

## **automatic feeding mixing and splitting machine with rotation**

The automatic feeding mixing and splitting machine is developed according to a number of national standards such as GB/T19494, GB474, etc. It is dedicated to realizing the automated reduction and uniform mixing of specimens.

### **Automatic Feeding Mixing and Splitting Machine**

Automatic feeding mixing and splitting machine integrates automatic feeding, mixing and reducing multiple functions, which improves the efficiency and accuracy of sample making, and is widely used in coal, electric power, metallurgy, building materials and scientific research and testing fields.

#### **Main Features**

1. Automatic feeding system: equipped with automatic lifting device, it can continuously and stably feed the samples into the mixing chamber, reducing manual operation and labor intensity.
2. Timing mixing function: the mixing process can be preset time, to ensure that the material is fully and evenly mixed, to avoid sample stratification or segregation.
3. Small belt conveyor: feed the material uniformly, avoid the stratification caused by the difference of material particle size, ensure the representativeness of the reduced sample.



4. High precision rotary reduction: adopts rotary reduction mechanism, according to the standard requirements of accurate sample separation, to ensure the uniformity and accuracy of the sample.
5. Safety protection design: the mixing bin cover is equipped with power failure protection, and the sampling barrel is equipped with a hand brake device to ensure safe and reliable operation.
6. Convenient operation: accurate positioning of the sampling barrel, easy to disassemble, maintenance and cleaning fast.

### **Advantages**

1. High degree of automation: reduces the involvement of manual labor, improves work efficiency and sample accuracy.
2. Environmental protection and safety: closed design effectively prevents dust leakage, protects the operating environment and staff health.
3. Excellent precision of reduction: It meets many national standards to ensure the scientific and reliable results of sample separation.
4. Strong adaptability: not only suitable for coal, but also can efficiently handle a variety of ores and particles of chemical materials.
5. Compact structure, easy maintenance: save space and easy to daily cleaning and maintenance, reduce long-term use of costs.

## **Working Principle**

The automatic feeding mixing and reducing machine automatically feeds the sample into the mixing bin through the belt conveyor, and the materials in the mixing bin are fully stirred through the rotary movement of the mechanical structure to ensure that the materials with different particle sizes and densities are fully mixed. Subsequently, the sample enters the rotary reduction mechanism, relying on the precise control of the caliber of the sample and the principle of rotary division, the sample will be evenly mixed into a number of sub-samples in equal proportion, to ensure the representativeness of the sample. The equipment is equipped with an intelligent timing control system to realize automatic operation, reduce human error and ensure the accuracy and stability of the test data.

## **Application Areas**

1. Coal industry: sampling, sample making and quality testing of coal samples.
2. Metallurgical industry: iron ore, sintered ore, pelletized ore and other mineral sample preparation.
3. Building materials industry: a variety of particles of building materials sample mixing and reduction.
4. Chemical industry: chemical particles and powder uniform mixing and precision sampling.
5. Scientific research institutes and third-party testing organizations: to provide high-precision sample preparation for scientific research analysis and quality testing.
6. Electric power industry: automatic preparation of coal samples for thermal power plants to improve testing efficiency and accuracy.

<b>Model</b>	<b>T150B</b>
Particle size for reduction	≤6 to 25mm
Reduction ratio	1/8 to 1/2(adjustable)
Lifting hopper capacity	80L
Mixed silo capacity	120L
Volume of sample bucket	15L
Number of sample buckets	8
Production rate	1000kg per hour
Motor power	1.1kw+1.5kw+0.55kw+1.1kw
Power supply	Three phase 380Vac
Weight	550kg
Dimensions	2300x820x2000mm