

ULTRAFINE POWDER SIEVING MACHINE WITH BI-DIRECTIONAL AIRFLOW

ABSTRACT

An ultrafine powder sieving machine with bi-directional airflow. A sieving cylinder (2) having a downward opening is disposed at a middle portion of an inner cavity of a machine case (1). A cylinder port of the sieving cylinder (2) is joined to an upper opening of a funnel (3). An upper negative pressure chamber (4) is in communication with an external draft inducing fan (5). A U-shaped rotary gas spraying pipe formed by a horizontal pipe (6) and a vertical pipe (7) is disposed between the sieving cylinder (2) and the machine case (1). An air input port of a blowing pipe (9) is in communication with a blowing port of an external blower (11). A feeding pipe (12) is disposed in the sieving cylinder (2). A buffering umbrella (13) is disposed above a discharging port of the feeding pipe (12). The phenomena of blocked sieving holes incurred by blocks of accumulated light and small micron-scale materials on the sieving screen are prevented, so that large-scale industrial production can be applied to sieving of ultrafine powders greater than 500 mesh.

Fig. 1