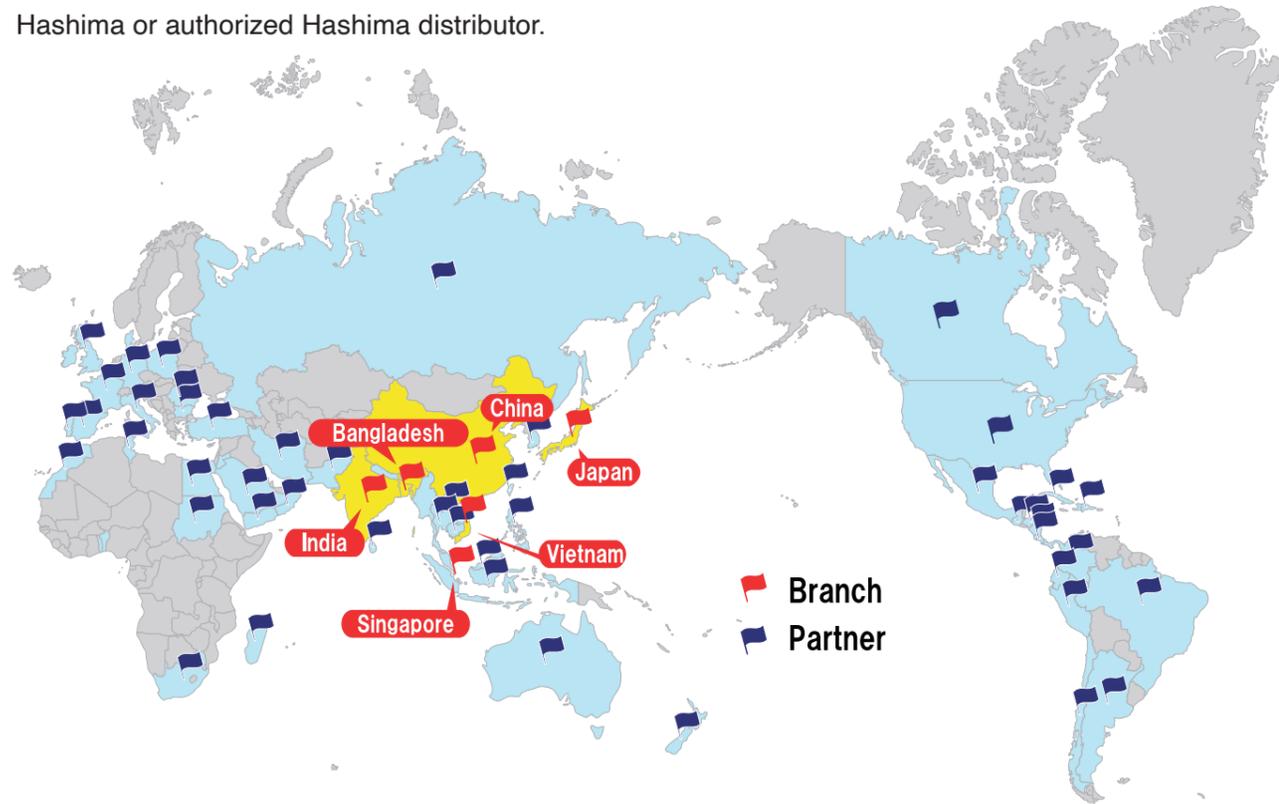# Hashima has been sold Needle Detector more than 114 countries.

Hashima's Needle Detector has been sold not only in Japan but also in more than 114 countries around the world, and we have a global network of distributors.

For maintenance and service inquiries, please contact your nearest Hashima or authorized Hashima distributor.

China
Bangladesh
Japan
India
Vietnam
Singapore

🚩 Branch
🚩 Partner

⬛ HASHIMA®

HEAD OFFICE : 7-6, RYOGE GIFU-CITY, JAPAN
TEL 81-58-247-8400, 81-58-245-4501 FAX 81-58-240-5775
KUNSHAN(CHINA) OFFICE : TEL : 86-512-57771838 FAX : 86-512-57771848
SINGAPORE OFFICE : TEL 65-62858131 FAX 65-62858132
INDIA OFFICE : TEL : 91-80-41540315 FAX : 91-80-25592002
BANGLADESH OFFICE : TEL : 880-2-7913655 FAX : 880-2-7913099
VIETNAM OFFICE : TEL : 84-226-3555840 FAX : 84-226-3555841

※Specifications and performance are subject to change without notice due to product improvement.

WEB site ▶️ 🐦 📷

Agent

http://www.hashima.co.jp/ 🔍

HASHIMA GENERAL CATALOG
Inspection Machine Series

HASHIMA JAPAN

⬛ HASHIMA

The best of Needle Detector in the industry

In production since 1994 and soon to be 30 years old .Over 22,000 single type needle detector produced.Over 5,500 two-head type needle detector produced.Cumulative total of needle detector machines: over 27,500 units

※As of July 2023

Conveyor type Nendle detector (single head)

HN-880CS
HN-790GS

■ 7inch color LCD

Conveyor type Nendle detector (two head)

HN-2880CS
HN-2790GS

■ 7inch color LCD

CONVEYOR TYPE

Selectable 2-mode system Standard mode & AP mode

The new CS type is equipped with a Standard mode and an AP mode that emphasizes the passage of accessories with Hashima Original Technology.

Standard Mode

Reference Video for Noise Reduction

Added as a Standard mode for the CS type equipped with new noise cancellation function. In order to achieve high inspection capacity and outside noise that affects the operation of the Needle Detector minimizes the impact.

AP Mode (Accessories Pass-through Mode)

Reference Video for AP mode

This mode also emphasizes the passage of clothing accessories and other items.It can be switched when necessary.High detection capability remains the same with stable area sensitivity, and the high passability of accessories compatible with needle detection has been realized.The improved passability enables smooth needle detecting operation.

