

# Metal Detector

Discover What You've Been Missing...

**DETECTION PERFECTION**



# Anritsu Dual Wave Metal Detection Systems deliver superior detection on YOUR challenging production lines.

With over a century of innovation as an electronics manufacturer, Anritsu released its first metal detector in 1981. Since then we have provided over 50,000 units to protect our customers and the products they produce. We strive to continuously improve and work closely with our customers to exceed their needs and expectations. Our latest metal detection systems have been designed to provide years of trouble-free service.

## Technology

**Our latest metal detector provides the highest performance on your production line.**

[> P. 4](#)

## Maintenance

**The systems were designed with ease of operation and maintenance in mind to reduce cost of ownership.**

[> P. 6](#)

## Reliability

**Designed to protect your product and brand reputation.**

[> P. 8](#)



M6-h series **M611**



## Enhanced Performance – M6-h delivers high detection sensitivity and stability on your production line.

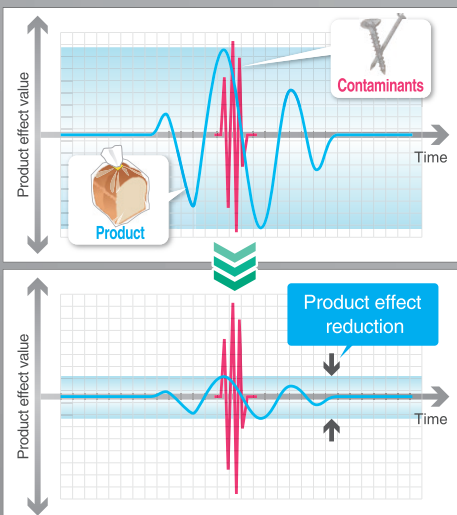
Delivering the same detection levels as described in catalogs is a big challenge for metal detection systems when performing the inspection on actual production lines. As detection sensitivity can vary depending on product and environment conditions including temperature and humidity, it can be challenging to provide consistent detection.

Anritsu's M6-h series metal detector is designed to deliver unrivaled levels of detection sensitivity on your production lines. The auto-learn process makes excellent detection quickly achievable.



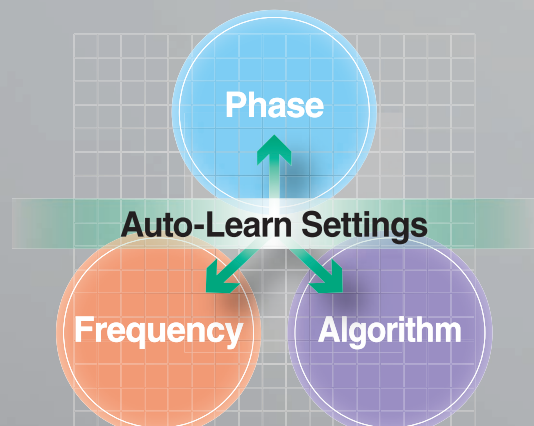
### Advanced Digital Signal Processing

Built-in digital signal processing (patent pending) better isolates product effect and minimizes its impact on detection. Outstanding detection made easy.



### Improved Auto-Learn provides reliable, repeatable performance

Improvement in detection and performance were developed in-house, using our 50+ years of industry experience. The auto-learn process optimizes the best phase, frequency and detection algorithms for the dual simultaneous frequencies.



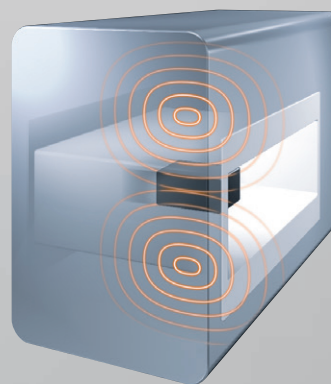




M6

## Vibration and electrical noise resistant

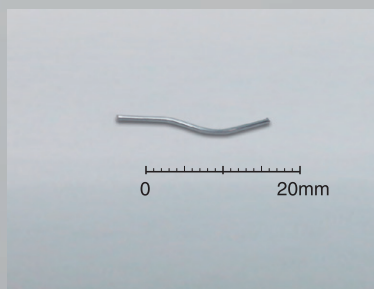
Metal detectors look for fluctuations within magnetic fields when the product passes through the detector head. Since the magnetic fields are affected by external sources such as floor vibration and inverters from nearby machines, a metal detector must be designed to handle these challenges. With this in mind, Anritsu's detection heads are designed to provide high sensitivity without sacrificing repeatability and reliability.



