

## Metal detector

AEC500C Series digital intelligent conveyor belt metal detector can be used in food, pharmaceutical, chemical, textile, plastic, garment, toy paper-making, hygienic products, electronics, renewable resources industry etc, applying to detect broken needles, iron wires, metals (such as Ferrous; Copper; Brass; Aluminum; Stannum; Stainless steel etc.) that mixed with products, raw materials. Using metal detector can help relative corporations pass HACCP,GMP, FDA, QS, ISO9001 certificate.

### 1. AEC500C Series Digital Intelligent Conveyor Belt Metal Detector

#### LCD Screen:



#### Touch screen: (has counting function on detection quantity)



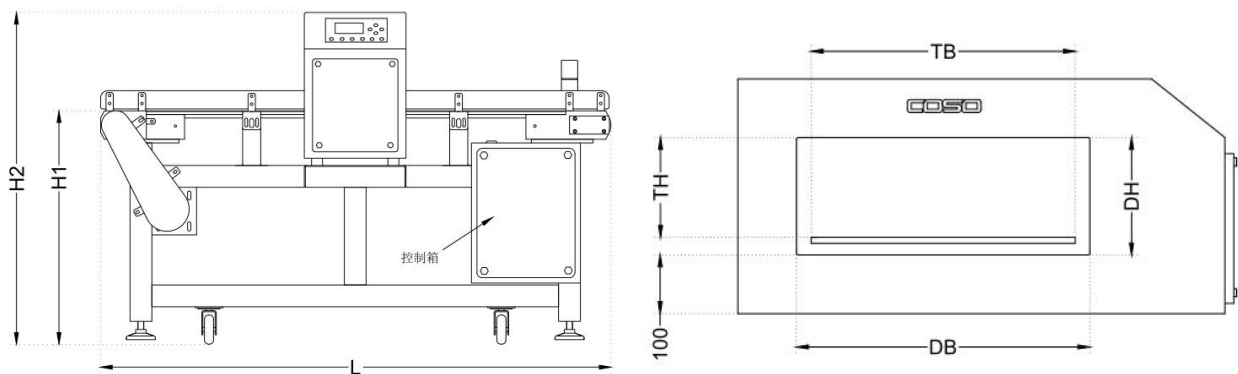
AEC500C Series digital intelligent metal detector is a new generation of intelligent metal detector adopted digital intelligent technology, which realizes full digitally and intelligently on metal detection. With excellent performances and easy operation to improve efficiency greatly.

**Product Features:**

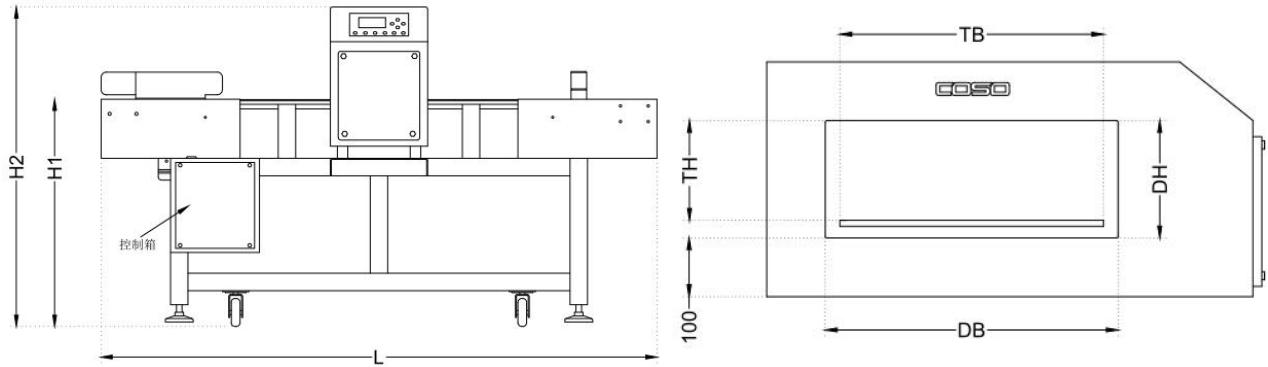
1. Operating system adopts highly human-oriented and intelligent design and has the function of one-bottom self-learning. The machine can set and store product parameters automatically and precisely when the products to be detected passing metal detector according to set procedure, no need to adjust by human and is easy to operate.
2. Detector is made by COSO unique materials and manufacturing techniques, possessing high sensitivity, strong ability for anti-interference, stable performances, and life span more than 10 years.
3. Having memory function for 100 kinds of products parameters; that is, metal detector can store 100 kinds of products parameters, and once the products parameters are set, no need to adjust again.
4. Metal detector can automatically detect faults when booting and has the function of prompt, which can effectively eliminate invalid detection.
5. The whole machine adopts modular design and installation, which benefits for assembly and disassembly, having advantages of convenient maintenance and low cost for maintenance.
6. Customization can be provided according to detecting products' sizes, weight and characteristics in order to achieve best detection results.
7. The automatic conveying system, reject system and control system can be customized according to production line's features, which can enhance production efficiency.
8. Customization for waterproof, dust-proof and explosion-proof needs can be provided according to the environment of production line in order to protect usage safety.