Fastest conveyor speed in the industry

Hashima's Conveyor Needle Detector has high belt roatation speed, so it can be achived high productivity and improved work efficiency.

Reference Video for conveyor speed

Fe φ0.8mm can be detected with a gate height of 120mm.

120 mm height is standard, and 140, 160, and 180 mm are available as factory options. (Refer to factory options below)

The only one in the industry.

Reference Video for Gate Height

■SPECIFICATIONS

MODEL	HN-880CS	HN-790GS	HN-2880CS	HN-2790GS
DETECTION METHOD	MAGNET INDUCTION			
DETECTION Bailey	Fe0.8φ sphere or above			
SENSITIVITY ADJUSTMENT	DECIMAL(100steps) orSIZING (6steps)			
DETECTION WIDTH	600mm			
DETECTION HEIGHT	120mm(standard)			
ALARM METHOD	BUZZER POSITION LUMP			
BELT SPEED	40～15m/min.			
POWER SUPPLY	single phase			
RATED OUTPUT	150W			
DIMENSIONS	1598(L)×950(W)×903(H)		2423(L)×1040(W)×903(H)	
NET WEIGHT	230kg		374kg	
PRODUCT GUIDER	Standard		Standard	

※Use non ferrous metal accessories for garments. ※Read instruction manual & test machine sensitivity before using. ※The specification is under standard test condition. ※We Have no responsibility that needle chip, iron chip etc. Come out after detecting under non-standard condition.
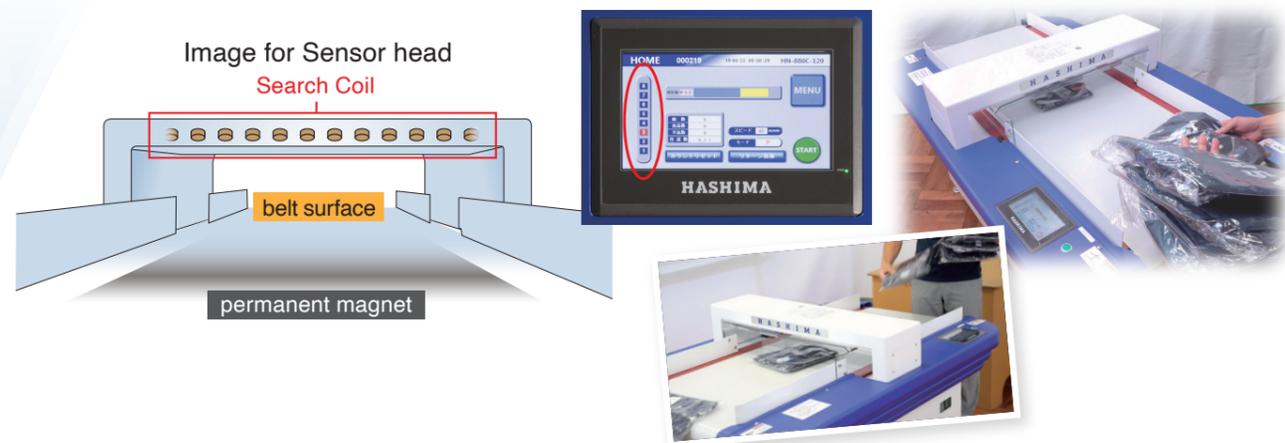
■FACTORY OPTION

MODEL	SNSOR HEIGHT	MAX. SENSITIVITY
HN-880CS	120mm	Fe 0.8φ
	140mm	Fe 1.0φ
	160mm	Fe 1.2φ
	180mm	Fe 1.5φ
HN-790GS	120mm	Fe 0.8φ
HN-2880CS	120mm	Fe 0.8φ
	140mm	Fe 1.0φ
	160mm	Fe 1.2φ
	180mm	Fe 1.5φ
HN-2790GS	120mm	Fe 0.8φ

※Please note that the sensitivity level that can be used may be limited by the surrounding environment and the product to be inspected.

HASHIMA

## Equipped with Detection Position Lamp

Hashima's unique sensor head uses a split detection coil, so when there is a detection, a lamp will indicate the position of the broken needle.

Reference Video for
Detection Position Lamp

Image for Sensor head
Search Coil

belt surface

permanent magnet

Auto PreChecker®

Simplification of daily inspection! Increased work efficiency!

Auto PreChecker®

Auto PreChecker makes sensor checking more accurate and quicker.
By using PreCheck Bar (Specialized test block) & system, you do not
need to check each coil one by one, the system checks sensors automatically.
Also you can keep the PreCheck result if you prepare the optional printer.
(※PATENT PENDING,TRADEMARK REGISTRATION PENDING.)

Reference Video for
Auto PreChecker

PreCheck Bar

OPTIONAL
THERMAL
PRINTER

HASHIMA EXCLUSIVE PRINTER
BY CITIZEN

PreCheck Report

Products Guider as standard.

The product guider helps inspection of thick clothing without malfunction.

Product guider
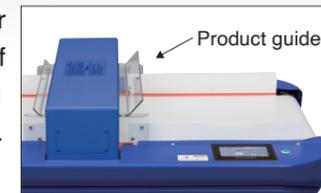
Equipped with Hashima original conveyor belt

Conveyor belts used in Hashima's needle detector are developed and manufactured in-house.

Supper Fine Mode is equipped as standard.

Hashima's unique sensor head system makes it easier for accessories to pass through by inspecting them in super fine mode. (Conveyor speed moves slowly.)

Reference Video for
Supper Fine Mode

Installation Environment Check function is equipped.

With Installation Environment Check Function, you can find the suitable site for Needle Detector.

Reference Video for
Installation
Environment

Optional accessories for Needle Detector

HN-S2 Chuter

▲HR-5050N

◀Indication Light

▲Auto sorting Chuter

▲Count Monitor

▲Foot Switch

Hashima's Needle Detector inspections are changing!

Needle Detector Precision Inspection Service

A new precision inspection service that provides factory-level inspections at the installation site by authorized Hashima technicians.

