WHAT IS CLAIMED IS:

1. An inspection apparatus comprising:

inspection chamber rows in each of which inspection chambers are arranged, the inspection chamber rows being arranged in multiple stages and each of the inspection chambers being configured to accommodate therein a tester configured to inspect an inspection object on a chuck top;

a refrigerant supplier configured to supply a refrigerant gas; and

a controller,

wherein the refrigerant supplier includes:

a refrigerant gas pipe connecting the chuck tops in each inspection chamber row to allow the refrigerant gas to pass therethrough; and

a first heat exchanger disposed in the refrigerant gas pipe between the chuck tops to exchange heat with the refrigerant gas discharged from the chuck tops,

wherein each of the chuck tops includes a heater configured to heat the inspection object and a temperature sensor,

wherein the controller is configured to control the heater based on a temperature detected by the temperature sensor,

wherein each of the inspection chambers includes a window formed in a housing of the inspection chambers and the window is opened to communicate with both a refrigerant pipe arrangement space formed in the housing of the inspection chambers and an outside of the inspection chamber rows.

2. The inspection apparatus of Claim 1, wherein each of the inspection chambers is configured such that clean room air in the outside is capable of being introduced into the inspection chamber from the window.

3. The inspection apparatus of Claim 1 or 2, wherein the chuck top includes a placement surface where the inspection object is placed, and

wherein the temperature sensor is installed on the placement surface.

4. The inspection apparatus of any one of Claims 1 to 3, wherein the refrigerant supplier further includes a refrigerant output,

wherein the refrigerant gas pipe further connects the refrigerant output and a first chuck top, and

wherein each of the inspection chamber rows includes a second heat exchanger disposed in the refrigerant gas pipe connecting the refrigerant output and the first chuck top so as to exchange heat with the refrigerant gas that is output from the refrigerant output.

5. The inspection apparatus of Claim 4, wherein the refrigerant gas that is output from the second heat exchanger is supplied to the first chuck top connected to the refrigerant gas pipe in each inspection chamber row.

6. The inspection apparatus of any one of Claims 1 to 5, wherein the refrigerant gas that is output from the first heat exchanger is supplied to the chuck top subsequently connected to the refrigerant gas pipe in each inspection chamber row.

7. An inspection method using an inspection system including inspection chamber rows in each of which inspection chambers are arranged, the inspection chamber rows arranged in multiple stages, each of the inspection chambers being configured to accommodate therein a tester configured to inspect an inspection object on a chuck top and including a window formed in a housing of the inspection chambers, and the window being opened to communicate with both a refrigerant pipe arrangement space

formed in the housing of the inspection chambers and an outside of the inspection chamber rows, the inspection method comprising:

supplying a refrigerant gas to a refrigerant gas pipe that connects the chuck tops in each inspection chamber row;

causing a first heat exchanger disposed in the refrigerant gas pipe between the chuck tops to exchange heat with the refrigerant gas discharged from the chuck tops; and

controlling a heater installed in each of the chuck tops based on a temperature detected by a temperature sensor installed in each of the chuck tops.