**Structure:**

- DB: Width of detector            H1: Height from conveyor belt to the ground  
DH: Height of detector        H2: Height of whole machine  
TB: Passing width                L: Length of conveyor belt  
TH: Passing height                W: Height of whole machine



For Lightweight Products



For Heavy-weight Products

**Specification (Provide customization service)**

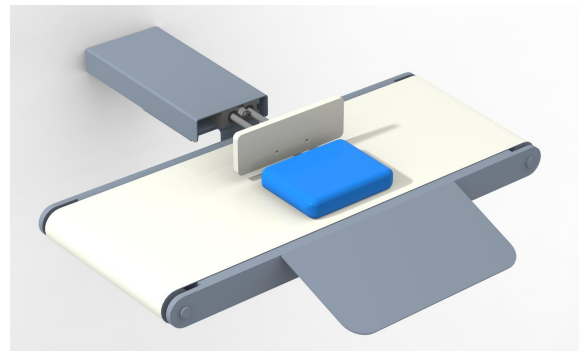
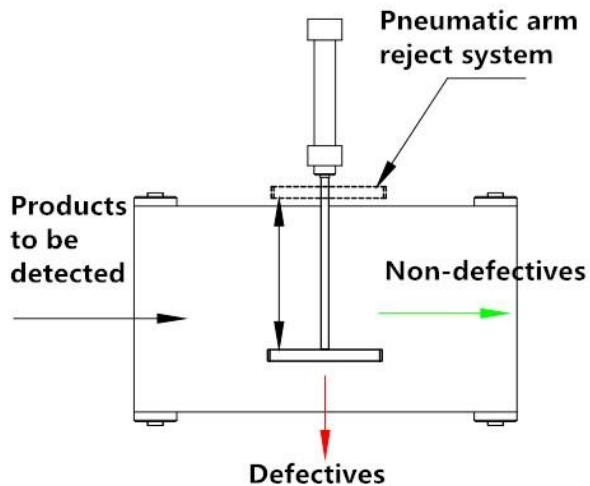
Model	Size of whole machine (mm)				Size of detector (mm)				sensitivity		Max Weight(kg)	Speed (m/s)	Power supply	Working Environment
	H1	H2	L	W	DB	TB	DH	TH	Fe (mm)	SUS (mm)				
3008	700	850	1200	650	300	250	80	50	0.8	1.5	0-25kg (can be customized)	0.25-0.6	AC220V ±10% 50-60Hz	-20°C~ 50°C Humidity below 90%
3010	700	870	1200	650	300	250	100	70	0.8	1.5				
3012	700	890	1200	650	300	250	120	90	0.8	1.5				
3015	700	920	1200	650	300	250	150	120	0.8	2.0				
4510	700	900	1400	750	450	400	100	70	1.0	2.0				
4512	700	920	1400	750	450	400	120	90	1.0	2.0				
4515	700	950	1400	750	450	400	150	120	1.0	2.0				
5010	700	900	1500	850	500	450	100	70	1.0	2.0				
5012	700	920	1500	850	500	450	120	90	1.0	2.0				
5015	700	950	1500	850	500	450	150	120	1.0	2.0				
5020	700	1000	1600	850	500	450	200	170	1.5	2.5				
5025	700	1050	1600	850	500	450	250	220	1.5	2.5				
5030	700	1100	1600	850	500	450	300	270	2.0	3.0				
6030	400	800	1800	950	600	550	300	270	2.5	3.5	25-100kg (can be customized)	0.25-0.6	AC380V ±10% 50-60Hz	0-40°C Humidity below 80%
6035	400	850	1800	950	600	550	350	320	3.0	4.0				
6040	400	900	2000	950	600	550	400	370	3.5	4.5				
6050	400	950	2000	950	600	550	500	470	4.0	5.5				

