**WHAT IS CLAIMED IS:**

1. A wafer processing method for processing a wafer, in an outer peripheral portion of which a mark is formed, by a processing machine including a processing unit and a display unit, comprising:

a provision step of providing a frame unit having the wafer, a tape bonded on a front surface or back surface of the wafer and having a diameter greater than the wafer, and a ring frame having an opening greater in diameter than the wafer and carrying at an inner peripheral portion thereof the tape bonded at an outer peripheral portion thereof to the ring frame;

a processing conditions selection step of selecting one set of processing conditions for processing the wafer by the processing unit from a plurality of sets of processing conditions stored in the processing machine;

a representative image display step of displaying a representative image that is stored in the processing machine in association with the set of processing conditions as selected in the processing conditions selection step, on the display unit; and

a determination step of, after the representative image display step, determining, through a comparison between the representative example presented in the

representative image and the frame unit provided in the provision step, whether the selected set of processing conditions is appropriate or inappropriate, wherein

the ring frame has a notch formed in an outer periphery thereof,

in the frame unit, the mark formed in the outer peripheral portion of the wafer and the notch of the ring frame are in a positional relationship set in accordance with the selected set of processing conditions for processing the wafer by the processing unit,

the frame unit provided in the provision step is formed of the ring frame, the wafer, and the tape integrated together so that the notch of the ring frame and the mark of the wafer are in the positional relationship,

the representative image displayed on the display unit in the representative image display step presents a representative example of the frame unit, in which the notch of the ring frame and the mark of the wafer are in the positional relationship,

if the selected set of processing conditions is determined to be appropriate in the determination step, a processing step is performed to process the wafer by the processing unit under the selected set of processing

conditions, and

if the selected set of processing conditions is determined to be inappropriate in the determination step, an unloading step is performed to unload the frame unit from the processing machine.

2. The wafer processing method according to claim 1, wherein

the processing to be performed in the processing step is dicing processing to divide the wafer, and

the selected set of processing conditions includes a size of the wafer, a distance between streets set on the wafer, processing feed speeds of the processing unit and the wafer, and a key pattern formed on the front surface or back surface of the wafer.

3. A wafer processing machine for processing a wafer integrated with a ring frame and a tape into a frame unit and included as a part of the frame unit, comprising:

a chuck table configured to hold the wafer to be processed,

a processing unit that processes the wafer held on the chuck table,

a display unit, and

a control unit configured to control the chuck

table, the processing unit, and the display unit, wherein

the control unit includes

a storage section configured to store a plurality of sets of processing conditions for processing a plurality of wafers that includes the wafer to be processed, by the processing unit, and a plurality of representative images presenting frame units including the wafers to be processed under the respective sets of processing conditions, and

a display control section configured, when one set of processing conditions is selected from the plurality of sets of processing conditions stored in the storage section, to display, on the display unit, the representative image presenting the frame unit that includes the wafer to be processed under the selected set of processing conditions, and

in the frame unit, a mark formed in an outer peripheral portion of the wafer and a notch of the ring frame are in a positional relationship set in accordance with the selected set of processing conditions for processing the wafer by the processing unit.