WHAT IS CLAIMED IS:

1. A carrying apparatus of a semiconductor heat treatment device, comprising a carrying main body, wherein the carrying main body comprises a plurality of carrying positions for carrying wafers, and the plurality of carrying positions are arranged at intervals in an axial direction of the carrying main body; the carrying apparatus further comprises a temperature measuring apparatus; the temperature measuring apparatus comprises a support member and a plurality of temperature measuring assemblies; the support member is connected to the carrying main body, and is located on outer sides of edges of the carrying positions of the carrying main body; and

the plurality of temperature measuring assemblies are arranged on the support member at intervals in the axial direction of the carrying main body, and each temperature measuring assembly has a temperature measuring end extending to an inner side of the edge of each carrying position and is used for detecting a temperature of a sub-region corresponding to the temperature measuring end;

wherein a fixing structure is arranged on the support member; a fixing portion is arranged on the carrying main body; and the carrying apparatus further comprises a fixing assembly for detachably connecting the fixing structure to the fixing portion, to detachably fix the support member on the carrying main body;

wherein a fixing hole for allowing the fixing structure to pass is formed in the fixing portion;

wherein the fixing assembly comprises a fixing member, a first elastic member and a pressing member;

wherein a fixing slot is formed in the fixing member; an inner circumferential wall of the fixing slot cooperates with an outer circumferential wall of the fixing portion; the first elastic member and the pressing member are stacked in the fixing slot and all sleeve the support member.

2. The carrying apparatus of the semiconductor heat treatment device according to claim 1, wherein the temperature measuring ends and centers of the carrying positions are opposite in the axial direction of the carrying main body.

3. The carrying apparatus of the semiconductor heat treatment device according to claim 1 or 2, wherein each temperature measuring assembly comprises an extending component and a temperature measuring component; one end of the extending component is connected to the support member, and the other end of the extending component is used as each temperature

measuring end extending to the inner side of the edge of each carrying position;

the temperature measuring component is arranged in the extending component, and is located at the temperature measuring end; and a connecting wire of the temperature measuring component is led out through the extending component and the support member in sequence.

4. The carrying apparatus of the semiconductor heat treatment device according to claim 3, wherein each temperature measuring component comprises a thermocouple; the thermocouple comprises a first electrode, a second electrode, a first connector, a second connector, a first conductive element, a second conductive element, and an insulation component; the first electrode and the second electrode are arranged in the extending component at an interval and are located at the temperature measuring end; the first connector and the second connector are arranged in the extending component at an interval; the first conductive element and the second conductive element are arranged in the support member at an interval; the first electrode is electrically connected with the first conductive element through the first connector; the second electrode is electrically connected with the second conductive element through the second connector; and

the insulation component is arranged in the extending component and the support member, and is used for electrically insulating the first conductive element from the second conductive element and electrically insulating the first connector from the second connector.

5. The carrying apparatus of the semiconductor heat treatment device according to claim 4, wherein the insulation component comprises an insulation sleeve; a first channel and a second channel electrically insulated from each other are arranged in the insulation sleeve; the first channel is used for allowing the first conductive element and the first connector to pass; and the second channel is used for allowing the second conductive element and the second connector to pass.

6. The carrying apparatus of the semiconductor heat treatment device according to claim 1, wherein a limiting component is arranged on the support member; and the limiting component cooperates with the carrying main body and is used for limiting the support member from rotating relative to the carrying main body.

7. The carrying apparatus of the semiconductor heat treatment device according to claim 6, wherein the limiting component is arranged on the support member; a limiting slot is formed in the carrying main body; the limiting component is arranged in the limiting slot; and an outer circumferential surface of the limiting component cooperates with an inner circumferential surface of the limiting slot so that the limiting component is limited from rotating relative to the limiting slot.

8. The carrying apparatus of the semiconductor heat treatment device according to claim 1, wherein the fixing structure comprises a convex arranged on the support member; a fixing hole for allowing the convex to pass is formed in the fixing portion; an external thread is arranged on an outer circumferential wall of the fixing portion;

the fixing assembly further comprises a second elastic member and an elastic sealing member;

an internal thread cooperating with the external thread is arranged on an inner circumferential wall of the fixing slot; the first elastic member, the second elastic member, the pressing member, and the elastic sealing member are stacked in the fixing slot in sequence from bottom to top and all sleeve the support member; and the elastic sealing member is located between the pressing member and one end of the fixing portion extending into the fixing slot.

9. A semiconductor heat treatment device, comprising a loading chamber, a process module, and the carrying apparatus according to any one of claims 1 to 8, wherein the loading chamber and the processor module communicate with each other; and the carrying apparatus is able to move between the loading chamber and the process module.