Precision Inspection Device(HN-C1)

Patent Pending

HASHIMA

Light weight

Compact
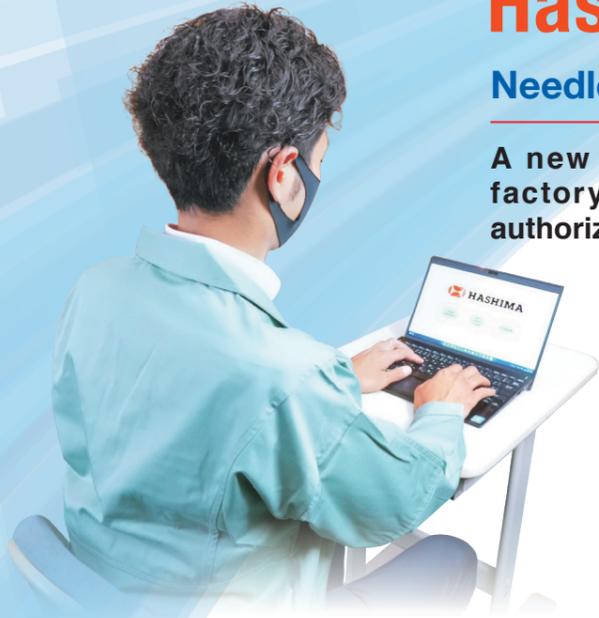
Compatible models HN-670, 870, 880C series

Mode select
Precision Inspection | Detection Test | Manual Operation
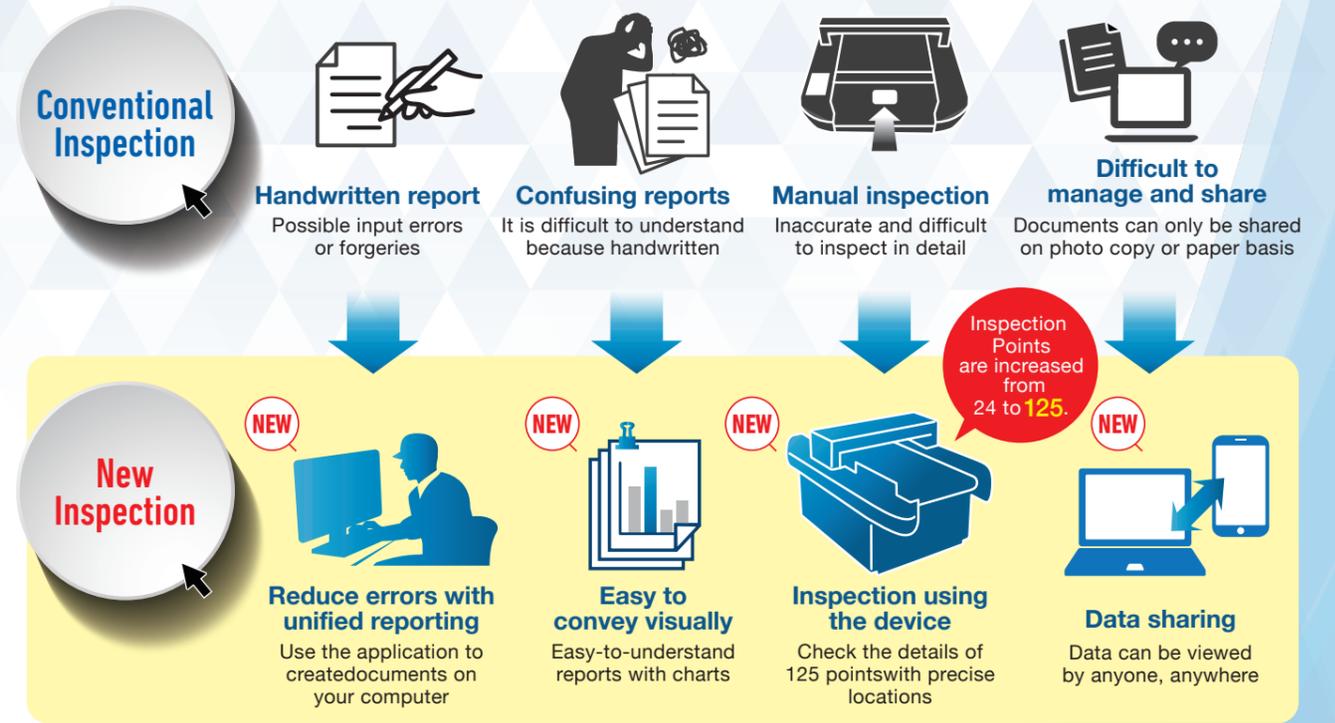Calibration screen

DATA
Data can be imported to PC

Hashima Needle Detector Precision Inspection System Introduction Movie

Check out the video

Scan the QR code on the left with a barcode reader on your smartphone or tablet device.

Hashima Needle Detector Precision Inspection System

01 A new automatic inspection system automatically and precisely inspects 125 locations within the detection area. Graphical indication of good/failure.

Advantages
- Automatically inspectable
- Graphing of inspection results

Numerical data is displayed in a graph
(Data is imported from Machine to PC.)

Detection signal status

Single / Two-head (front)

good
Reference level
failure

MAX値(F)
閾値

automatically and precisely inspects 125 locations

02 Graphical representation of the installation environment and inspection of operating conditions important for Needle detector.

Advantages
- Confirmation of the machine's installation environment
- Check Needle Detector and operating conditions

Single / Two-head (front)

Installation environment conditions

Needle Detector operating status

<環境ノイズ検査>
failure
Reference level
good

<動作ノイズ検査>
failure
good
Reference level

検査前
検査後
判定値

The appropriateness of the installation environment of Needle Detector can be inspected and confirmed.

Graphing of proper inspection data for installation environment and operating conditions (Data is imported from Machine to PC.)