## The FOCUS function

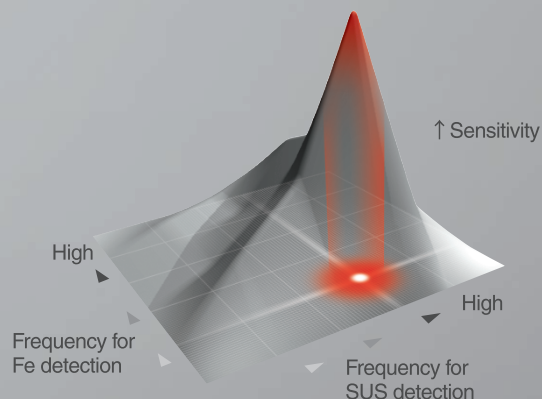
Metal contaminants come in all shapes and sizes such as wires, shavings and flakes. The FOCUS function delivers enhanced detection of those hard-to-detect real world contaminants.

\*Detection enhancement may vary depending on contaminant types



## High sensitivity detection of both ferrous and non-ferrous metals

Anritsu's patented dual-frequency technology is optimized for both ferrous and non-ferrous metals simultaneously. With the improved auto-learn process, Anritsu systems analyze more than 10,000 combinations of frequencies and algorithms to provide the best detection possible.



Maintenance

**Designed with ease of operation, low maintenance and cost of ownership in mind.**



## Tool free belt removal **M6h**

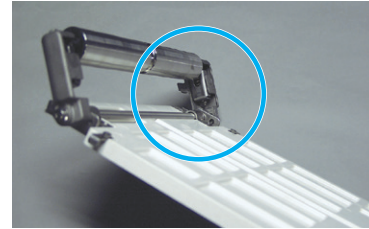
The conveyor belt can be easily removed or attached without tools. The direct drive system (washdown models only) allows quick and easy cleaning.

## Full belt speed control **M6h**

Variable belt speed, 5 to 90 m/min, is built in and stored in the product settings. Each product can run at its unique speed and the speed can also be adjusted as needed.

## No tension adjustment necessary **M6h**

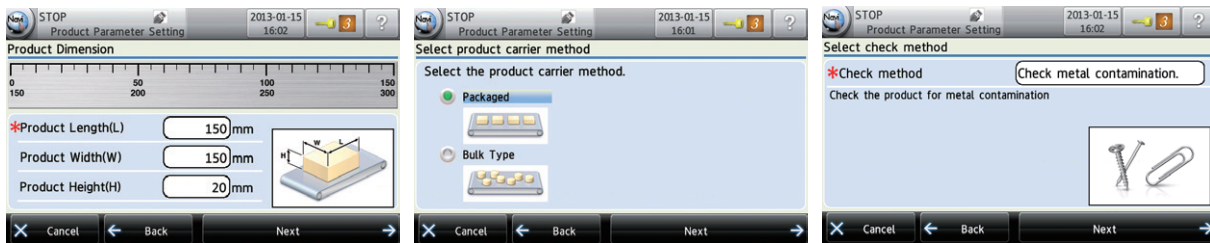
By using an automatic belt tensioner, belt adjustments are eliminated. The washdown models also use a v-guide belt to eliminate any tracking issues.



Automatic tension mechanism

## No operation manual is required with Product Registration Navigation

The Product auto-learn process uses a setup wizard that simplifies setup with step-by-step illustrated instructions.

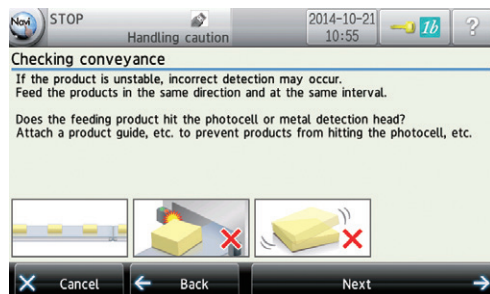


## Multilingual display and global service network

11 different languages are selectable on screen including English, Spanish, Portuguese, German, French and other. Anritsu's service network extends over 50 countries to quickly provide parts and service.

## Minimize false rejects

Built-in troubleshooting screens show the possible cause of false rejects and provide on-screen suggestions to improve performance.



## Improved troubleshooting and help screens

Unique Error and Alarm codes minimize downtime by offering guidance and reducing the need for service support.



## Features and Functions of M6-h series/M5 series

**Diagnostic function:** Allows the operator to check items that can cause false rejects - preventing problems before they occur.

