Claims

1. A method of substrate processing, comprising:

processing a first substrate within a first station within a first substrate processing line of a substrate processing system, wherein

the first substrate processing line comprises a plurality of stations that comprise at least the first station, and

processing the first substrate comprises:

loading the first substrate into a processing area of the first station of the first substrate processing line, and

delivering a first resource from a first common resource to a component within the first station of the first substrate processing line for a first configurable period of time;

locking out the first resource from providing the first common resource to a component within a first station of a second substrate processing line for the first configurable period of time;

unloading the first substrate from the processing area of the first station of the first substrate processing line after the first configurable period of time has elapsed;

processing a second substrate within the first station within the second substrate processing line of the substrate processing system, wherein

the second substrate processing line comprises a plurality of stations that comprise at least the first station, and

processing the second substrate comprises:

loading the second substrate into a processing area of the first station of the second substrate processing line, and

delivering the first resource from the first common resource to the component within the first station of the second substrate processing line for a second configurable period of time;

locking out the first resource from providing the first common resource to the component within the first station of the first substrate processing line for the second configurable period of time; and

unloading the second substrate from the processing area of the first station of the second substrate processing line.

2. The method of claim 1, wherein loading the second substrate into the processing area of the first station of the second substrate processing line occurs before the first configurable period of time has elapsed.

3. The method of claim 1, further comprising:

processing a third substrate within a second station within a first substrate processing line of a substrate processing system, wherein

the first substrate processing line comprises a plurality of stations that comprise at least the first station, and at least the second station, and

processing the third substrate comprises:

loading the third substrate into a processing area of the second station of the first substrate processing line, wherein loading the third substrate into the processing area of the second station occurs before the second configurable period of time has elapsed, and

delivering a second resource from a second common resource to a component within the second station of the first substrate processing line for a third configurable period of time;

locking out the second resource from providing the second common resource to a component within a second station of the second substrate processing line for the third configurable period of time;

unloading the third substrate from the processing area of the second station of the first substrate processing line after the third configurable period of time has elapsed;

processing a fourth substrate within a second station within the second substrate processing line of the substrate processing system, wherein

processing the fourth substrate comprises:

loading the fourth substrate into a processing area of the second station of the second substrate processing line, wherein loading the fourth substrate into the processing area of the second station of the second substrate processing line occurs before the third configurable period of time has elapsed, and

delivering a second resource from the second common resource to the component within the second station of the second substrate processing line for a fourth configurable period of time;

locking out the second resource from providing the second common resource to the component within the second station of the first substrate processing line for the fourth configurable period of time; and

unloading the fourth substrate from the processing area of the second station of the second substrate processing line.

4. The method of claim 3, wherein the first common resource, and the second common resource are the same type of common resource, wherein the common resource is selected from a group consisting of a power resource, a gas resource, or a vacuum resource.

5. The method of claim 1, wherein a difference in time from when the first substrate is loaded into the processing area of the first station of the first substrate processing line and the time from when the first substrate is loaded into the processing area of the first station of the second substrate processing line is less than the first configurable period of time.

6. The method of claim 1, wherein the first resource from the first common resource further comprises:

a power resource from a common power resource,

a gas resource from a common gas resource,

a vacuum resource from a common vacuum resource,

or combination thereof.

7. The method of claim 1, wherein the loading of the first substrate, and the unloading of the first substrate, from first station of the plurality of stations of the first substrate processing line further comprises:

transporting the first substrate between the plurality of stations by use of a magnetic transportation system.

8. The method of claim 1, wherein the loading of the second substrate, and the unloading of the second substrate, from first station of the plurality of stations of the second substrate processing line further comprises:

transporting the second substrate between the plurality of stations by use of a magnetic transportation system.

9. A method of substrate processing, comprising:

processing a first substrate within a first station within a first substrate processing line of a substrate processing system, wherein

the first substrate processing line comprises a plurality of stations that comprise at least the first station, and

processing the first substrate comprises:

loading the first substrate into a processing area of the first station of the first substrate processing line, wherein loading the first substrate into the processing area of the first station of the first substrate processing line occurs before a third configurable period of time, and a fourth configurable period of time, have elapsed,

delivering a first resource from a first common resource to a component within the first station of the first substrate processing line for a first configurable period of time, wherein the first resource from the first common resource is a power resource from a common power resource, and

delivering a second resource from a second common resource to a component within the first station of the first substrate processing line for a second configurable period of time, wherein the second resource from the second common resource is a vacuum resource from a common vacuum resource;

locking out the first resource from providing the first common resource to a component within a first station of a second substrate processing line for the first configurable period of time;

locking out the second resource from providing the second common resource to a component within a first station of a second substrate processing line for the second configurable period of time;

unloading the first substrate from the processing area of the first station of the first substrate processing line after the first configurable period of time, and the second configurable period of time, have elapsed;

processing a second substrate within the first station within the second substrate processing line of the substrate processing system, wherein

the second substrate processing line comprises a plurality of stations that comprise at least the first station, and

processing the second substrate comprises:

loading the second substrate into a processing area of the first station of the second substrate processing line, wherein loading the second substrate into the processing area of the first station of the second substrate processing

line occurs before the first configurable period of time, and the second configurable period of time, have elapsed,

delivering the first resource from the first common resource to the component within the first station of the second substrate processing line for the third configurable period of time, and

delivering the second resource from the second common resource to the component within the first station of the second substrate processing line for the fourth configurable period of time;

locking out the first resource from providing the first common resource to the component within the first station of the first substrate processing line for the third configurable period of time;

locking out the second resource from providing the second common resource to the component within the first station of the first substrate processing line for the fourth configurable period of time; and

unloading the second substrate from the processing area of the first station of the second substrate processing line after the third configurable period of time, and the fourth configurable period of time, have elapsed.

10. The method of claim 9, wherein the first resource from the first common resource further comprises:

a power resource from a common power resource,

a gas resource from a common gas resource,

a vacuum resource from a common vacuum resource,

or combination thereof.

11. The method of claim 9, wherein the second resource from the second common resource further comprises:

a power resource from a common power resource,

a gas resource from a common gas resource,

a vacuum resource from a common vacuum resource,

or combination thereof.

12. The method of claim 9, wherein a difference in time from when the first substrate is loaded into the processing area of the first station of the first substrate processing line and the time from when the first substrate is loaded into the processing area of the first station of the second substrate processing line is less than the first configurable period of time.

13. The method of claim 9, wherein the loading of the first substrate, and the unloading of the first substrate, from first station of the plurality of stations of the first substrate processing line further comprises:

transporting the first substrate between the plurality of stations with a magnetic transportation system.

14. The method of claim 9, wherein the loading of the second substrate, and the unloading of the second substrate, from first station of the plurality of stations of the second substrate processing line further comprises:

transporting the second substrate between the plurality of stations with a magnetic transportation system.