stainless steel sample splitter with fully sealed design

Stainless steel sample splitter is a kind of experimental equipment for uniform reduction of granular samples, which is mainly used in the pre-sampling process of bulk solid samples, such as coal, ores and chemical raw materials.

Stainless Steel Sample Splitter

This sample splitter has a compact structure and is made of all stainless steel, which has good corrosion and abrasion resistance and is suitable for long-term use in high humidity and dusty environments.

Its design is based on the national standard GB474 “Preparation of coal samples” and other related specifications, to meet the strict requirements of uniformity and representativeness in the sample preparation process.

Main Features

1. All stainless steel structure: with corrosion resistance, easy to clean, no pollution and other advantages, to ensure that the sample is not subject to secondary pollution.
2. High inclination slot design: the angle of inclination of each slot is greater than or equal to 60 degrees, to ensure that the material slides down quickly and does not block the material.

3. Multiple sets of grooves arranged side by side: the material can be automatically shunted, shrinking more evenly.
4. Totally closed structure: prevent the sample from splashing or external pollution, enhance the safety of the laboratory.
5. Easy to operate and clean: parts can be quickly disassembled, material replacement or cleaning is very convenient.

Core Advantages

1. High precision reduction: can ensure the representativeness of the sample, reduction error control within the national standards.
2. Efficiency enhancement is obvious: compared with manual reduction, greatly improve the speed and consistency of sample making.
3. Adaptable: applicable to different particle size, humidity or density of granular materials.
4. Environmental health: dust-free closed design, in line with modern laboratory and testing center health standards.

Working Principle of Stainless Steel Sample Splitter

The material is poured in from the inlet and falls down freely by gravity, and is automatically divided into streams in a number of juxtaposed V-type or trapezoidal grooves. Representative samples can be extracted from the corresponding sample collector after each indentation. Due to the reasonable design of the angle of each groove, the material will not pile up or sliding deviation in the diversion process, so as to achieve the purpose of “equal probability of reduction”.

Application Areas

1. Coal industry: raw coal sample reduction, commercial coal testing and sampling.
2. Metallurgical mining industry: iron ore, manganese ore, copper ore and other metal ore sample preparation.
3. Chemical industry: sample extraction of particulate chemicals.
4. Third-party testing organizations: standard sample preparation.
5. Research institutes and universities: materials experiments, powder research, engineering analysis and other basic sample processing links.

Although this type of equipment is simple in structure, it plays an irreplaceable role in improving detection accuracy and sample preparation efficiency, and is one of the indispensable basic tools in laboratories, testing stations and laboratories.

stainless steel sample splitter with fully sealed design

Model	Particle size for reduction	Groove width	Number of grooves
SN1	≤13mm	39mm	16 个
SN2	≤6mm	18mm	18 个
SN3	≤3mm	9mm	24 个
SN4	≤1.25mm	5mm	30 个