

## rotary sample divider with internal cleaning function

Rotary sample divider is a combination of automation technology and precision mechanical design of high-efficiency reduction equipment, specially developed for the equal proportion reduction of granular materials.

### Rotary Sample Divider

The rotary sample divider is designed and manufactured in strict compliance with the national standard GB 474 Coal Sample Preparation Method, aiming to improve the accuracy and repeatability of sample preparation. The equipment is suitable for coal, ore, coke, chemical products, building materials and other granular samples of the reduction work, is an important auxiliary equipment for all kinds of laboratories and industrial testing site.

### Features

1. Intelligent rotary sorting system: through the motor-driven rotary disk, to achieve continuous and uniform automatic reduction, to avoid human error.
2. High-frequency vibration feeding: equipped with precision vibrator, adjustable amplitude, to ensure the uniformity and fluidity of the material in the whole feeding process.
3. Adjustable speed reduction disk: the rotation speed can be set flexibly to adapt to different particle size, density or fluidity of the material.



4. Reasonable sample receiving design: the sample receiving container is compactly arranged and adopts directional clamping method, which is stable and reliable, and the sample collection is highly efficient.
5. Convenient cleaning structure: the internal space design is reasonable, can be quickly opened for maintenance, convenient for thorough cleaning to avoid sample contamination.
6. Excellent sealing and dust removal interface: shell fully closed design, reduce dust leakage, supporting dust removal port, can be connected to the negative pressure dust removal system, enhance the safety of the working environment.

### **Advantages**

1. High data reliability: through the automated shrinkage process, to ensure sample representativeness, in line with national standards of accuracy requirements.
2. Significantly reduce human error: compared with the traditional manual four-part method, automatic rotary reduction greatly improves the reduction efficiency and consistency.
3. Convenient operation, simple maintenance: modular structure facilitates the operator to get started quickly, daily maintenance is convenient and quick.
4. Environmentally friendly design: reduce the operation of the dust escape, adapt to the modern laboratory environmental requirements and safety production norms.
5. Adaptable: applicable to a variety of density, particle size, moisture content of different granular materials, covering a number of industry testing needs.

## **Working Principle**

1. Uniform feeding: through the electromagnetic vibrator will be uniformly sent to the sample shrinkage area, to avoid large particles and small particles layering or blocking phenomenon.
2. Rotary reduction: the material falls to the rotating reduction plate, under the action of centrifugal force and gravity is uniformly thrown to each sub-sample channel, to achieve equal proportion distribution.
3. Sample collection: each sample channel is equipped with a sample container, according to the preset ratio of automatic collection of samples, easy to use for subsequent analysis.

## **Application Areas**

1. Coal industry: used in the standard sample preparation of power coal, coking coal, etc..
2. Mineral resources sampling: iron ore, copper ore, manganese ore, bauxite and other materials, sample precision reduction.
3. Metallurgy and iron and steel enterprises: for sintered ore, pelletized ore, coke and other processes of raw materials or semi-finished products in the pre-test sample processing.
4. Building materials field: suitable for limestone, cement clinker, quartz sand and other materials for sample making needs.
5. Chemical and new materials: suitable for sample reduction of catalysts, plastic granules, chemical powders and other granular products.

6. Research laboratories and third-party testing organizations: as a standard sample pretreatment equipment for sample reduction before experimental analysis.

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<b>Model</b>	<b>SD400M</b>	<b>SD500M</b>
Particle size for reduction	≤3 to 13mm	≤6 to 25mm
Reduction ratio	1/8 to 1/2(adjustable)	
Feed hopper capacity	20L	50L
Volume of sample bucket	2.5L	8L
Number of sample buckets	8	8
Production rate	600 to 1200kg per hour	1200 to 1800kg per hour
Motor power	0.2kw	0.2kw
Power supply	220Vac, 50Hz	220Vac, 50Hz
Weight	150kg	280kg

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<b>Model</b>	<b>SD400M</b>	<b>SD500M</b>
Dimensions	1000x600x950mm	1230x640x1200mm