**History recording:** Complete error and alarm status is recorded and can be checked at a glance.

**Quick machine warm-up:** Get up and running faster with better system stability.



## Maximize quality and protect your brand reputation.

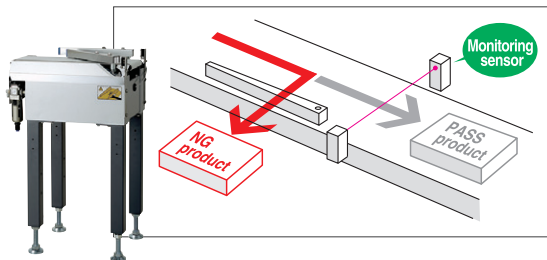
### Smart Guide - perfect for HACCP

Metal detectors are considered a critical control point (CCP) in HACCP programs and require detection checks to make sure they are meeting your standards. Smart Guide directs detection and operation checks in an easy-to-understand format. It can be set to stop operation if the testing fails ensuring compliance. Operator training is also minimized.



### Reject confirmation

Contaminated products should not only be detected but also rejected properly. Anritsu's reject confirmation ensures rejected products are fully removed from the production line.



### Daily inspection report

Simplified data and log management allows quick response to retailers or customer quality inquiries.

Metal Detector Daily Inspection Report ABC Confectionery Co., Ltd.											
PLANT: Arai DATE: 10/20/10 LINE: #C102 MD NAME: A-MD-02											
PRODUCTION						INSPECTION RESULT					
Production Number	Product	Production Qty.	Start Time	Stop Time	Test piece size to be detected	Pa	Start	Stop	Result	Start	Stop
AJ-005	Chocolate bar (Cacao)	15,800	7:00	11:45	0.8 mm	1.0 mm	1.2 mm	OK	OK	B. Collins	F. Wright
LL-9009	Chocolate bar (Hazel nut)	54,000	10:00	23:55	0.8 mm	1.0 mm	1.2 mm	OK	OK	K. Hart	M. Oliver

\*Example of daily inspection report when using QUICCA.

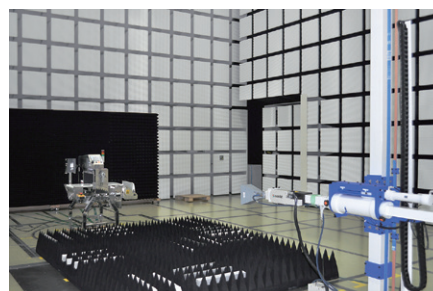
### User levels

Passwords are required when changing critical product settings including sensitivity changes. This helps avoid human errors and potential operator mistakes. Optional barcode reader simplifies operator identification.



### Design verification that meets global standards

We conduct strict design verifications to meet national and international standards such as CE marking and FCC. Anritsu metal detectors offer reliable solutions for quality control in the food industry around the globe.



In-house electromagnetic environmental test





## HACCP compliance

HACCP compliance requires verifying the operation of the inspection equipment on a regular basis. QUICCA automatically records these operation checks and the associated product name, time/data and the operator ID who performed the check. QUICCA helps prevent omissions in data recording and falsification of data, improving consistency of inspection reports. The system provides certification to HACCP requirement, that a product has been inspected with a fully compliant inspection system. You can show your customers that your manufacturing process uses and follows stringent quality control processes and can increase your company's brand image.

(Anritsu is not responsible for the inspection results by this documentation.)



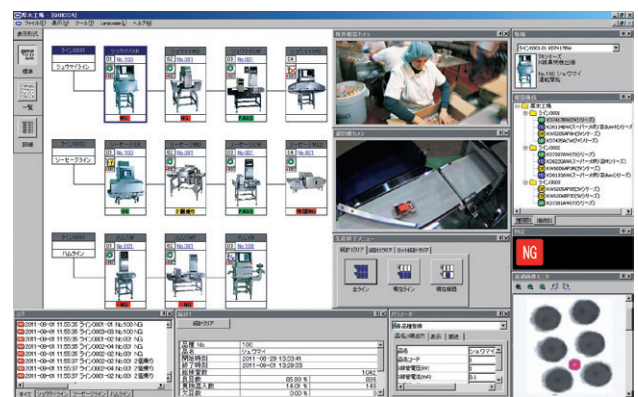
QUICCA



## Complete product traceability Advanced line monitoring

Overall quality management and control system, QUICCA, offers real-time production line monitoring and analysis as well as advanced traceability for each individual product by using ID codes printed on each product.

With centralized information, QUICCA can aid in detection production issues before they become a larger problem.



# Lineup

High Sensitivity

**M6-h**



**M6-h series** **M6-h**

Anritsu's unique dual-wave detection technology minimizes product effect to deliver high performance and stability. The M6-h is the next evolution of the industry's first simultaneous 2 frequency detection systems.

