

SECTION B — PERFORMING OPERATIONS; TRANSPORTING

B03 SEPARATION OF SOLID MATERIALS USING LIQUIDS OR USING PNEUMATIC TABLES OR JIGS; MAGNETIC OR ELECTROSTATIC SEPARATION OF SOLID MATERIALS FROM SOLID MATERIALS OR FLUIDS; SEPARATION BY HIGH-VOLTAGE ELECTRIC FIELDS

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)

Subclass index

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| PRETREATMENT..... | 1/00 |
| WASHING, WET SEPARATING, SEPARATING BY PNEUMATIC JIGS; FEEDING AND DISCHARGING PRODUCTS TREATED THEREBY..... | 4/00, 5/00, 11/00 |
| COMBINATIONS OF PROCESSES OR APPARATUS..... | 7/00 |
| ARRANGEMENTS OF PLANT..... | 9/00 |
| CONTROL BY PHYSICAL EFFECTS..... | 13/00 |

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|-------------|---|------|---|
| 1/00 | Conditioning for facilitating separation by altering physical properties of the matter to be treated (pretreatment of ores in general C22B) [1, 2006.01] | 5/24 | • • • Constructional details of jigs, e.g. pulse control devices [2, 2006.01] |
| 1/02 | • Preparatory heating [1, 2006.01] | 5/26 | • • in sluices [2, 2006.01] |
| 1/04 | • by additives [1, 2006.01] | 5/28 | • by sink-float separation [2, 2006.01] |
| 1/06 | • by varying ambient atmospheric pressure [1, 2006.01] | 5/30 | • • using heavy liquids or suspensions [2, 2006.01] |
| | | 5/32 | • • • using centrifugal force (centrifuges B04B; cyclones B04C) [2, 2006.01] |
| 4/00 | Separating by pneumatic tables or by pneumatic jigs (sink-float separation using dry heavy media B03B 5/46) [2, 2006.01] | 5/34 | • • • • Applications of hydrocyclones [2, 2006.01] |
| 4/02 | • using swinging or shaking tables [6, 2006.01] | 5/36 | • • • Devices therefor, other than using centrifugal force (jigs B03B 5/10) [2, 2006.01] |
| 4/04 | • using rotary tables or tables formed by travelling belts (separating solids from solids using gas currents and revolving drums B07B 4/06) [6, 2006.01] | 5/38 | • • • • of conical receptacle type [2, 2006.01] |
| 4/06 | • using fixed and inclined tables [6, 2006.01] | 5/40 | • • • • of trough type [2, 2006.01] |
| | | 5/42 | • • • • of drum or lifting wheel type [2, 2006.01] |
| 5/00 | Washing granular, powdered or lumpy materials; Wet separating (separating by pneumatic tables or by pneumatic jigs B03B 4/00) [2, 2006.01] | 5/44 | • • • Application of particular media therefor [2, 2006.01] |
| 5/02 | • using shaken, pulsated or stirred beds as the principal means of separation (B03B 5/28, B03B 5/48 take precedence) [2, 2006.01] | 5/46 | • • using dry heavy media; Devices therefor [2, 2006.01] |
| 5/04 | • • on shaking tables (on vanners B03B 5/08) [2, 2006.01] | 5/48 | • by mechanical classifiers (sink-float separation aspects B03B 5/28) [2, 2006.01] |
| 5/06 | • • • Constructional details of shaking tables, e.g. riffing [2, 2006.01] | 5/50 | • • Rake classifiers [2, 2006.01] |
| 5/08 | • • on vanners [2, 2006.01] | 5/52 | • • Spiral classifiers [2, 2006.01] |
| 5/10 | • • on jigs [2, 2006.01] | 5/54 | • • Drag classifiers [2, 2006.01] |
| 5/12 | • • • using pulses generated mechanically in fluid [2, 2006.01] | 5/56 | • • Drum classifiers [2, 2006.01] |
| 5/14 | • • • • Plunger jigs [2, 2006.01] | 5/58 | • • Bowl classifiers [2, 2006.01] |
| 5/16 | • • • • Diaphragm jigs [2, 2006.01] | 5/60 | • by non-mechanical classifiers, e.g. slime tanks (using shaken, pulsated or stirred beds as the principal means of separation B03B 5/02; hydraulic classifiers B03B 5/68) [2, 2006.01] |
| 5/18 | • • • • Moving-sieve jigs [2, 2006.01] | 5/62 | • by hydraulic classifiers, e.g. of launder, tank, spiral or helical chute concentrator type [2, 2006.01] |
| 5/20 | • • • using pulses generated by air injection [2, 2006.01] | 5/64 | • • of the free settling type [2, 2006.01] |
| 5/22 | • • • using pulses generated by liquid injection [2, 2006.01] | 5/66 | • • of the hindered settling type [2, 2006.01] |
| | | 5/68 | • by water impulse (shaking tables B03B 5/04; jigs B03B 5/10; hydraulic classifiers B03B 5/62) [2, 2006.01] |
| | | 5/70 | • • on tables or strakes [2, 2006.01] |

B03B

- 5/72 • • • which are movable [2, 2006.01]
- 5/74 • • • • Revolving tables [2, 2006.01]
- 7/00 **Combinations of wet processes or apparatus with other processes or apparatus, e.g. for dressing ores or garbage [1, 2006.01]**
- 9/00 **General arrangement of separating plant, e.g. flow sheets [1, 2006.01]**
- 9/02 • specially adapted for oil-sand, oil-chalk, oil-shales, ozokerite, bitumen, or the like [1, 2006.01]
- 9/04 • specially adapted for furnace residues, smeltings, or foundry slags [1, 2006.01]
- 9/06 • specially adapted for refuse [1, 2006.01]
- 11/00 **Feed or discharge devices integral with washing or wet-separating equipment** (filling or emptying devices per se B65G 65/30) [1, 2006.01]
- 13/00 **Control arrangements specially adapted for wet-separating apparatus or for dressing plant, using physical effects** (detecting, measuring, or analysing devices G01) [1, 2006.01]
- 13/02 • using optical effects [1, 2006.01]
- 13/04 • using electrical or electromagnetic effects [1, 2006.01]
- 13/06 • using absorption or reflection of radioactive emanation [1, 2006.01]