**Notes:**

1. All the sensitivity parameters above is on the basis of the test card detected on conveyor belt without carrying any products; while the actual sensitivity will be affected by the product's features and working environment.
2. Above technical parameters are some ordinary models, if you want to know more different technical parameters, please consult our sales;
3. Products will constantly upgrade; please refer to our newest technical parameters for changes on parameters.

## AEC500C Series Metal Detector with automatic rejection system

### 1. Metal Detector with Pneumatic Pusher Rejection System

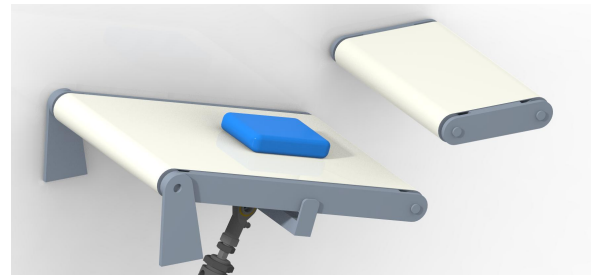
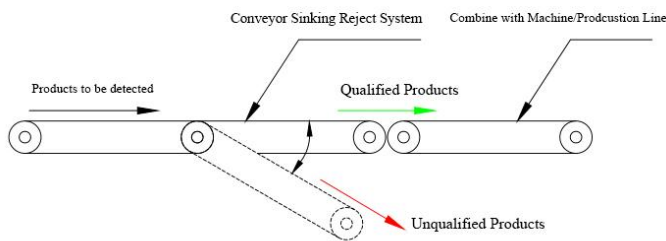


**Eliminating principle:** As shown above, the **green** arrow indicates the direction of non-defectives. The **red** arrow indicates the direction of defectives. The **black** arrow indicates moving route of removing device when detecting metal foreign bodies.

**Application:** It is suitable for box products, and the weight is less than 10kg. It is mainly used in food, pharmaceutical, chemical, toys, medical supplies and other industries online metal detection, such as a box of drinks and a box of biscuits etc.

**Product features:** The design of the pneumatic arm can be connected with the production line, which can realize the automatic on-line metal detection and the automatic elimination of the bad products.

## 2. Metal detector with sinking conveyor rejection system



### Principle for rejection system:

As picture shows, Green arrow → means moving direction for qualified products; Red arrow → shows the moving direction of unqualified products; Bi-directional arrow ↔ means the moving direction of reject system when detecting unqualified products containing metallic impurities.

