

What is claimed is:

1. A substrate processing method for performing a predetermined processing of a substrate while sequentially transporting the substrate to a plurality of processing sections of a substrate processing apparatus provided in a fabrication plant according to a preset recipe, the substrate processing method comprising:

processing a the substrate in one of the processing sections of the substrate processing apparatus, processing results of the substrate processing apparatus being managed by an online system provided outside the substrate processing apparatus and provided in the fabrication plant and having a host computer and operational situation of the substrate processing apparatus being monitored by a monitoring system which is an independent system provided outside the substrate processing apparatus and provided in the fabrication plant;

interrupting the processing of the substrate by a processing interruption command sent from the monitoring system to the substrate processing apparatus during processing of the substrate;

setting the substrate whose processing has been interrupted in a standby state in the substrate processing apparatus, wherein the processing results of the substrate whose processing has been interrupted are not reported from the substrate processing apparatus to the online system;

customizing the recipe and performing reprocessing of the processing-interrupted substrate according to the customized recipe in the substrate processing apparatus, or performing reprocessing of the processing-interrupted substrate according to a preset recipe for reprocessing in the substrate processing apparatus; and

reporting the result of processing which has been executed according to the customized recipe or the preset recipe for reprocessing from the substrate processing apparatus to the online system having the host computer.

2. The substrate processing method according to claim 1, wherein the substrate set in a standby state is set in a standby state on a transport device for transporting the substrate.

3. The substrate processing method according to any one of claims 1 to 2, wherein the reprocessing of the substrate comprises performing the remaining processing in the predetermined processing after the interrupting.

4. The substrate processing method according to any one of claims 1 to 3, wherein the predetermined processing comprises a plurality of process steps;

a plurality of recipes for reprocessing, corresponding to the plurality of process steps, are prepared, and the recipe for reprocessing is automatically selected according to the

process step which has been performed when interrupting the processing of the substrate.

5. The substrate processing method according to any one of claims 1 to 4, wherein the reprocessing of the processing-interrupted substrate is performed in preference to an unprocessed substrate when interrupting the processing of the substrate.

6. The substrate processing method according to any one of claims 1 to 5, wherein when there is a plurality of substrates whose processing has been interrupted, the preference order of reprocessing of the substrates is selectable.

7. The substrate processing method according to any one of claims 1 to 6, wherein the results of processing are reported to the online system after completion of the reprocessing of the substrate.

8. The substrate processing method according to claim 1, wherein the monitoring system for monitoring the operational situation of the substrate processing apparatus collects and analyzes processing point data to monitor variation in the data.

9. The substrate processing method according to claim 1, wherein the monitoring system for monitoring the operational situation of the substrate processing apparatus comprises a Fault Detection and Classification system.