Claims

[Claim 1]

An operation control system for grinder, characterized in that:

in a stone mill grinder including a ring-shaped (annular) fixed grindstone having a flat grinding surface on an outer peripheral portion and a truncated cone portion formed with a central hollow shape on an inner side continuing to the flat surface and a ring-shaped (annular) rotary grindstone having a truncated cone portion formed with a central hollow shape on an inner side continuing to a flat surface installed by facing these flat grinding surfaces to each other in a vertical direction and a servomotor for vertically moving the rotary grindstone,

an oscillation sensor is provided on a machine body, the rotary grindstone is moved to the fixed grindstone side while being rotated and brought into contact with a food material or a material to be ground, presence of oscillation is sensed by the oscillation sensor at time of contact, and movement of the rotary grindstone is controllable on the basis of reaction of the oscillation sensor, and further based on a comparison of a measured oscillation numerical value and a predetermined oscillation numerical value,

wherein the predetermined oscillation numerical value is variable based on type and condition of the raw material or the grindstone.

[Claim 2]

The operation control system for grinder according to claim 1, wherein

the oscillation sensor is set on an upper cover on which a supply hopper is mounted at a center.

[Claim 3]

A diagnosis device of grinder, comprising:

in a stone mill grinder including a ring-shaped (annular) fixed grindstone having a flat grinding surface on an outer peripheral portion and a truncated cone portion formed with a central hollow shape on an inner side continuing to the flat surface and a ring-shaped (annular) rotary grindstone having a truncated cone portion formed with a central hollow shape on an inner side continuing to a flat surface installed by facing these flat grinding surfaces to each other in a vertical direction and a servomotor for vertically moving the rotary grindstone,

an oscillation sensor provided on a housing of the grinder and an auxiliary device which sets an EP (easy point) for keeping a contact state or the clearance proper by catching and digitizing oscillation of the grinder by the oscillation sensor,

wherein movement of the rotary grindstone is controllable on the basis of the reaction of the oscillation sensor, and further based on a comparison of a measured oscillation numerical value and a predetermined oscillation numerical value,

further wherein the predetermined oscillation numerical value is variable based on types and conditions of the raw material or the grindstone.

[Claim 4]

The diagnosis device of grinder, according to claim 3, wherein

the oscillation sensor is provided on the upper cover on which the supply hopper is mounted in the housing.

[Claim 5]

The diagnosis device of grinder, according to claim 3 or 4, wherein

to the oscillation sensor, an output cord is detachably connected and fixed by a lock ring.