

## CONVEYOR TYPE METAL DETECTOR

# NMD-530 Series

SEEKER®



Certified by CE mark 

- Multi-Frequency Operation
- Full Color Touch Screen (7 inch TFT LCD)
- User-Friendly Operating System
- Phase-Tracking Function
- Digital Signal Processing (32-Bit Microprocessor)
- Auto-Setting Function
- Powerful Durability (IP66)
- Smart Self-Diagnosis
- USB Port for Data Management
- RS232C & 485 Data Link Ports
- Security System (3-Level Passwords)
- Metal Detecting History Management
- Easy Software Upgrade
- Variable Languages Option



Multi Frequency

**NMD530 Series (SEEKER)** Conveyor type metal detector is the most widely demanded model among NMD530 Series range products. Offering multi frequency operation system which is able to auto-select the correct operating frequency for maximum contaminant sensitivity in seconds. No longer are operators required to manually optimize frequencies, which is both time consuming and risky.

Complemented by an array of innovative features and advantages, NMD530 Series (SEEKER) Conveyor type metal detector delivers tangible benefits to the manufactures at every key stage in their process and is equally effective in both “wet” and “dry” application.

 Total Inspection Systems & solution  
**NOW SYSTEMS CO., LTD.**



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Multi Frequency

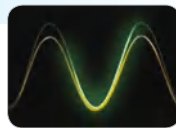


## High Performance for Metal Detection

- Closed Coil System for perfect detection
- High quality filter for more precise detection
- Auto absorption function for vibration, impact, noise and etc.,
- Dust Proof & Water Proof Standard (IP66) authentication

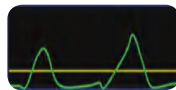
## Multi Frequency Operation

- Supporting multi frequency operation mode that can measure various types of products with the correct operating frequency for maximum contaminant sensitivity in seconds



## Phase Tracking Function

- Optimum detecting level is maintained by automatically coping with products of which phase is changed minutely, so detection is rather difficult such as frozen food.



## Full Color Touch Screen (7 inch TFT LCD)

- An intuitive and convenient full color touch screen, containing regional languages and user manual



## Digital Signal Processing Function

- The adoption of 32-bit microprocessor has added more precise operation and performance of the equipment. Software filter technology to remove ambient noise affecting performance of a metal detector has been applied.

## Exterior Design considering the convenience and aesthetics

- Modern and sensuous design in which both convenience and beauty are emphasized at the same time

## Connectivity to external devices

- Backing up inspection history and etc., by using a USB removable disk and reviewing the data on a PC.
- Monitoring real-time operating status for multiple metal detectors through the connective access to LAN.
- Interlocking the machine to various typed external devices through RS232C & 485 port.



## Auto-setting function of the inspection items

- Auto-setting the machine for a testing product with the most suitable values even for beginners not to operate the equipment properly.

## Setting function of a variety of items for convenient operation

- Up to 100 kinds of products are registered with each different setting value for convenient operation.

## Manageable Metal Detecting History

- Detection history by various classifications and periods (in a daily / weekly / monthly / period-specified way)
- Data on detection history accessibility by LCD screen, USB disk and Printer (Optional).

## Easy Software upgrade

- Easy software upgradability by USB and touch screen whenever the latest version is available

## Password Setup Function

- Setting up each three different passwords depending on each status (a user, an administrator and an engineer)

## Specification

Standard Specification		NMD530 2010	NMD530 2015	NMD530 2020	NMD530 2025	NMD530 2030	NMD530 2510	NMD530 2515	NMD530 2520	NMD530 2525	NMD530 2530	NMD530 3010	NMD530 3015	NMD530 3020	NMD530 3025	NMD530 3030	NMD530 3510	NMD530 3515	NMD530 3520	NMD530 3525	NMD530 3530
Tunnel Size	Width (TW)	200					250					300					350				
	Height (TH)	100	150	200	250	300	100	150	200	250	300	100	150	200	250	300	100	150	200	250	300
Passing Size	Width (PW)	150					200					250					300				
	Height (PH)	70	120	170	220	270	70	120	170	220	270	70	120	170	220	270	70	120	170	220	270
Estimated *1 Sensitivity	Ferrous	0.5	0.5	0.8	0.8	1.0	0.5	0.8	0.8	1.0	1.0	0.5	0.8	0.8	1.0	1.2	0.5	0.8	1.0	1.0	1.2
	SUS304	0.8	1.0	1.0	1.0	1.2	0.8	1.0	1.0	1.5	1.5	0.8	1.0	1.2	1.5	1.5	0.8	1.0	1.2	1.5	1.5
Conveyor Length (CL)		1,000 ~ 2,000mm																			
Conveyor Height (CH)		500~1,500mm (+50 & -20mm)																			
Conveyor Speed		Fixed (22M/Min.) & Variable (Max. 44M/Min.)																			
Standard Rejecting System		Belt Stops, Audible Alarm & Lamp (Auto Rejector available as option)																			
Preset Numbers		100 items																			
Outputs		Relay (5A) / 1A1B 2EA, DC24V SOL, AC220V 0.2A																			
Power Supply		Single Phase(110 to 220V) & Three Phase(220 to 380V and etc.), Free Cycle(50/60Hz) & Fuse(3A)																			
Operating Temperature		0°C to 50°C (advised to use the machine under the normal condition)																			