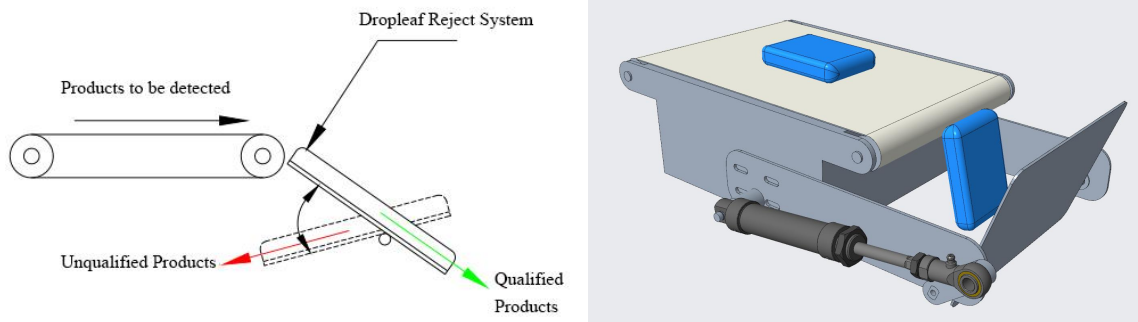
### Application:

Suitable for lightweight products; mainly used in bakery industry for online detection. Metal detector can be customized according to special requirements of production line's features. Suitable for cookies, paste, custard cake industry.

### Product Features:

Special design of small roller and sinking conveyor can realize seamless connection with production line, which is suitable for connection between middle and other production line. Also, it helps moving order eliminate influence from conveyor and rejector, which can realize full automation on online metal detection and rejection on unqualified products.

### 3. Metal detector with flap rejection system



#### Principle for rejection system:

As picture shows, Green arrow → means moving direction for qualified products; Red arrow → shows the falling direction of unqualified products; Bi-directional arrow ↔ means the moving direction of reject system when detecting unqualified products containing metallic impurities.

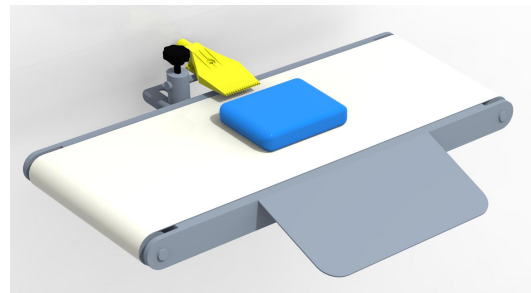
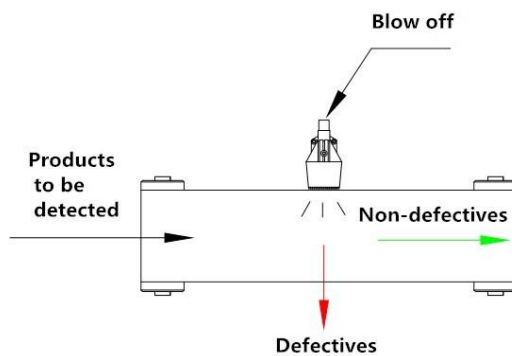
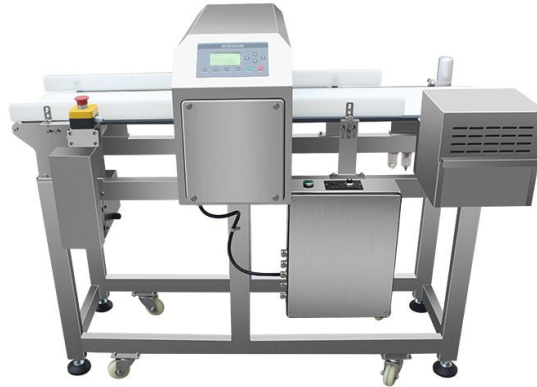
#### Application:

Suitable for bulk, lightweight and easy-falling products; mainly applied to food, pharmaceutical, toys industry etc for automatic online metal detection.

#### Product features:

Metal detector adopts air-operated flap reject system which can combine with production lines realizing full automation on online metal detection and automatic rejection on unqualified products.

