Title (en)

METHOD FOR SINK AND FLOAT SEPARATION OF FINE GRAINED MINERAL RAW MATERIALS

Title (de)

VERFAHREN ZUR SINK-SCHWIMMSCHEIDUNG FEINKÖRNIGER MINERALISCHER ROHSTOFFE

Title (fr)

PROCEDE DE SEPARATION DE MATIERES BRUTES MINERALES A GRAINS FINS PAR MILIEU DENSE

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Application

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Abstract (en)

[origin: WO02078850A2] The invention relates to a device for the sink and float separation of mineral raw materials, particularly coal, according to density by means of a liquid, particularly a dense medium. The device comprises a separating container (1) with a cylinder (2) arranged in a rotatable manner therein for extracting the sunken items. The separating container comprises inlets (6; 10, 11) for the liquid and for the raw material which is to be separated, in addition to at least one outlet (12, 13) for the liquid, and one overflow (13) for separating the floating items. The inlets and outlets (10, 11; 12, 13) are arranged in a parallel position with respect to the axis of rotation of the cylinder (2). According to the invention, at least two respective inlets and outlets (10; 11; 12, 13) are provided for the liquid, being arranged, respectively, opposite each other in pairs on a specific height. At least one inlet and one outlet (10; 13) and the overflow (13) are arranged on the same levels as the liquid and at least one pair of inlets and outlets (11, 12) are disposed directly above the pockets of the sunken items (3) which are distributed over the periphery of the outer surface of the drum. The invention also relates to a corresponding method for the sink and float separation of mineral raw materials.

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