

# Drum In Housing Separators

**Powerful magnetic drum separator can clear ferromagnetic and paramagnetic impurity realizing continuous and automatic iron unloading**



**EXPERT IN EFFICIENT MAGNETIC  
SEPARATION SOLUTIONS**

**Based on profound design capabilities, provide you with  
more reasonable magnetic separation solutions**

**Tianjin North Star Technology Co.,Ltd**

Address: Room 414-11, 4F, Block A, No.5, Lanyuan  
Road, Huayuan Industrial Park, Tianjin.

Tel: +86-022-87987163

E-Mail: [tjbeisu@163.com](mailto:tjbeisu@163.com)

Website: <http://tjbeisu.cn>

# Company Profile

Tianjin North Star Technology Co., Ltd. is a professional equipment manufacturer dedicated to the magnetic separation industry. Relying on the international leading magnetic separation and vibration conveying technology, it aims at designing and manufacturing high-performance equipment to provide the industry with high-performance and high-quality designed magnetic sorting, magnetic automation and vibration conveying equipment. With rich application experience in professional and technical fields, we can solve problem encountered in product processing, purification and quality review for enterprises.



## **Our mission**

Provide efficient and practical customized products through technical innovation

## **Company vision**

Become an authoritative supplier in the field of magnetic technology

## **Company strategy**

Continuously develop and design new products according to industry need

Adopt advanced professional technology, methods and materials

Continue to innovate and create various products that are user-friendly

Concentrate financial resources and the company's core resources for key projects

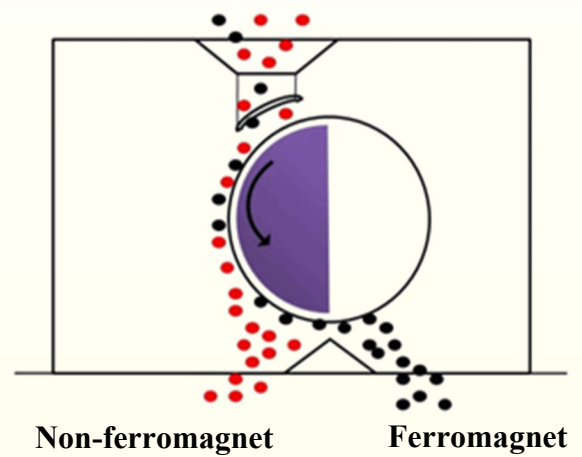
Experienced R&D technical team work together to create a better and safer world

Corporate organization structure oriented to common goals

# Drum In Housing Separators

Drum in housing separators have a widely application —always installed after free-fall chutes or a vibratory chute processing with powders (even fine powders), granulates, fibres and coarser product streams (non-sticky). Magnetic drum separator can continuously and automatically separate ferromagnetic materials such as iron and steel. When the material is uniformly fed to the drum by vibrating feeder, the magnetic poles can easily separate the weakly magnetic materials out, such as martensitic stainless steel and even paramagnetic particles, etc.

The drum magnetic separator can realize continuous and automatic iron unloading through a built-in permanent magnetic area with an included angle of  $180^\circ$  and outside rotating stainless steel shell. The drum brings the adsorbed ferromagnetic particles to its bottom and the scraper welded on drum scrapes the iron filings away from the magnetic field area later. Then fallen magnetic and non-magnetic materials are collected separately.



## Design principle

When material flows down the drum separator, because of the magnetic adsorption, the ferromagnet's running track is separated from the non-ferromagnet thereby realizing automatic separation of each other.

## Characteristics and advantages

- Absorbable pure iron particles:  $>50 \mu\text{m}$
- Absorbs weak magnetic particles:  $>0.1 \text{ mm}$
- Maximum particles can be processed:  $>10\text{mm}$
- Multiple magnetic field strength can be optional
- Field strength on drum surface can reach  $10500\text{GS}$
- Maximum magnetic field depth can be more than  $150\text{mm}$

## Application industry

Such as foundry, glass, grain, pharmaceutical, food, plastic, chemical fertilizer, mining, ceramics, quartz, resource recovery, refractory materials, etc.