Differences from Conventional Inspections

Conventional Inspection

Handwritten report
Possible input errors or forgeries

Confusing reports
It is difficult to understand because handwritten

Manual inspection
Inaccurate and difficult to inspect in detail

Difficult to manage and share
Documents can only be shared on photo copy or paper basis

Inspection Points are increased from 24 to 125.

New Inspection

NEW **Reduce errors with unified reporting**
Use the application to created documents on your computer

NEW **Easy to convey visually**
Easy-to-understand reports with charts

NEW **Inspection using the device**
Check the details of 125 points with precise locations

NEW **Data sharing**
Data can be viewed by anyone, anywhere

03 **Electronic data** with certificate and report.

Advantages
- Approval with report and inspection results
- Electronic certificate issued

Report-1

Report-2

Needle Detector precision inspection certificate(electronic certificate)

Hashima confirmed and authenticated

Issued

HASHIMA CO.,LTD.

After inspection, a "Report-1-2" will be issued, and if the level is cleared A certificate of precision inspection is officially issued.

★This precision inspection service is performed by an authorized Hashima technician. If the inspection results do not meet the requirements, certificate will not be issued.

04 The original inspection report is stored on the Hashima Cloud Server and can be accessed at any time and from anywhere.You can check it.

Advantages
- QR code on the certificate
 Secure service for easy confirmation of inspection results

HASHIMA CO.,LTD.

PDF certificates and reports can be downloaded from the Hashima Cloud server from anywhere by reading the QR code, allowing you to share information with your customers.

QR code is included on the certificate, allowing easy confirmation of test results.

Line-up for RFID（Electronic Tag）Reading Device

What is RFID tag（Electronic Tag）？

Utilizing RFID tags (electronic tags), which are rapidly becoming popular in the apparel industry, Hashima has developed the world's first product that combines Needle Detector with RFID (electronic tag) reading device.RFID (Radio Frequency Identification) is a technology that uses radio waves to wirelessly communicate with electronic tags on which information is written.
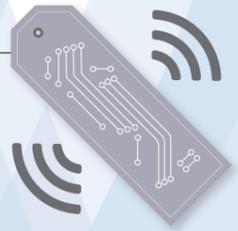
First in the industry! RFID data can be acquired withNeedle Inspection.

HN-R880CS

RFID Reader

Sensor Head for Needle Detector HN-880CS

RFID Reader

Sensor Head for Needle Detector

Patented

Needle Detector sensor head + RFID reader integrated equipment

Linkage counting date with Needle Inspection History

Display for registered product information

- With only one operation of the product, Needle Inspection and RFID reading are possible.
- Since it is an integrated equipment, it requires less installation space.
- By utilizing RFID tag readers, products can be read quickly and the number of inspections can be counted accurately.
- RFID tags can be read and Needle Inspection history can be linked to products. It helps to improve traceability.
- Even forgetting to attach RFID tags can be detected.
- Historical data can be exported to CSV. Needle Inspection history and quantity count data can be utilized.

Accurate counting of products

Product real-time display

HN-R880CS（Needle Detector + RFID Reading Device）

OK

NG
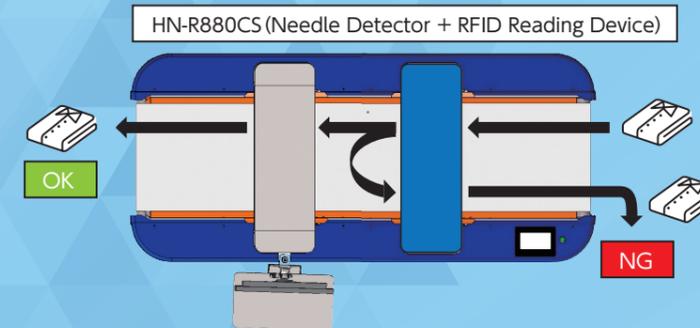
MODEL NAME	HN-R880CS
PRODUCTS NAME	NEEDLE DETECTOR + RFID READING DEVICE VOLTAGE & RATED
OUTPUT	SINGLE PHASE,200W
DETECTION ABILITY	120mm(Feφ0.8mm)、140mm(Feφ1.0mm)、160mm(Feφ1.2mm)、180mm(Feφ1.5mm)
BELT SPEED	40～15m/min
DETECTION WIDTH	600mm
MACHINE SIZE	2,423L×1.040W×903H(mm)
MACHINE WEIGHT	320kg

RFID COUNTING DEVICE FOR HASHIMA NEEDLE DETECTOR

HRF-CR1

- Used in conjunction with Hashima Needle Detector
- Accurate product counting linkage with Needle Inspection Record by high-performance RFID reader

RFID Counting Device HRF-CR1

Two Head Type Needle Detector HN-2880CS

- By using RFID tag readers, products can be read and count accurately.
- In conjunction with a needle detector, the inspection conditions and passage history are stored together.
- Data will be exported by CSV File.
- Find products without RFID Tag.
- Use Global Standard RFID Reader.
- Multilingual support (Japanese, Chinese, English, Vietnamese)
- Product information registration (data input/output)

HRF-CR1 (RFID COUNTING DEVICE)

HN-880CS (Needle Detector)

OK ③ ② ① ④ ⑤ NG
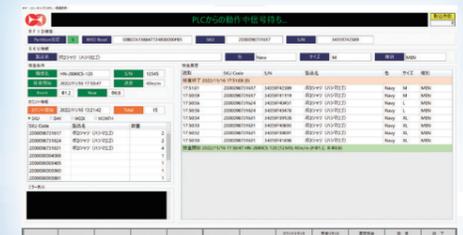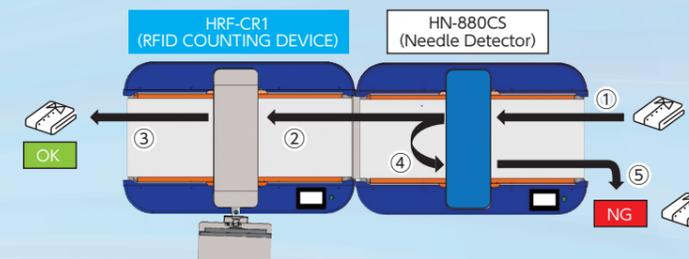
Management Software

MODEL NAME	HRF-CR1
WORKING WIDTH	600mm
VOLTAGE	1P220V
OUTPUT	150W
MEASUREMENT	1,598(L)X 950(W)X 903(H)
WEIGHT	230kg

Conveyor Type Metal Detector

High-performance sensor and Color LCD Touch Panel realize easy operation. Inspection machine for all metals !!

