WHAT IS CLAIMED IS:

1. A processing apparatus that processes a plate-shaped workpiece in which a device is disposed in each of a plurality of regions marked out by a plurality of planned dividing lines set in a front surface of the workpiece in a state in which a side of the front surface of the workpiece is held, the processing apparatus comprising:

a chuck table that includes one surface and the other surface located on an opposite side to the one surface, has a plate-shaped holding component having a predetermined region formed of a transparent material from the one surface to the other surface, and holds the side of the front surface of the workpiece;

a processing unit that processes the workpiece for which the front surface is held by the chuck table and forms processed grooves in the workpiece;

a first imaging unit that has a first imaging element, is disposed over the chuck table, and images a side of a back surface of the workpiece held by the chuck table;

a second imaging unit that has a second imaging element, is disposed under the chuck table, and images, through the holding component, the side of the front

surface of the workpiece in a region corresponding to a region imaged by the first imaging unit in a thickness direction of the workpiece;

a display device that displays an image of the workpiece acquired by at least either the first imaging unit or the second imaging unit; and

a control part that has a storing device in which a program to execute image processing is stored and a processing device that processes an image in accordance with the program, the control part inverting, in a predetermined direction, either a first image obtained by imaging of the processed groove formed on the side of the back surface by the first imaging unit or a second image obtained by imaging of the processed groove formed on the side of the front surface by the second imaging unit in such a manner that orientations of the first image and the second image correspond with each other, the control part causing the display device to display both the processed groove in the first image and the processed groove in the second image in a state in which the first image and the second image are superimposed,

wherein, in a kerf check step,

a region on the side of the back surface including the processed groove and

a region on the side of the front surface mutually corresponding to the region on the side of the back surface in the thickness direction of the workpiece are imaged, and

wherein

the image processing executed by the control part includes an edge detection,

the display device displays positions of end parts in a width direction of the processed groove, and

the positions of the end parts are identified by the edge detection in each of the first image and the second image.

2. The processing apparatus according to claim 1,

wherein the display device displays both the processed groove in the first image and the processed groove in the second image in a state in which the first image and the second image are superimposed, at least one of the first image or the second image being in a semi-transmissive state.