

ECLA**EUROPEAN CLASSIFICATION****B03B**

SEPARATING SOLID MATERIALS USING LIQUIDS OR USING PNEUMATIC TABLES OR JIGS (removing fluids from solids B01D; magnetic or electrostatic separation of solid materials from solid materials or fluids, separation by high voltage electric fields B03C; flotation differential sedimentation B03D; separating by dry methods B07; screening or sifting B07B; by picking B07C; separating peculiar to particular materials and provided for in other single classes, see the relevant classes) [C9602]

B03B1/00

Conditioning for facilitating separation by altering physical properties of the matter to be treated (pre-treatment of ores in general C22B) [N: Pretreatment prior to magnetic separation B03C1/00]

B03B1/02

- . Preparatory heating

B03B1/04

- . by additives

B03B1/06

- . by varying ambient atmospheric pressure

B03B4/00

Separating by pneumatic tables or by pneumatic jigs (sink-float separation using dry heavy media B03B5/46)

[N: **Note**

[C9602]Group B03B4/00G takes precedence over groups B03B4/02 to B03B4/06B]

B03B4/00G

- . [N: the currents being pulsating, e.g. pneumatic jigs; combination of continuous and pulsating currents]

B03B4/02

- . using swinging or shaking tables [N9602]

B03B4/04

- . using rotary tables or tables formed by travelling belts (separating solids from solids using gas currents and revolving drums B07B4/06) [N9602]

B03B4/06

- . using fixed and inclined tables; [N: using stationary pneumatic tables, e.g. fluidised beds] [N9602]

B03B4/06B

- . . [N: having inclined portions] [N9602]

B03B5/00

Washing granular, powdered or lumpy materials; Wet separating (separating by pneumatic tables or by pneumatic jigs B03B4/00)

B03B5/02

- . using shaken, pulsated or stirred beds as the principal means of separation (B03B5/28, B03B5/48 take precedence)

B03B5/04

- . . on shaking tables (on vanners B03B5/08)

B03B5/06

- . . . Constructional details of shaking tables, e.g. riffling

B03B5/08

- . . on vanners

- B03B5/10 . . . on jigs
- B03B5/12 using pulses generated mechanically in fluid
- B03B5/14 Plunger jigs
- B03B5/16 Diaphragm jigs
- B03B5/18 Moving-sieve jigs
- B03B5/20 using pulses generated by air injection
- B03B5/22 using pulses generated by liquid injection
- B03B5/24 Constructional details of jigs, e.g. pulse control devices
- B03B5/26 . . . in sluices

- B03B5/28 . . by sink-float separation
- B03B5/30 . . . using heavy liquids or suspensions
- B03B5/32 using centrifugal force ([centrifuges B04B](#); [cyclones B04C](#))
- B03B5/34 Applications of hydrocyclones
- B03B5/36 Devices therefor, other than using centrifugal force ([jigs B03B5/10](#))
- B03B5/38 of conical receptacle type
- B03B5/40 of trough type
- B03B5/42 of drum of lifting wheel type
- B03B5/44 . . . Application of particular media therefor
- B03B5/44B [N: composition of heavy media]
- B03B5/44B2 [N: composition of dry heavy media]
- B03B5/44C [N: recovery of heavy media]
- B03B5/46 . . . using dry heavy media; Devices therefor

- B03B5/48 . . by mechanical classifiers ([sink-float separation aspects B03B5/28](#))
- B03B5/50 . . . Rake classifiers
- B03B5/52 . . . Spiral classifiers
- B03B5/54 . . . Drag classifiers
- B03B5/56 . . . Drum classifiers
- B03B5/58 . . . Bowl classifiers

- B03B5/60 . . by non-mechanical classifiers, e.g. slime tanks ([using shaken, pulsated or stirred beds as the principal means of separation B03B5/02](#); [hydraulic classifiers B03B5/62](#); [water impulse classifiers B03B5/68](#))

- B03B5/62 . . by hydraulic classifiers, e.g. of launder, tank, spiral or helical chute concentrator type [C9602]
- B03B5/62B . . . [N: Upward current classifiers]
- B03B5/62C . . . [N: Helical separators]
- B03B5/64 . . . of the free settling type
- B03B5/66 . . . of the hindered settling type

- B03B5/68 . . by water impulse ([shaking tables B03B5/04](#); [jigs B03B5/10](#); [hydraulic classifiers B03B5/62](#))
- B03B5/70 . . . on tables or strakes

- B03B5/72 . . . which are movable
- B03B5/74 Revolving tables

- B03B7/00** **Combinations of wet processes or apparatus with other processes or apparatus, e.g. for dressing ores or garbage**

- B03B9/00** **General arrangement of separating plant, e.g. flow sheets**

- B03B9/00B . [N: specially adapted for coal]
- B03B9/02 . specially adapted for oil-sand, oil-chalk, oil-shales, ozokerite, bitumen, or the like
- B03B9/04 . specially adapted for furnace residues, smeltings, or foundry slags
- B03B9/06 . specially adapted for refuse
- B03B9/06D . . [N: the refuse being industrial]
- B03B9/06D1 . . . [N: the refuse being glass]
- B03B9/06D2 . . . [N: the refuse being concrete slurry]
- B03B9/06D3 . . . [N: the refuse being building rubble]

- B03B11/00** **Feed or discharge devices integral with washing or wet-separating equipment**
(filling or emptying devices per se [B65G65/30](#))

- B03B13/00** **Control arrangements specially adapted for wet-separating apparatus or for dressing plant, using physical effects** (detecting, measuring, or analysing devices [G01](#); control devices in general [G05](#))

- B03B13/00B . [N: Methods or arrangements for controlling the physical properties of heavy media (in relation with groups [B03B5/30](#) to [B03B5/46](#)), e.g. density, concentration, viscosity]
- B03B13/02 . using optical effects [\[C9602\]](#)
- B03B13/04 . using electrical or electromagnetic effects
- B03B13/06 . using absorption or reflection of radioactive emanation [\[C9602\]](#)