HASHIMA Conveyor Type Metal Detector

HM-6010A
HM-6020A

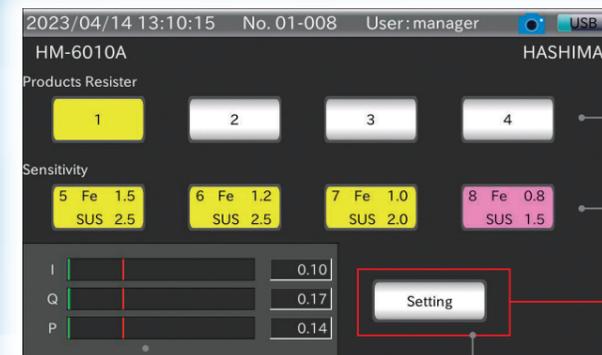Color LCD Touch Panel

Reference Video for Metal Detector

2023/04/14 13:10:15　No. 01-008　User：manager

HM-6010A　　　　HASHIMA

Products Resister

| 1 | 2 | 3 | 4 |

Sensitivity

| 5 Fe 1.5 / SUS 2.5 | 6 Fe 1.2 / SUS 2.5 | 7 Fe 1.0 / SUS 2.0 | 8 Fe 0.8 / SUS 1.5 |

I ___ 0.10
Q ___ 0.17
P ___ 0.14

Setting

— Memory Function

— Sensitivity Setting

Detected Value Indication Monitor　Setting

Setting Menu

2023/04/14 13:10:24　No. 01-008　User：manager

Setting

User	Photo Sensor
Volume	Language
Date	Information

FEATURES

■ **Detects all metals**
Contaminants can be detected regardless of the type of metal.
Detects the highest sensitivity Fe ϕ0.8mm sphere, SUS304 ϕ1.5mm sphere. (100mm height)

■ **Stable and highly accurate detection**
A unique sensor head and software control enable stable and highly accurate detection of metallic foreign objects.

■ **Uses Color LCD Touch Panel with excellent operability**
Easy to operate with advanced touch panel.

■ **Simple Selection for Standard Sensitivity Level Setting**
You can easily select the Sensitivity Level Setting with the standard ferrous ball size.

■ **Equipped with memory function**
You can set the sensitivity according to the product to be inspected. Equipped with a memory function that can register product settings.

■ **Multilingual display and audio**
Supports Japanese, English and Chinese. Multilingual display and voice make it easier for operator.

MODEL	HM-6010A	HM-6020A
DETECTION METHOD	ELECTRIC INDUCTION SYSTEM	
MAX. SENSITIVITY	Fe ϕ0.8mm sphere, SUS304 ϕ1.5mm sphere	Fe ϕ1.2mm sphere, SUS304 ϕ2.0mm sphere
DETECTION WIDTH	600mm	
DETECTION HEIGHT	100mm	200mm
ALARM FUNCTION	ALARM, CONVEYOR REVERSE FUNCTION	
BELT SPEED	20m/min	
VOLTAGE	SINGLE PHASE	
RATED OUTPUT	150W	
MEASUREMENT	1,600mm(L) X 1,050mm(W) X 1,200mm(H)	1,600mm(L) X 1,050mm(W) X 1,300mm(H)
WEIGHT	290kg	300kg

LARGE SIZE CONVEYOR TYPE NEEDLE DETECTOR
HN-1380C/HN-1580C

Auto Pre-Checker

HOME 000121 21/10/30 12:34:56 HN-1380C

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

φ 1.2

sens. 9.0

total	152
pass	134
detect	18
loop	0/11

belt speed 40 m/min
mode P

MENU
STOP
counter reset
return position

■ **7 Inch Color LCD**

PHOTO:HN-1380C

The industry's fastest speed 40m/min

■ SPECIFICATION

Model	HN-1380C/1580C
Detection Method	Magnetic Induction System
Detection Sensitivity	Fe φ 1.2mm Sphere or above
Detection Levels	10 stages(100 steps) or Sizing (6 steps)
Detection Width	1300mm/1500mm
Detection height	160mm (150mm with Guider)
Alarm Method	Buzzer・Position lamp
Belt Speed	15m~40m/min
Power Source	Single Phase
Dimention	1,830 (L) x 1,800(W) x 1,000mm(H)
Weight	495kg
Product Guider	Standard

*Use non ferrous metal accessories for garments.
The specification is under standard test condition.
The sensitivity may vary depending on the tested product and
operating environment.
*we are not responsible for any damage caused by chipped iron
as a result of operation under non-standard condition

■ FEATURES
● **New sensor head**
With the new sensor head, the detection unit is not subjected to any vibration from the conveyor, and it operates more stably.
This enables the industry's fastest speed of 40 m/min.
● **Auto pre-checker**
It is equipted with an auto pre-checker which is used for the pre-operation inspection Inspection time can be greatly reduced.
● **Super fine mode(40~15m/min)**
Belt speed can be changed from 15m/min to 40m/min, allowing smoother passage of various apparel accessories.
● **Environment test mode**
The machine's installation environment can be tested.
● **Two sensitivity options**
10 Stages method (100 steps) and sizing method (6 steps) can be selected
● **7 Inch Color LCD**
" The use of a color LCD has greatly improved operability and visibility.
"The operation status can be seen at a glance

HANGER TYPE NEEDLE DETECTOR
HN-1300H

■ SPECIFICATIONS

Model	HN-1300H
Detection Ability	Fe φ1.0mm Sphere or above
Detection Width	Height 1,300mm Width 130mm
Detection Speed	600pcs/h
Power Source	1P 220V
Rated Output	100W
Air Pressure	5kg/cm2
Dimension	2,300（L）×900（W）×2,350（H）mm
Weight	800kg

※Use non ferrous metal accessories for garments.
※Read instruction manual & test machine sensitivity before using.
※The specification is under standard test condition.
※We have no responsibility that needle chip, iron chip etc.
　come out after detecting under non-standard condition.