Entry

**M5**



**M5 series** **M5**

Easy product navigation with one-touch operation and auto-learn wizard. Illustrated product and troubleshooting guides for simple operation.

For Large Products

**Large Aperture**



**For Large Products**

Anritsu's Dual Wave Technology maximizes detection of both ferrous and non-ferrous metals. Suitable for larger packaged products or bulk inspection solutions.

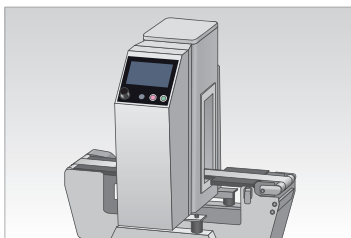
For Aluminum Packaged Products

**M**



**For Aluminum Packaged Products** **M**

Through magneto-reflection technology, Anritsu's M-Series Metal Detector achieves high-sensitivity detection of metals that can be magnetized including stainless steel fragments. As its detection process is not affected by the aluminum package, the M Series Metal Detector is ideal for aluminum packaged products such as chocolate and pouch products.



**M6-h series / M5 series**

Vertical heads available for best detection on taller products.



**M6-h series / M5 series**

Full system or detector head only options available.



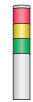
**Test Pieces**

Test pieces of Fe sphere, SUS304 sphere, SUS wire and non-ferrous metal sphere in various sizes are available.

## Option

### Tower light (with buzzer alarm)

Supports remote monitoring



### Emergency stop switch

Stops equipment in emergencies



### Line height change

Screw legs allow for easy height adjustment



### Anchor plate

Secures units firmly in position

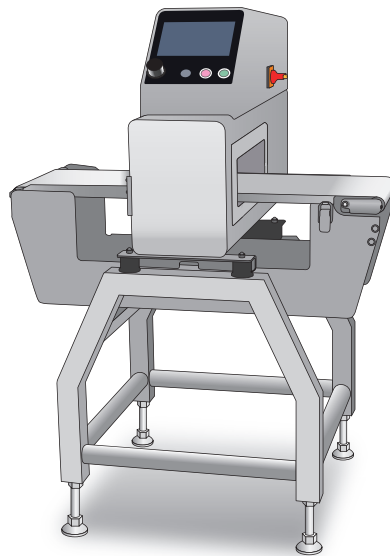


### Casters

Allows safe system movement



CE & FCC marking



### Cross plate

Provides smooth product transitions and prevents product accumulation



### Cross roller

Provides smooth product transitions and prevents product accumulation



### Scraper

Removes adherent objects from the conveyor belt's surface



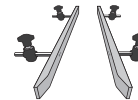
### Guide bank

Keeps bulk products contained on the belt



### Product guide

Provides accurate product positioning on conveyors



### Buzzer

Provides an audible alarm for rejects/alarms



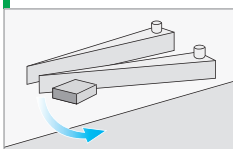
### Data printer

Prints inspection results



## Rejector

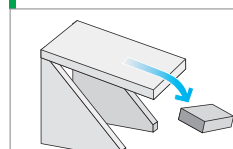
### Flipper



Highly versatile

Cartons  
Thick bags

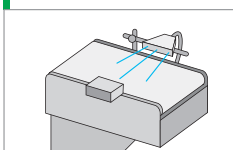
### Dropout



For thin products

Thin bags  
Sheets

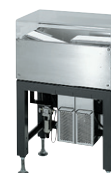
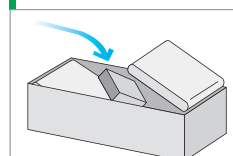
### Air jet



High speed

Light individual-packaged products

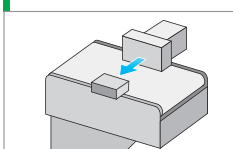
### Up and Out



For thin products

Thin bags  
Sheets

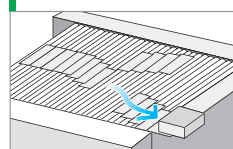
### Pusher



General purpose

Cartons

### Carrier



For open-topped containers

Cans  
Jars





---

**ANRITSU INFIVIS INC.** <http://www.anritsu.com>

1001 Cambridge Drive Elk Grove Village, IL 60007-2453  
Phone (847) 419-XRAY (9729) Fax (847) 537-8266

© ANRITSU INFIVIS CO., LTD. 2017

ISO14001 CERTIFICATE No.JQA-EM0210  
ISO 9001 CERTIFICATE No.JQA-0316

- 
- 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, a full maintenance inspection should be completed annually.

Specifications are subject to change without notice.  
No part of this catalog may be reproduced without our permission.