CLAIMS

1. A method for affixing a protective film, comprising:

an arrangement step of arranging a protective film so as to cover a main surface of a semiconductor wafer; and

an affixing step of pressing the protective film against the main surface to affix the protective film to the main surface, characterized in,

that the main surface has a first region in which bumps are arranged and a second region which includes at least a part of a peripheral edge of the main surface and in which no bumps are arranged,

that the affixing step includes a compression step of compressing the protective film in a thickness direction thereof, and

that the compression step is performed using a pressing member for pressing the protective film against the main surface and a support member installed along an outer peripheral edge of the second region,

wherein the arrangement step is a step of arranging the protective film such that a peripheral edge part of the protective film protrudes outward from the peripheral edge of the second region, and

wherein the compression step is a step of compressing the peripheral edge part of the protective film by using the support member to support the peripheral edge part and sandwiching the peripheral edge part between the support member and the pressing member so as to restrict the thick portion of the protective film from flowing further outward from the peripheral edge of the main surface,

wherein the pressing member has a pressing surface on its entire lower surface, the pressing surface is a flat surface, and the pressing surface in contact with the protective film flattens a surface of the protective film.

2. The method for affixing a protective film according to claim 1, wherein, in the support member, a support surface that supports the peripheral edge part of the protective film is parallel to the main surface or inclined so as to face the main surface side.

3. The method for affixing a protective film according to claim 2, having a relationship of $C_1>C_2$, where a clearance between the main surface of the semiconductor wafer and a pressing surface of the pressing member is C_1, and a clearance between the support surface of the support member and the pressing surface of the pressing member is C_2.

4. The method for affixing a protective film according to any one of claims 1 to 3, wherein the protective film has a layer capable of exhibiting fluidity or plasticity.

5. The method for affixing a protective film according to claim 4, wherein the compression step is performed in a state where the protective film is heated and the fluidity or the plasticity is exhibited.

6. The method for affixing a protective film according to any one of claims 1 to 5, having a relationship of $0.5 \leq H2/H1$, where an average height of the bumps is H1 and an average thickness of the protective film is H2.

7. A method for manufacturing a semiconductor component, comprising the method for affixing a protective film according to any one of claims 1 to 6.

8. A protective film when used in the method for affixing a protective film according to any one of claims 1 to 6.