\*1 Results of when test balls, Fe and SUS 304 were set at the center of belt surface under the highest frequency. Detection sensitivity depends on product shape, installation and environmental conditions

Supplying detecting Head and control Box only is available



**External Output Printer Setup Function(Optional)**

- Additional option for installing an external output printer for detection history



**Selectable Auto Rejecting System Type of Conveyor Belts**

- Plastic Chain Modular Belt for oil or moisture resistance and no deformation or tension changes, impact and abrasion resistance.
- Poly Urethane Belt for contacting bulk foods (FDA accreditation)

**Selectable Various Rejecting System**

- Standard Rejector ( Belt Stops, Audible Alarm & Lamp )
- Optional Rejectors ( Flip Bar / Pusher on Belt / Pusher on Roller ) ( Air Blast / Dumper Chute ) ( Drop Flap / Slide Carrier )

\* Please refer to page #4 for more details about optional auto rejectors.

**Test Pieces (Sphere Type)**



(ø mm)

0.3	0.5	0.8	1.0	1.2	1.5	2.0	2.5	3.0
3.5	4.0	4.5	5.0	6.0	7.0	8.0	9.0	10

(ø mm)

0.5	0.8	1.0	1.2	1.5	2.0	2.5	3.0	3.5
4.0	4.5	5.0	6.0	7.0	8.0	9.0	10	

(ø mm)

0.5	0.8	1.0	1.2	1.5	2.0	2.5	3.0	3.5
4.0	4.5	5.0	6.0	7.0	8.0	9.0	10	

\* Certificate of Conformity for Test Pieces is available upon request

**Customizable Design**

- Extended / Inclined Conveyor
- Super Wide Head Width (Max. 2,000mm) & Head Height (Max. 1,000mm)

**Outputs**

> Relay (5A) / 1A1B 2EA, DC24V SOL, AC220V 0.2A

**Power Supply**

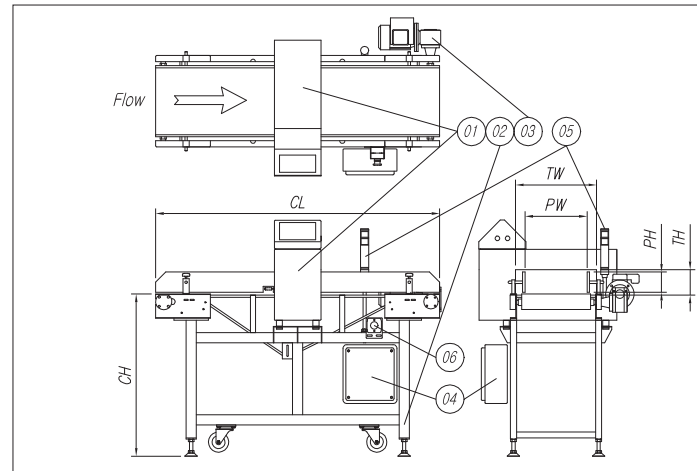
> Single Phase (110 to 220V) & Three Phase (220 to 380V and etc.,)  
 > Free Cycle (50/60Hz)  
 > Fuse (3A)

**Network**

> Ethernet Port (TCP/IP Connectivity and remote monitoring support)  
 > Serial Communication Port (RS-232C x 1 & RS485 x1)

**Operating Temperature**

> 0°C to 50°C (advised to use the machine under normal temperature)



No	Description	Material
1	Metal Detector Head	SUS304
2	Conveyor Frame	SUS304
3	Moter	.
4	Power Box	SUS304
5	Tower Lamp	.
6	Emergency Switch	.