■ FEATURES
● **Speedy and smooth needle detecting**
It is possible to detect the products with hanger at 6sec/pc
● **Improvement of detecting precision**
φ1.0mm steel is detected by detecting width 130mm
Detecting precision is improved by adopting newly developed detecting sensor. detecting length is 130cm. so long size products (suit,coat,pants,etc.) can be detected.
● **Improvement of performance for an outside noise**
New detecting sensor unit has also good noise performance. when new type is compared with previous type, 30% reduced influence by an outside noise.
● **New sensitivity level monitor**
A level monitor adopts new design and is easier to check the sensitivity level. detecting position lamp is divided to 20 pieces so that it is also possible to show foreign object exactly. detecting position exactly.
● **Auto assortment**
This needle detector can assort goods products or not automatically on the processing bringing-----set out-----detecting-----assorting. the operator can do needle detecting efficiently without stop the system.
● **Data collection**
The detecting result is able to be collected to your computer (windows XP) by optional software from the needle detector. the collected data can be used for each purpose.

TABLE TOP TYPE NEEDLE DETECTOR
HN-450N

■ FEATURES
● As indicator on control panel is indicates the position of broken needles, it is easy to find broken needles.
● As detecting adjustment can be changed by 6 steps, it is easy t o adjust in accordance with the sizes and kinds of accessories.

■ ATTENTION
● Table top needle detector is designed to detect magnetic metal objects in ladies, children's and men's clothes.

■ OPTION
● **Table for HN-450N**
HN-450N can be built in the optional table. The surface of the table and the needle detector are same height using this table. This table is helpful for detecting work.

■ **Control panel**

Sensitivity adjustment SW

■ SPECIFICATIONS

Model	HN-450N
Detection Method	Magnetic induction
Detection Sensitivity	MAX 110mm height by steel needle (φ0.6×L33)
Detection Levels	6 Levels
Alarm Method	Buzzer
Detection Width	80mm×450mm
Power Source	Single phase
Rated Output	(appr.) 10W
Dimension	590（L）×400（W）×82（H）mm
Weight	(appr.) 9kg

※Use non ferrous metal accessories for garments.
※Read instruction manual & test machine sensitivity before using.
※The specification is under standard test condition.
※We have no responsibility that needle chip, iron chip etc.
　come out after detecting under non-standard condition.

HANDY TYPE NEEDLE DETECTOR
HN-30S/35W

■ **Updated detection function**
■ **Notice by light and buzzer**
■ **Always keep clean by antimicrobial processing**

HN-30S

HN-35W (Wide type)

Antimicrobial

SIAA
ISO 22196
抗菌加工
無機抗菌剤・練込
本体
JP0122538A0001X

Based on the results evaluated by ISO22196 method, SIAA is displayed on products with quality control and information disclosure according to Antimicrobial Product Technology Council guidelines.

■ Features
● **φ0.8 mm steel ball is detected**
This new handy type needle detector can detect φ0.8mm steel ball and is good for a steel pin
● **Easy to use with clean**
New design and Antimicrobial processing, using long time with no stress
● **Detecting wider area (HN-35W)**
Unit surface is wider and easy to detect by Spot/Wider sensitivity select switch
● **Sensitivity select switch(HN-30S)**
The new handy type needle detector adopts Hi/Low sensitivity select switch
● **Battery save function**
Under stand by, the battery mode is changed to save mode automatically, which saves battery consumption. When take it in hand, the machine starts automatically. New designed detecting circuit cuts electric power consumption.
● **Large size LED lamp and buzzer.**
It's easy to check the detecting result by adapting large size LED lamp and buzzer.

Model	HN-30S	HN-35W
Detection Method	Magnetic induction	Magnetic induction
Detection Ability	Hi:φ0.8mm Sphere Low:φ1.0mm Sphere	φ0.8mm Sphere
Detection Area	·······	Spot / Wide
Alarm Method	Buzzer, LED lamp	Buzzer, LED lamp
Detecting Area	25mm(W)×50mm(L)	48mm(W)×93mm(L)
Power Supply	1.5V dry cell battery×2(AA)	1.5V dry cell battery×2(AA)
Dimension	58(W)×195(L)×50(H)mm	56(W)×245(L)×67(H)mm
Weight	210g	300g

※Use non ferrous metal accessories for garments.
※The specification is under standard test condition. We have no responsibility for needle chip, iron chip etc.
　Come out after detection under non-standard condition.
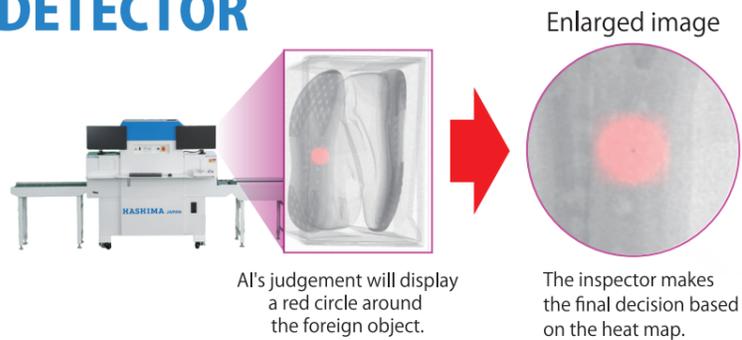
AIX DETECTOR

X-ray inspection AI support system

AIXDETECTOR
(INTERNATIONAL PATENT PENDING)

AI will make X-ray inspection evolving more and more.
The more you use it, the more it evolves.

