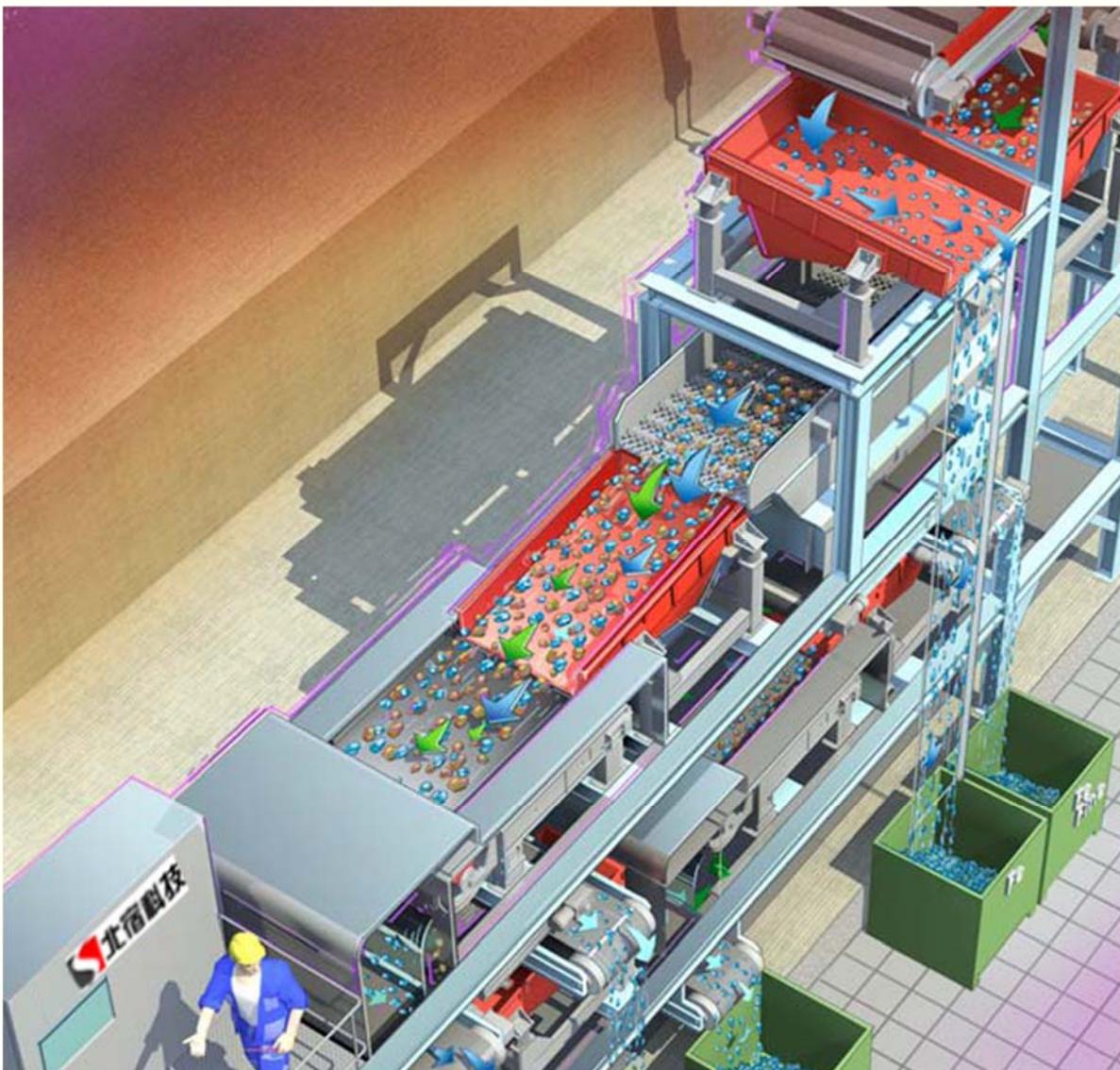


# Magnetic Roller Separator

**Powerfully purify material, adsorb iron and paramagnetic iron impurities in material  
Bring new opportunity for high-standard material purification and decontamination**



**HIGH EFFICIENCY AND HIGH QUALITY  
MAGNETIC SEPARATION SOLUTIONS**

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

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

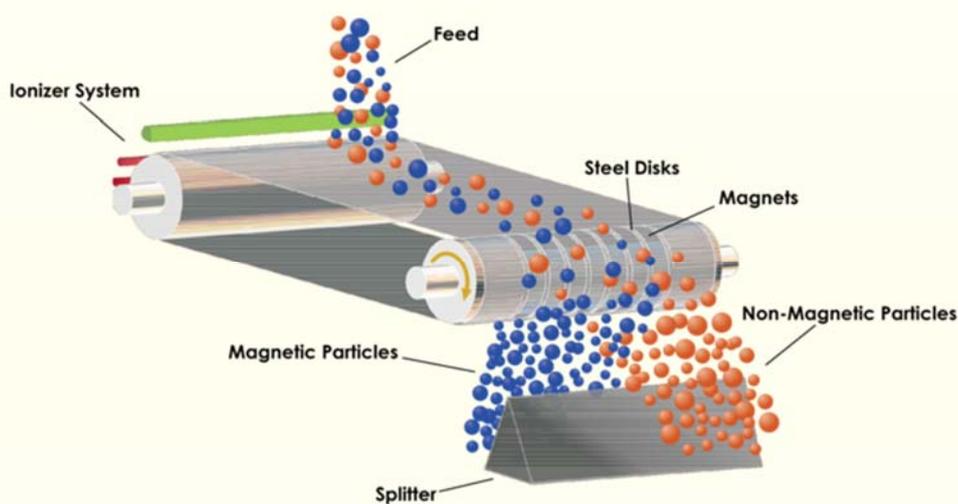
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# Permanent Magnetic Roller Separator

Powerful magnetic roller separator is a kind of ultra powerful, NdFeB, permanent-high-gradient magnetic separator, which is widely applied in production line of raw material and completed products for adsorbing weak-magnetic and magnetic particles. Before the material passes over the roller separator, it is necessary to filter out as much ferromagnetic impurities as possible to achieve the best iron removal effect. To get better effect, the material usually needs to be fed to the magnetic roller surface through the vibration feeder chute.

