

Abstract

5 A continuous wet ball-milling separation device (7), comprising a cylinder. The cylinder internally
comprises a feeding section (A), a shearing section (B), and a crushing section (C) in sequence from
top to bottom; the feeding section is located at the upper portion of the device, and is provided with a
liquid inlet (4), a material inlet (2), and a material distributor (6); the shearing section is located in
the middle of the device, and is internally provided with shearing blades (9); and the crushing section
10 is located at the lower portion of the device, and is internally provided with stirring rods (10) and
crushing balls (11), and a grading discharge module is provided at the bottom of the crushing section.
Also disclosed are a grading discharge module used in the device and a continuous wet ball-milling
separation method applying the device. The device implements continuous operations of material
crushing and grading by means of the material distributor, wet shearing, wet crushing, and wet
grading, and effectively improves the material grinding effect.

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