AIXDETECTOR

AI that learns every day
Through repeated night time learning,
AI will eventually become like experienced and skilled operators

What is HASHIMA AIX-DETECTOR

AIXDETECTOR

It is a support software that assists in the visual inspection of foreign objects, consisting of judgment result display software and learning software for more accurate and efficient inspection by installing AI in X-ray inspection. When displaying product images taken by an X-ray inspection system on a monitor, the system can detect foreign objects and display their locations on the monitor using a heat map.
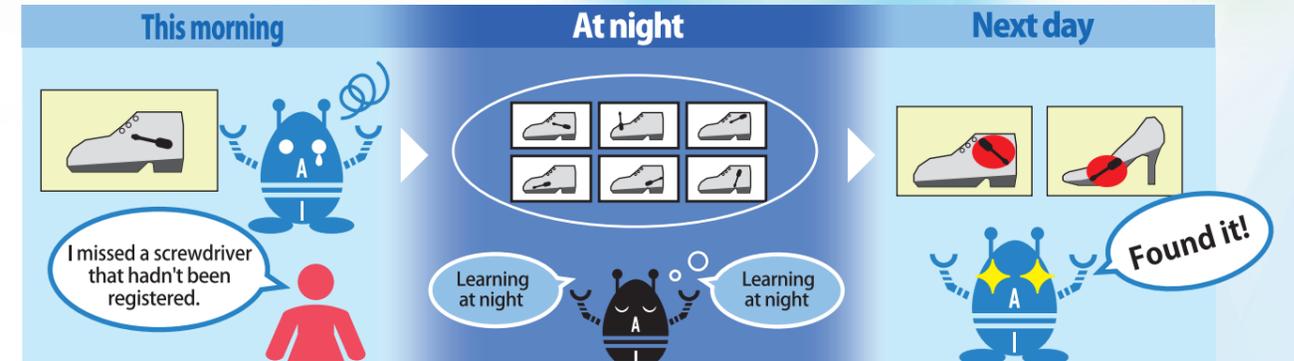
Enlarged image

AI's judgement will display a red circle around the foreign object.

The inspector makes the final decision based on the heat map.

This morning | At night | Next day

I missed a screwdriver that hadn't been registered.

Learning at night

Learning at night

Found it!

By registering foreign objects that have been overlooked, AI will learn them at night, and similar objects can be found in the future. Given its foreign matter registration nature, it can be applied to different products

AIXDETECTOR

Advantages of AIX-Detector

Improved inspection accuracy and speed

It takes only 0.2 seconds to detect a foreign object of 0.8 mm in size. With the support of AI, the operator can find foreign objects quickly and reliably.

Improved inspection quality variation.

O?   ×?   ×

Visual inspection by an operator can be inconsistent and erroneous. The judgment results may vary. With the help of AI, the inspection is always performed with the same standard.

Reference Video for X-ray inspection machine

Cost Reduction
Reduce human resource development costs

In the past, inspection quality (variation/speed) was dependent on the operator's experience, however with the support of AI, high inspection quality can be maintained regardless of the operator's experience
This means that "visual inspection work" will be leveled out with the introduction of AI and anyone can do in a short time.
There will be no need to spend time and money on training operators.

Maintain high inspection quality and easy transfer to other factories

By installing a highly experienced AI into a newly established factory, it is possible to achieve the same testing quality as the existing factories and   Inspection guidance by skilled operators can be kept to a minimum.

well-experienced AI

Initial installation factory

New installation factory

This is a well-experienced AI.

It can start testing immediately starting tomorrow

X-Ray
INSPECTION MACHINE

X Ray Inspection system

●Monitor Arm
The monitor position changing is possible.

Control Panel

●Label Printer
It is useful for Traceability.

●Rear Conveyor
Length: 1m

●Remote Control Switch
Easy operation by dedicated remote controller

●Automatic Loading Conveyor
Length :1m.
Height : 850mm.

HNX-S665NDS

HASHIMA JAPAN

FUNCTION

■High Precision Sensor
Maximum Sensitivity in the industry by new line sensor. This mode is equipped with high precision X ray line sensor and realizes low noise and speed up .

■Double Direction Shooting（Dual Sensor）
Double Direction shooting (0 degree and 25 degree) can provide 2 dirrefent angle image data by one operation. It is quite useful to detect foreign object .

■Traceability
All scan image data can be saved and can print out the scan image dates No. and also can print out the scan image date itself and transfer it at a distance through internet.

■Multi-Language Support
We suppose that the machine will be operated overseas, so that it supports Japanese, English and Chinese.

■Full Automatic Operation
X ray irradiating, Conveyor Start, Image capture and saving are controlled by one operation automatically.

■Variety of Monitor setting
It is possible to select variety of setting (one image with one direction, one image with 2 direction) for detecting object.

■Energy Saving
This model checks the operation condition and controls the power consumption automatically.

HNS-S410NDS **SMALL SIZE**

For small object to shoes (knee-high boots) and process inspection

■HNX-S410N/HNX-S410NDS
Installation dimension

1970
460 850 460 200
1000
985
850
690
1735
440
300
810
241
273
337
369
401
410

HNX-S665NDS **MEDIUM SIZE**

For small object to garments

■HNX-S665N/HNX-S665NDS
Installation dimension

2130
460 850 460 360
1000
985
850
940
420
770
1735
650
284
302
325
368
408
480
608

HNX-S800NDS **LARGE SIZE**

**The sensor size is 819mm width.
For large size garment.**

■HNX-S800N/HNX-S800NDS
Installation dimension

2360
460 1080 460 360
1000
985
850
1100
500
1995
800
1030

FUNCTION

Printing Icon   Setting

■Main Screen

Renewal of Software
Iconizing required functions to mark them intuitive.
The new software copes with both advanced settings and simple operations so that old version user also can use the new software.