#### 4. Metal detector with air blowing rejection system

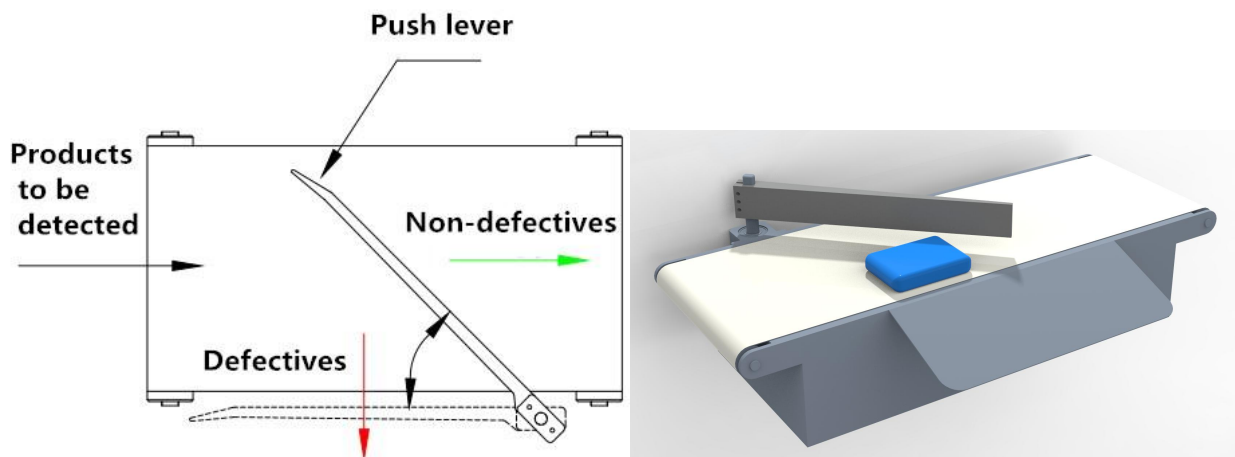


**Eliminating principle:** As shown above, the **green** arrow indicates the direction of non-defectives. The **red** arrow indicates the direction of defectives.

**Application:** It is suitable for the products with high speed and light weight. And it is mainly used in food, pharmaceutical, toys, hygienic products, health care products and other industries online metal detection.

**Product features:** The design of the pneumatic turnover plate can be connected with the production line, which can realize the automatic on-line metal detection and the automatic elimination of the bad products.

## 5. Metal Detector with Swing Arm Rejection System



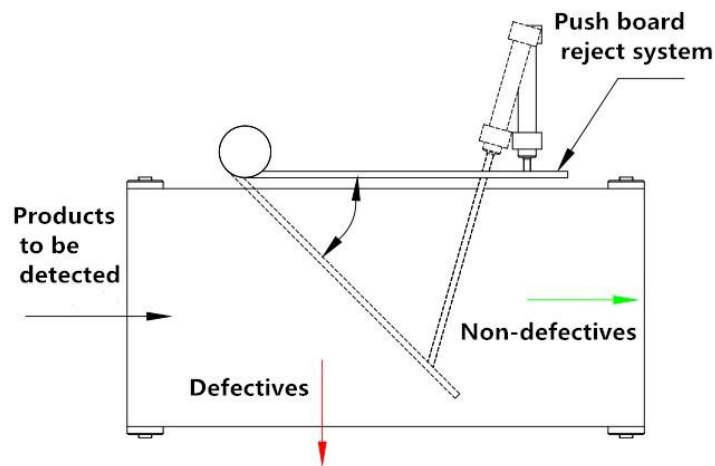
**Eliminating principle:** As shown above, the **green** arrow indicates the direction of non-defectives. The **red** arrow indicates the direction of defectives. The **bidirectional** arrow indicates moving route of removing device when detecting metal foreign bodies.

**Application:** It is suitable for boxed products, bagged products. There are some spaces when the products are being transported. And the weight of products are less than 5kg and the length is not exceeding 250mm. It is mainly used in food, pharmaceutical, toys, sanitary products and other industries of metal detection.

**Product features:** The design of the pneumatic push lever can be connected with the production line, which can realize the automatic on-line metal detection and the automatic elimination of the bad products.



## 6. Metal Detector with Pushing Board Rejection System



**Eliminating principle:** As shown above, the **green** arrow indicates the direction of non-defectives. The **red** arrow indicates the direction of defectives. The **black** arrow indicates moving route of removing device when detecting metal foreign bodies.

