WHAT IS CLAIMED IS:

1. A processing method for a workpiece, comprising:

a cutting step of cutting the workpiece by using a cutting blade of a cutting unit in a processing apparatus;

an actual cut groove forming step of cutting a test piece from one side to the other side thereof by using the cutting blade to thereby form an actual cut groove;

an actual imaging step of imaging a side surface of the test piece at the one side or the other side after performing the actual cut groove forming step, thereby forming an actual image including the actual cut groove;

a normal image storing step of previously storing a normal image of a cut groove obtained by using a normal cutting blade and next imaging the cut groove from one side surface at the one side of the test piece; and

a determining step of determining whether or not the cutting blade is to be changed, according to inclination of a side wall of the actual cut groove detected from the images formed in the actual imaging step and the normal image storing step,

wherein

the cutting blade of the cutting unit in the

processing apparatus is having a very small thickness,

in the normal image storing step, inner surfaces of the cut groove in the normal image are perpendicular to a front side of the test piece, and

in the determining step, a distance between an inner surface of the cut groove in the actual image and the inner surface of the cut groove in the normal image on a same side at a predetermined determination position is detected.

2. The processing method according to claim 1, wherein, in the determining step:

when the distance between the inner surface of the cut groove in the actual image and the inner surface of the cut groove in the normal image on the same side at the predetermined determination position is larger than a predetermined allowed value, and therefore determines that replacement of the cutting blade is required, a notifying unit is operated to notify an operator; and

when the distance between the inner surface of the cut groove in the actual image and the inner surface of the cut groove in the normal image on the same side at the predetermined determination position is equal to or less than the predetermined allowed value, and therefore determines that the replacement of the cutting blade is

not required, the processing method is returned to the cutting step.

3. The processing method according to claim 2, wherein the notifying unit functions to issue at least one of sound or light.

4. The processing method according to claim 1, wherein

the test piece is mounted on a test piece chuck table; and

a lattice-shaped suction groove is formed in an upper surface of the test piece chuck table.

5. The processing method according to claim 1, wherein in the determining step, the cut groove in the normal image is superimposed on the cut groove of the actual image.

6. The processing method according to claim 1, wherein the actual imaging step and the determining step may be performed during the cutting operation of the workpiece.

7. The processing method according to claim 1, wherein in the determining step, an outline of the cut groove in the normal image is compared with an outline of the cut groove in the actual image.

8. The processing method according to claim 1, wherein in the determining step, the inner surfaces of the cut groove in the actual image is compared with an imaginary line forming inner surfaces of an ideal cut groove.