NMD530 4010	NMD530 4015	NMD530 4020	NMD530 4025	NMD530 4030	NMD530 4510	NMD530 4515	NMD530 4520	NMD530 4525	NMD530 4530	NMD530 5010	NMD530 5015	NMD530 5020	NMD530 5025	NMD530 5030	NMD530 5510	NMD530 5515	NMD530 5520	NMD530 5525	NMD530 5530	NMD530 6010	NMD530 6015	NMD530 6020	NMD530 6025	NMD530 6030
400					450					500					550					600				
100	150	200	250	300	100	150	200	250	300	100	150	200	250	300	100	150	200	250	300	100	150	200	250	300
350					400					450					500					550				
70	120	170	220	270	70	120	170	220	270	70	120	170	220	270	70	120	170	220	270	70	120	170	220	270
0.8	0.8	1.0	1.0	1.5	0.8	0.8	1.0	1.2	1.5	0.8	0.8	1.0	1.2	1.5	0.8	0.8	1.0	1.5	1.5	0.8	0.8	1.2	1.5	1.5
1.0	1.2	1.5	1.5	2.0	1.0	1.2	1.5	1.5	2.0	1.0	1.2	1.5	1.5	2.0	1.0	1.2	1.5	2.0	2.0	1.0	1.2	1.5	2.0	2.0
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## Application

**General Food** (Instant Food, Cookie/Bread, Kimchi, Vegetable, Tofu and etc.)

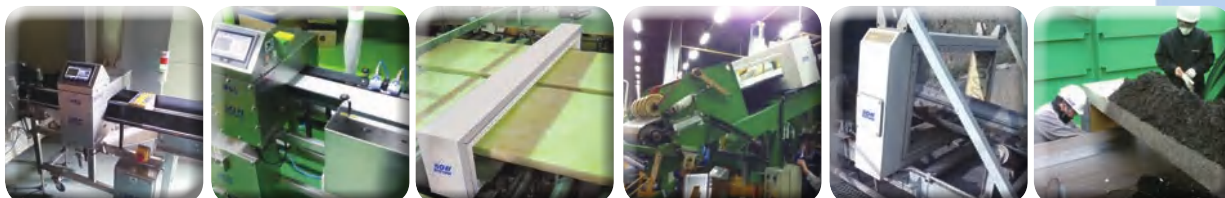


**Sea Food** (Frozen/Refrigerated Sea Food, Dried Fish and etc.)

**Meat** (Frozen/Refrigerated Meat, Other processed Meat and etc.)



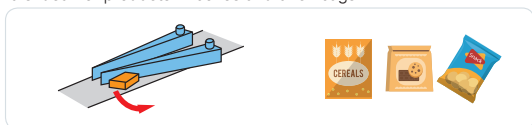
**General Industry** (Rubber, Timber, Plastic, Chemical Resin, Raw Material Recycling and etc.)



## Auto Rejectors Available as option

### Flip Bar

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



### Air Blast Type

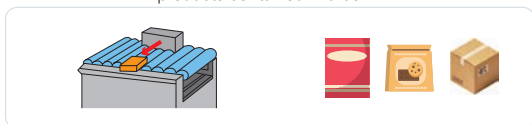
NG products are blown sideways off the line by a powerful air jet. It is ideal for small, lightweight packaged products at high speed.



### Pusher Type

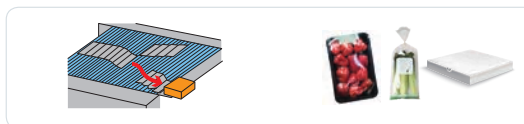
NG products are pushed off the line sideways by the action of a gate attached to an air cylinder. It is suitable for rejecting products in packages and thick bags.

\*Pusher on Belt : For relatively light weighted (Max 0.6 kg) products  
\*Pusher on Roller : For relatively heavy weighted (Max 30.0 kg) products contained in a box



### Slide Carriage 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 and open-topped containers (Cans & Jars).



### Drop Belt Type

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



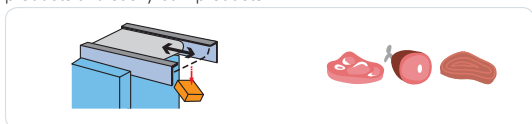
### Roadless Type

It is ideal for long shaped products.



### Retracting Conveyor Type

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



### Dumper Chute

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