## Design principle

Magnetic roller separator evenly convey the material to rubber belt rounded on magnetic roller by vibration feeder chute. Because of magnetic force, the magnetic field attracts and holds ferrous particles firmly to the drum shell. Whereas the non-magnetic material is thrown forward by gravity and inertia, thereby achieving the iron automatic separation.



## Characteristics and advantages

Absorbable weak-magnetic particles:  $>0.1\text{mm}$

Absorbs ferro-magnetic particles:  $>0.20\ \mu\text{m}$

Maximum particles can be processed:  $10\text{mm}$

Field strength on surface can reach  $14000\ \text{Gauss}$

Automatically iron unloading without shutting down

Commonly applying for high purity of refinement

Standard product diameters are:  $100\text{mm}$ ,  $150\text{mm}$  and  $300\text{mm}$

Maximum width of magnetic roller can reach  $1500\text{mm}$

Overall stainless steel structure, single or multilayer magnetic roller can be optional



# Permanent Magnetic Roller Separator

## Optional configuration

A variety of magnetic circuit and temperature tolerance criteria are available

Surface treatment can be sandblast or polish

Optional sealed dust cover and transparent observation window

Optional single, double, and triple stage machines

## Application industry

Coarse-grained weak magnetic minerals (tin-iron ore, manganese ore, etc.) coarse-grained tailings or selection and purification;

Non-metallic minerals (andalusite, sillimanite, kyanite, garnet, feldspar, quartz, rutile, zircon, corundum, diamond, etc.)

Refined processing of raw materials and products

Remove weak magnetic impurities in various abrasive products, catalysts and other materials;

## Material handling

Industrial minerals/ores, such as silica sand, feldspar, etc.

Abrasives and refractory materials

Food, medicine, chemical industry

Engineering plastics

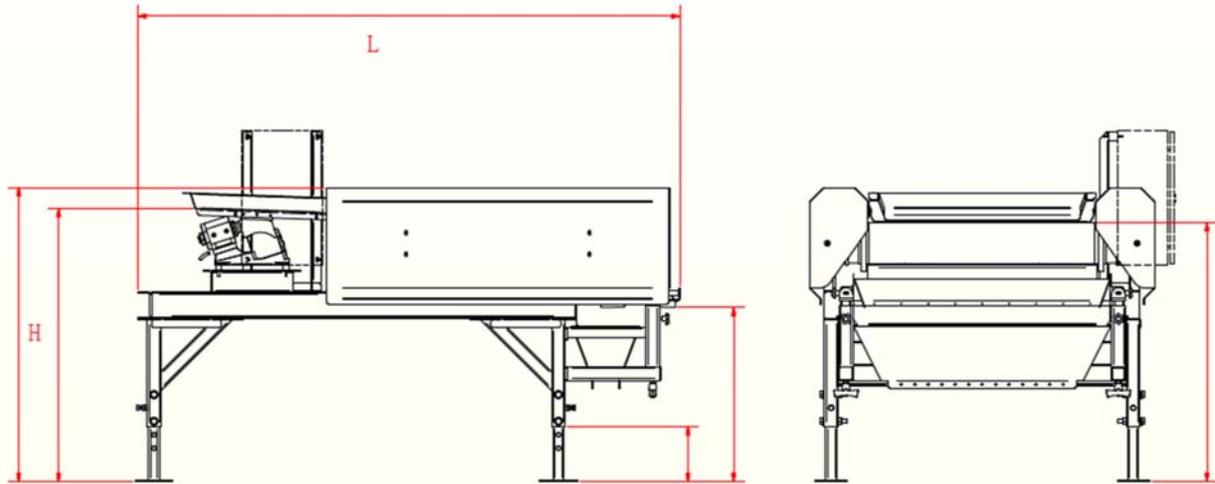
Recycled materials

Metal and special material processing, etc.



# Permanent Magnetic Roller Separator

## Permanent magnetic roller separator standard dimension



Specification	Roller Ø(mm)	Roller Length(mm)	Height(mm)	Weight(kg)
DR100-250-1	∅ 100	250	1272	240
DR100-375-1	∅ 100	375	1272	300
DR100-500-1	∅ 100	500	1272	330
DR100-750-1	∅ 100	750	1272	410
DR100-1000-1	∅ 100	1000	1272	450
DR100-1500-1	∅ 100	1500	1272	520
DR150-250-1	∅ 150	250	1576	480
DR150-375-1	∅ 150	375	1576	560
DR150-500-1	∅ 150	500	1576	650
DR150-750-1	∅ 150	750	1576	792
DR150-1500-1	∅ 150	1000	1576	860
DR150-1500-1	∅ 150	1500	1576	1090
DR300-250-1	∅ 300	250	2121	720
DR300-375-1	∅ 300	375	2121	830
DR300-500-1	∅ 300	500	2121	970
DR300-750-1	∅ 300	750	2121	1180
DR300-3000-1	∅ 300	1000	2121	1270
DR300-3000-1	∅ 300	1500	2121	1770