

HIGH-EFFICIENCY DYNAMIC SLURRY-LIQUID-SEPARATING FILTRATION APPARATUS AND FILTRATION METHOD THEREFOR

ABSTRACT

A high-efficiency dynamic slurry-liquid-separating filtration apparatus and a filtration method therefor. The filtration apparatus comprises a filter cylinder body (1), a filter pipe (2a) and a filter core on the filter pipe (2a) arranged within the filter cylinder body (1), a material inlet (3) on the filter cylinder body (1), a solid residue outlet (4) provided at the bottom part of the filter cylinder body (1), and a filtrate outlet (5) provided at the mid-bottom part of the filter cylinder body (1), where the filter core is multiple filter plates (2b) connected with the filter pipe (2a), where the filter plates (2b) are perpendicular to the longitudinal axis of the filter cylinder body (1), and where the upper end of the filter pipe (2a) is connected to a rotary shaft of an inverter motor (7). The filtration method comprises: preheating the filtration apparatus; after filtering for a period of time, adjusting the rotational speed of the inverter motor (7), thus removing a thin layer of filter residue cake on the filter plates (2b).

Fig. 1