WHAT IS CLAIMED IS:

1. A chuck table for holding a workpiece under suction, comprising:

a base table having a suction path to be connected to a suction source;

a support member that is mounted on the base table and supports the workpiece; and

a protective plate disposed so as to cover an upper surface of the support member and to protect the support member, wherein

the protective plate has a plurality of through-holes that transmits a suction force from the suction source to the workpiece, wherein the through-holes are formed at a higher density on an outer periphery side than on a center side of the protective plate.

2. The chuck table according to claim 1, wherein the through-holes are configured to have a smaller diameter in a first region located at distances in a predetermined range from the center of the protective plate than in a second region on an outer side of the first region.

3. The chuck table according to claim 1, wherein the protective plate has a porosity of 5% or higher and 35% or lower.

4. The chuck table according to claim 1, wherein the base table includes

a support member suction path configured to hold the support member under suction,

a protective plate suction path formed on an outer periphery side of the support member suction path and configured to hold the protective plate at an outer peripheral portion thereof under suction, and

a workpiece suction path configured to hold the workpiece under suction.

5. The chuck table according to claim 1, wherein the protective plate is formed of a transparent body.

6. The chuck table according to claim 1, wherein the support member is formed of a transparent body.

7. The chuck table according to claim 1, wherein the support member is thicker at an outer peripheral portion thereof than at a central portion thereof.

8. The chuck table according to any one of the preceding claims, wherein the protective plate is not provided with the through-holes in a plurality of regions where the protective plate overlaps an opening of the base table.

9. A laser processing apparatus comprising:

a chuck table configured to hold a workpiece under

suction;

a laser beam application unit configured to apply processing to the workpiece held on the chuck table by irradiating a laser beam to the workpiece; and

a moving unit configured to relatively move the chuck table and the laser beam application unit, wherein

the chuck table includes

a base table having a suction path connected to a suction source,

a support member that is mounted on the base table and supports the workpiece, and

a protective plate disposed so as to cover an upper surface of the support member and to protect the support member,

the protective plate having a plurality of through-holes that transmits a suction force from the suction source to the workpiece, wherein the through-holes are formed at a higher density on an outer periphery side than on a center side of the protective plate.

10. The laser processing apparatus according to claim 9, wherein the through-holes are configured to have a smaller diameter in a first region located at distances in a predetermined range from the center of the protective plate than in a second region on an outer side

of the first region.

11. The laser processing apparatus according to any one of claim 9 or claim 10, wherein the protective plate is not provided with the through-holes in a plurality of regions where the protective plate overlaps an opening of the base table.