# Drum In Housing Separators

## Drum magnetic separator category

Divided into ferrite or rare earth magnetic system in the light of magnet category  
Standard field strengths are 1500GS, 1800GS,3000GS, 6000GS, 9000GS

Customized design field strengths and magnetic poles direction according to needs

Customized design radial or axial magnetic poles according to applying condition

The box structure of magnetic drum configuration can be open or box structure

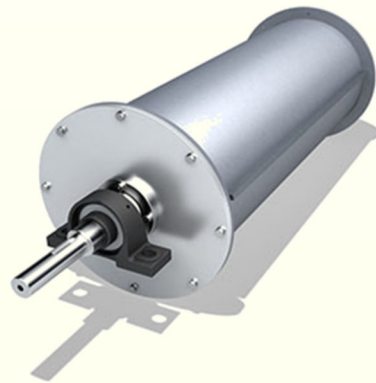
Drum configuration quantity can be single drum, double drum and multi drum design



---

**MAGNETIC DRUM**

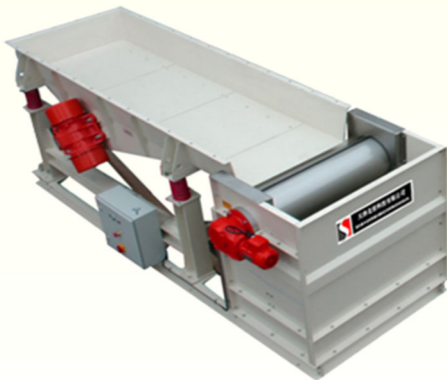
---



---

**MAGNETIC DRUM**

---



---

**OPEN MAGNETIC DRUM SEPARATOR**

---



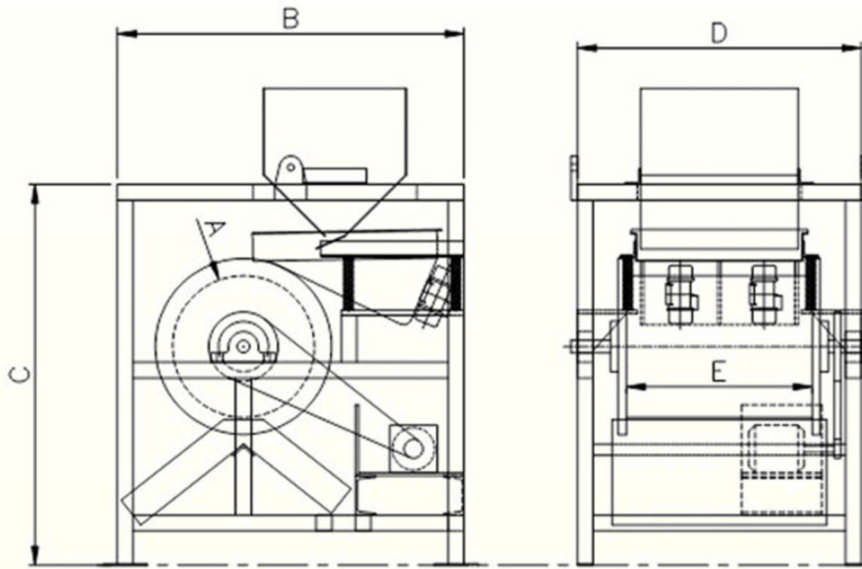
---

**MAGNETIC DRUM SEPARATOR IN HOUSING**

---

# Drum In Housing Separators

## Drum magnetic separator standard dimension



Note: all the sizes can be customized.

Magnetic drum separator technical specification									
Diameter A (mm)	Width E (mm)	C	D	B	Diameter A (mm)	Width E(mm)	C	D	B
300	300	883	405	559	375	300	1003	405	737
	350	883	455	559		350	1003	455	737
	400	883	505	559		400	1003	505	737
	450	883	555	559		450	1003	555	737
	500	883	605	559		500	1003	605	737
	600	883	705	559		600	1003	705	737
	750	883	855	559		750	1003	855	737
	900	883	1005	559		900	1003	1005	737
	1050	883	1155	559		1050	1003	1155	737
	1200	883	1305	559		1200	1003	1305	737
450	300	1149	405	711	600	450	1500	555	965
	350	1149	455	711		500	1500	605	965
	400	1149	505	711		600	1500	705	965
	450	1149	555	711		750	1500	855	965
	500	1149	605	711		900	1500	1005	965
	600	1149	705	711		1050	1500	1155	965
	750	1149	855	711		1200	1500	1305	965
	900	1149	1005	711					
	1050	1149	1155	711					
	1200	1149	1305	711					