WHAT IS CLAIMED IS:

1. A method for setting up a grinding apparatus, the grinding apparatus including a chuck table that holds a plate-shaped workpiece on a holding surface thereof, a grinding mechanism that has grinding stones mounted thereon and grinds, with the grinding stones, the plate-shaped workpiece held on the holding surface, a lift mechanism that moves the grinding mechanism in a direction vertical to the holding surface, an upper-surface height gauge that measures a height of an upper surface of the plate-shaped workpiece held on the holding surface, and a height ascertainment device that ascertains a height of the grinding mechanism moved with the lift mechanism, by moving the grinding mechanism by the lift mechanism and storing the height of the grinding mechanism when lower surfaces of the grinding stones come into contact with the holding surface,

the grinding mechanism including a contact detection section configured to detect contact of the lower surfaces of the grinding stones with the upper surface of the plate-shaped workpiece,

the method comprising:

a holding step of holding the plate-shaped

workpiece on the holding surface of the chuck table so that a cushioning portion is disposed between a central area of a lower surface of the plate-shaped workpiece and the holding surface; and

a storing step of storing the height of the grinding mechanism when the lower surfaces of the grinding stones are ascertained through detection by the contact detection section to have come into contact with the upper surface of the plate-shaped workpiece that is held on the holding surface, by lowering of the grinding mechanism with the grinding stones mounted thereon from above the plate-shaped workpiece held on the holding surface,

wherein

the upper-surface height gauge is configured to be moved together with the grinding mechanism in the direction vertical to the holding surface by the lift mechanism, and

the contact detection section is configured to detect the contact of the lower surfaces of the grinding stones with the upper surface of the plate-shaped workpiece by lowering the grinding mechanism, initiating the measurement of the height of the upper surface of the plate-shaped workpiece by the upper-

surface height gauge before the lower surfaces of the grinding stones come into contact with the plate-shaped workpiece, keeping lowering the grinding mechanism to press the lower surfaces of the grinding stones against the upper surface of the plate-shaped workpiece, and ascertaining that an amount of a change in a value measured by the upper-surface height gauge no longer corresponds to an amount of a change in the height of the grinding mechanism.