can be weighed on the SSV-f.

### Checkweighers



### Compact and reliable inspection

#### Combination Checkweigher and Metal Detector

Both metal detection and checkweighing are controlled by a standard touch screen control panel.



### Dual lane simultaneous inspection

### **Dual-Lane Checkweigher**

Suitable for lines where two lanes of products are inspected with just one unit, such as divided filling packaging or tube filling lines.

### Twelve lane simultaneous inspection

### Built-In Multi-Lane Weighing System (Up to 12 lanes)

Suitable for products that are manufactured in multiple lanes, such as foods and precision components.

### For large size cases and packages

#### **High Load Checkweigher**

Ideal for finished products in cartons and cardboard boxes. This reliable checkweigher can weigh products up to 60 kg.

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### For large size cases and packages

### **Case Checkweigher**

Ideal for end of line products in cartons or cardboard boxes. Integrated with a pusher rejector, this system saves space and simplifies operations.

#### **Classifies frozen scallop into 8 ranks**

#### Frozen Scallop Grading System

Automatically grades frozen scallops based on specified quantity and mass. The system handles up to 250 scallops/minute with a maximum accuracy of ±1.0 g.



### **Classifies fresh fish into 10 ranks**

#### Fresh Fish Grading System



Graders automatically classify fresh fish into up to 10 ranks based on specified quantity and mass. Maximum throughput is 350 sauries or 230 mackerels per minute with a maximum accuracy of  $\pm 3$  g.



### Ensures stable product transfer

### Checkweigher for Instant Noodle in Bags

An extended infeed conveyor ensures proper product spacing and stable transfer for accurate weight inspection.



### Side belt conveyor

#### Side-Belt Checkweigher for Beverage Cartons

An angle adjustable mechanism allows for handling unstable paper carton beverages. Combination with a metal detector is also available.

### For retort pouch foods and confectionery

Combination Checkweigher and Metal Detector for Aluminum Foil Packaged Products

This checkweigher is integrated with a metal detector that is suitable for products in aluminum-foil packages.



### Checkweighers



### For capsules size # 00 to 05

#### **Capsule Checkweigher**

Capsules can be individually checkweighed into three classifications (overweight, proper weight or lightweight) with a maximum accuracy of ±2 mg and a maximum speed of 120,000/hour.



### Achieve dynamic weighing for small bottles

#### Small Bottle Checkweigher

The weighing systems have stable transfer and high accuracy measurement for slim, small-diameter bottles including nasal drops and eye lotions that are difficult to transfer independently.



# High speed and high accuracy weighing for aerosol inhaler

#### Aerosol Inhaler Checkweigher

A star wheel feeds aerosol cans to the weigh table at a constant speed and with a uniform spacing, achieving high speed and accurate weighing.

### **Automatic Combination Weigher**



### Gentle product handling and ease of use

#### **Clean Multi Scale Cube**

Measures snacks, candy, cereals, and other fragile products with high speed and high accuracy. Designed to minimize impact and damage to products, this system dramatically reduces the giveaway.



### Smooth handling of sticky products

#### **Clean Cup Scale**

The vertical memory method enhances productivity. The cup and shutter are designed to scrape off products, making it ideal for wet, sticky and difficult to handle fresh foods.

### **Quality Management**



### Overall quality management and control system

### QUICCA

Records data of all inspection systems in one centralized location. Useful for HACCP reporting, establishing

> traceability, and line monitoring to ensure overall line quality and efficiency.

### Rejectors



### Air Jet Type

NG products are blown sideways off of the line by a powerful air blast. It is ideal for small, lightweight packaged products at high speed.

### **Dropout Type**

The rejection conveyor drops down to drop the NG product. It is ideal for products in thin bags.



### Swing Pusher Type

It is ideal for rejecting tall products in standing containers. The tall arm pushes products off the line.



### Shuttle Type

The belt on the rejector is expanded/contracted during the rejection to let the rejected products fall. It is ideal for unpackaged minced meat and sticky bulk products.



### **Flipper Type**

The most common type of rejector is the flipper. NG products are pushed aside by the rejector gates (arms). It is ideal for products in boxes and thick bags.



### Up and Out Type

The rejection conveyors flip up/ down so that the NG product drops out of the line. It is suitable for products in thin bags.



### **Pusher Type**

NG products are pushed off the line sideways by a gate with an air cylinder. It is suitable for rejecting products in packages and thick bags.



### Chute Type

Rejected products fall when the chute turns. It is ideal for rejecting relatively light bulk products.



#### **Carrier Type**

NG products are sorted horizontally without any shock due to rejection. Since the rejection process doesn't cause any damage, it is ideal for fragile products.



### Trip Type

In this unusual belt method, NG products are carried off either left or right by belts running crosswise to the product flow. It is suitable for rejecting large packaged products.

# Commitment to real solutions yields sophisticated quality control.

### **Total in-house system**

Anritsu designs and develops all its products in-house to support every solution with 100% confidence. We are dedicating to meet your strict demands for quality—through both our products and through our support.



### **Global maintenance network**

We offer service networks in 50 countries, ensuring that service, maintenance and repairs are carried out quickly and efficiently.

> ISO14001 CERTIFICATE No. JQA-EM0210 ISO9001 CERTIFICATE No. JQA-0566

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