**Application:** It suitable for the whole bag, large package, large weight products and the weight is less than 50kg. It is mainly used in food, pharmaceutical, chemical, toys, medical supplies and other industries online metal detection. It can be customized according to the volume and weight of the products. Such as the whole bag of rice, the whole bag of flour.

**Product features:** The design of the pneumatic push board can be connected with the production line, which can realize the automatic on-line metal detection and the automatic elimination of the bad products.

**Customer's cases:**





Dongguan Coso Electronic Tech Co., Ltd

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Email: coso06@cosoar.com

Phone: +8613622681426

Metal Detector, Metal Separator, Check Weigher, X Ray Inspection System



## CE Certificate:

Attestation of compliance



## Verification of Compliance

Verification No.:	MK22120070-P01S02
Name and address of Applicant:	Dongguan Coso Electronic Tech Co., Ltd Building 3, No. 9, Yinkai West Road, Dongcheng District, Dongguan, Guangdong, China
Name and address of Manufacturer:	Dongguan Coso Electronic Tech Co., Ltd Building 3, No. 9, Yinkai West Road, Dongcheng District, Dongguan, Guangdong, China
Product name:	Metal Detector
Rated:	100-240V~, 50/60Hz, 120W
Product model(s):	AEC500C, AEC500A, AEC500B, AEC500D, SEC600, SEC1000, SEC1200
Product trademark:	N/A

This verification confirms that the product meets the requirements of the following standard.  
The conformity was demonstrated based on following standard(s) listed by European Commission as harmonized with MACHINE DIRECTIVE 2006/42/EC.

EN 60204-1:2018

The verification has been carried out in accordance with individual rules and conditions agreed with the applicant. Evaluation has been carried out in accordance with:

Test report(s) No.:	MK22120070-P01S02
Test conducted by:	TMC Testing Service Limited
Verification issue date:	December 27, 2022

**Notes:**

This verification refers to the above mentioned product and its conformity in regards of a above mentioned standard(s) was proven on test sample.  
This verification does not imply meeting all essential requirements, a assessment of the series-production or any other restricted Notified Bodies conformity assessment procedure appropriate for the product.  
This verification holder shall use this verification in connection to Verification of Compliance and technical data relevant for the product the verification was issued.

TMC Testing Service Limited  
Unit 8B, 4 / F, Lippo Sun Plaza, 28 Canton Road, Tsim Sha Tsui, Kowloon, Hong Kong



Lab Director  
Admire Xu





ISO 9001 Certificate



ISO 9001

# Quality Management System Certificate

Certificate No. : 04924Q02053R0S

We hereby certify that

**Dongguan Coso Electronic Tech Co., Ltd**

Unified Social Credit Code: 9144190078296863XL

Address: Room 101, Building 3, No.9, Yinkai West Road, Dongcheng District, Dongguan, Guangdong, China

by reason of its Quality Management System has been awarded this certificate for compliance with the standard **GB/T 19001-2016 / ISO 9001:2015**

Applies in the following area:

**Production and sales of metal detector, metal separator, check weigher, weight sorting machine; Sales of X-ray foreign object detection machine**

Initial date: 2024-12-31

Term of validity of this certificate: 2024-12-31 to 2027-12-30

The scope of this certificate only includes the premises listed in the certificate. If it involves administrative licensing pre-approval or mandatory certification, the scope of this certificate only covers products and services within the scope of the licensing qualification and the mandatory certification. During the validity period of the certificate, the certified organization must be subjected to regular supervision and review, and only if the review is positive can this certificate be validated. The related information of this certificate can be searched on the portal of Guangdong Quality Testing CTC Certification Co., Ltd. (<https://www.gtctc.org>) and the CNCA (<http://cncacn.org>), or by scanning the QR code below for inquiries.



WeChat Official Account



Certificate Query



中国认可  
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MANAGEMENT SYSTEM  
CNAS C049-M

*Guo Liudong*  
Chairman



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