●Image adjustment
An operator can call a number of conditions by pressing iconized adjustment button. This function will help to fine out foreign object that difficult to find out.
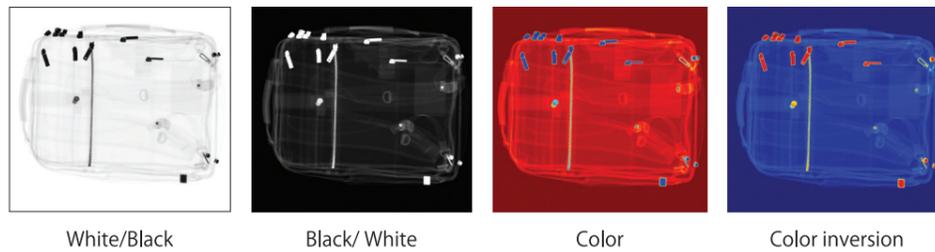
●Counter
Since each scan date has running No. and the operator can check the before and after scan data easily by this counter function.

Menu
Color adjustment

Cut View
Measurement
Drawing
Color Display
Black and white Inversion
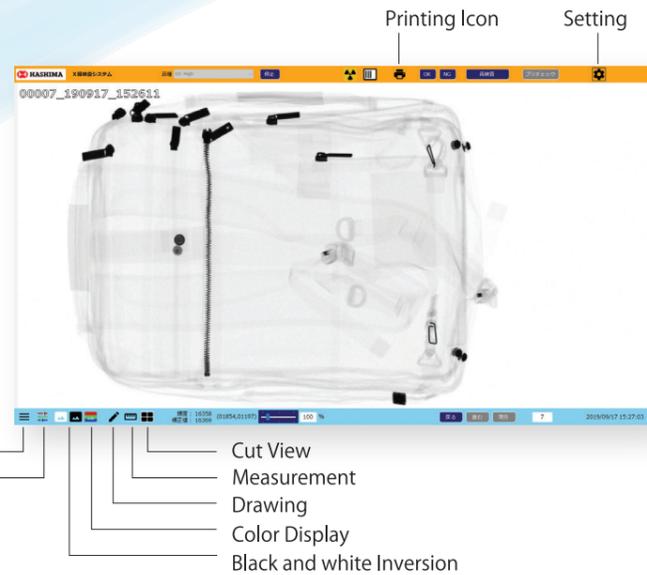
■Full color Display
It is helpful to find our foreign object by full color display

White/Black   Black/ White   Color   Color inversion

■Drwaing Function
An operator can put comment to the scan data directly.

contamination by foreign objects

Drawing Tool

■Report Creation Function
It is easy to create each report based on Customer name,
Lot No. , Size, Color.

OPTION

■Barcode Reader System
Automatically read the barcode on the side of the boxed product. The imager system uses a CMOS sensor for fast reading speed and reliable reading of barcodes on moving products.

■Spot Sensor System
Conventionally, the presence or absence of products on the conveyor was checked by using photoelectric sensors, which blocked the light from the passing products.
In this method, the package itself sometimes allows light to pass through, causing the machine to malfunction
By using a spot sensory system, it will reliably recongnize even the packaged products.

17

■ SPECIFICATIONS

Model	HNX-S410N	HNX-S410NDS	HNX-S665N	HNX-S665NDS	HNX-S800N	HNX-S800NDS
X-ray Angle	0°　25°(Dual Direction)					
Tunnel Size	400(W)×300(H)mm		690(W)×420(H)mm		850(W)×500(H)mm	
Belt Width	460mm		648mm		785mm	
Belt Speed	Adjustable Belt Speed 15〜25m/min					
Conveyor Stly	Double Conveyor	Single Conveyor	Double Conveyor	Single Conveyor	Double Conveyor	Single Conveyor
Object Weight	Max 5kg					
X-ray Sensor	Straight Type Line Sensor					
Sensor Length	409.6mm		665.6mm		819.2mm	
Sensor Pixel Size	0.4mm					
Sensor Pixel Number	1,024pixels		1,664pixels		2,048pixels	
X-ray Tube Voltage	30〜75kV					
X-ray Tube Current	0〜3mA					
Operating System	Windows10(64bit)					
Memory	8GB					
Hard Disk	2TB					
Image Processing	Brightness, Contrast, Sharpness, Zoom					
Data Saving	Automatic or Manual Saving					
Data Format	TIFF/BMP/JPEG(Plurally Selectable)					
Display	23.8inch Full Definitions×2(Standard)					
Image Data Print	Automatic or Manual Printing					
Safety Sensor	Hand Insertion Sensor					
Dimensions	1970(W)×810(D)×1735(H)mm		2130(W)×940(D)×1735(H)mm		2360(W)×1100(D)×1995(H)mm	
Weight	700kg		800kg		900kg	
Power Supply	AC90〜120V 50/60Hz					
Power Consumption	0.8KVA					
X-ray Leakage	1 μSV/h以下					
Operating Temperature	5〜35℃					
Operating Humidity	20〜80%RH（With Non Condensation）					
Standard Accessories	Instruction Manual, Test Piece					
Optional Accessories	Touch Panel, PC Printer (Selectable) Label Printer, Roller Conveyor, Electric Converyor (Put/Carry Out) , Monitor Stand, Putting Guide, UPS					

OPTION

Auto Conveyor
Any size ones are avaiable

Roller Conveyor
Any size ones are avaiable

Color printer
（RICOHSG2200）
Print out the image scan data
Support Windows 64 bit

UPS
Uninterruptible
Power Source (UPS)
In case of electrical outage, protecting the machine

Label Printer
Print label to trace the products
(Recommend the above model)

Remote Control Switch
Frequent operation is controlled by the button without using the mouse and the touch panel.

18