WHAT IS CLAIMED IS:

1. A processing method of a wafer, the processing method comprising:

a protective sheet preparation step of preparing a protective sheet without an adhesive layer, the protective sheet including

a first sheet suitable for being thermocompression-bonded to a surface of the wafer by heating,

a second sheet that is laid on the first sheet and has fluidity due to the heating, and

a third sheet that is laid on the second sheet and keeps flatness even with the heating;

melting temperatures of the first sheet and the second sheet are lower than the third sheet;

the first sheet, the second sheet and the third sheet being thermocompression bonded to become a three-layer protective sheet;

a protective sheet laying step of causing a side of the first sheet to face a front surface of the wafer and executing heating to execute thermocompression bonding to lay the protective sheet on the front surface of the wafer;

a heating temperature to execute the heating

during the thermocompression bonding is higher than the melting temperature of the second sheet, for the second sheet melting and having fluidity while the melting temperature of the third sheet is higher than the heating temperature, for the third sheet not to melt and keeping the flatness;

and

a grinding step of causing a side of the protective sheet to be held by a holding surface of a chuck table and grinding a back surface of the wafer.

2. A protective sheet without an adhesive layer suitable for being laid on a surface of a wafer, the protective sheet comprising:

a first sheet suitable for being thermocompression-bonded to the surface of the wafer by heating;

a second sheet that is laid on the first sheet and has fluidity due to the heating; and

a third sheet that is laid on the second sheet and is allowed to keep flatness even with the heating;

melting temperatures of the first sheet and the second sheet are lower than the third sheet;

the first sheet, the second sheet and the third sheet being thermocompression bonded to become a three-layer protective sheet; and

a heating temperature to execute the heating during the thermocompression bonding is higher than the melting temperature of the second sheet and lower than the melting temperature of the third sheet.

3. The protective sheet according to claim 2, wherein

the first sheet and the second sheet are configured by a polyolefin-based resin, and the third sheet is configured by a polyester-based resin.

4. The protective sheet according to claim 3, wherein

the first sheet is configured by polypropylene, the second sheet is configured by polyethylene, and the third sheet is configured by polyethylene terephthalate.

5. A protective sheet laying method for laying a protective sheet without an adhesive layer on a wafer by thermocompression bonding, the protective sheet including a first sheet that is thermocompression-bonded to a surface of the wafer by heating, a second sheet that is laid on the first sheet and has fluidity due to the heating, and a third sheet that is laid on the second sheet and is allowed to keep flatness even with the heating, melting temperatures of the first sheet and the second sheet are lower than the third sheet;

the first sheet, the second sheet and the third sheet being thermocompression bonded to become a three-layer protective sheet;

the protective sheet laying method comprising:

a protective sheet placement step of placing the protective sheet on an upper surface of the wafer; and

a thermocompression bonding step of executing thermocompression bonding through pressing the protective sheet placed on the upper surface of the wafer and heating the protective sheet, wherein

a heating temperature when the thermocompression bonding of the protective sheet is executed in the thermocompression bonding step is a melting temperature of the first sheet so that the first sheet exerts an adhesive force, the heating temperature is higher than the melting temperature of the second sheet so that the second sheet has fluidity, and the heating temperature is lower than the melting temperature of the third sheet so that the third sheet keeps flatness.