

CLAIMS

What is claimed is:

1. A rib cover for a multi-station processing module, the rib cover comprising:

a first portion configured to support the rib cover on a rib of the multi-station processing module, the rib disposed between adjacent processing chambers of the multi-station processing module;

a first side shield configured to cover a first wall of the rib; and

at least one spacer configured to hold a first surface of the rib cover away from the rib.

2. The rib cover of claim 1, further comprising a second side shield to cover a second wall of the rib when the rib cover is fitted thereto.

3. The rib cover of claim 2, wherein the first portion and the first and second side shields of the rib cover define a channel for the rib cover.

4. The rib cover of claim 3, wherein the channel includes a flared mouth.

5. The rib cover of claim 4, wherein engagement of the flared mouth with the rib prevents radial movement of the rib cover with respect to the processing module.

6. The rib cover of claim 3, wherein the channel is configured to support or hold the rib cover on the rib under gravity alone.

7. The rib cover of claim 3, wherein the at least one spacer is located in the channel, the channel configured to support or hold the rib cover on the rib by a sliding fit or by a frictional engagement between the at least one spacer and the rib.

8. The rib cover of claim 3, wherein the at least one spacer is configured to minimize thermal contact between the rib cover and the rib.

9. The rib cover of claim 8, wherein a separation distance between the rib cover and the rib is in a range of 0.05 to 0.50 inches (approximately 1.27 to 12.7 mm).

10. The rib cover of claim 3, wherein a sectional thickness of the rib cover or the channel is in a range of 0.25 to 0.70 inches (approximately 6.35 to 17.78 mm).

11. The rib cover of claim 1, wherein at least a second portion of the rib cover includes a ceramic material.

12. A multi-station processing module comprising:
- a rib cover comprising:
- a first portion configured to support the rib cover on a rib of the multi-station processing module, the rib disposed between adjacent processing chambers of the multi-station processing module;
- a first side shield configured to cover a first wall of the rib;
- and
- at least one spacer configured to hold a first surface of the rib cover away from the rib.
13. The multi-station processing module of claim 12, wherein the rib cover further comprises a second side shield to cover a second wall of the rib when the rib cover is fitted thereto.
14. The multi-station processing module of claim 13, wherein the first portion and the first and second side shields of the rib cover define a channel for the rib cover.
15. The multi-station processing module of claim 14, wherein the channel includes a flared mouth.
16. The multi-station processing module of claim 15, wherein engagement of the flared mouth with the rib prevents radial movement of the rib cover with respect to the processing module.

17. The multi-station processing module of claim 14, wherein the channel is configured to support or hold the rib cover on the rib under gravity alone.

18. The multi-station processing module of claim 14, wherein the at least one spacer is located in the channel, the channel configured to support or hold the rib cover on the rib by a sliding fit or by a frictional engagement between the at least one spacer and the rib.

19. The multi-station processing module of claim 14, wherein the at least one spacer is configured to minimize thermal contact between the rib cover and the rib.

20. The multi-station processing module of claim 19, wherein a separation distance between the rib cover and the rib is in a range of 0.05 to 0.50 inches (approximately 1.27 to 12.7 mm).

21. The multi-station processing module of claim 14, wherein a sectional thickness of the rib cover or the channel is in a range of 0.25 to 0.70 inches (approximately 6.35 to 17.78 mm).

22. The multi-station processing module of claim 12, wherein at least a second portion of the rib cover includes a ceramic material.

23. A method of operating a multi-station processing module, the method comprising:

providing a rib cover for the rib, the rib cover comprising:

a first portion configured to support the rib cover on a rib of the multi-station processing module, the rib disposed between adjacent processing chambers of the multi-station processing module;

a first side shield to cover a portion of a wall of a first processing chamber of the adjacent processing chambers of the multi-station processing module; and

at least one spacer configured to hold a first surface of the first portion, or a surface of the first side shield, away from a surface of the wall of the first processing chamber of the processing module; and

fitting the rib cover to the rib.

24. The method of claim 23, further comprising removing a residual deposition from the rib cover between processing cycles of the processing module.