

CLAIMS

1. A gas box comprising:

a vacuum regulator connectable to a pressure reduction passage to control flow of gas through the pressure reduction passage;

a dielectric gas pressure regulator connectable the gas supply passage to control flow of dielectric gas to the gas supply passage;

a nitrogen gas pressure regulator to control flow of nitrogen gas to the gas supply passage; and

a channeling block connected to the dielectric gas pressure regulator and the nitrogen gas pressure regulator and connectable to the gas supply passage to selectably provide the nitrogen gas or the dielectric gas to the gas supply passage.

2. The gas box of claim 1, further comprising:

a gas supply connector for connection to the gas supply passage to provide the nitrogen gas or the dielectric gas to the gas supply passage.

3. The gas box of claim 2, further comprising:

a vacuum supply connector for connection to the pressure reduction passage to provide the vacuum from the vacuum regulator to the pressure reduction passage.

4. The gas box of claim 3, wherein the vacuum supply connector is connected through the channeling block to the vacuum regulator.

5. The gas box of claim 3, further comprising:

a vacuum receiving connector connectable to a vacuum pump to connect the vacuum regulator to the vacuum pump;

a nitrogen gas receiving connector connectable to a nitrogen gas inlet supply to connect the nitrogen gas inlet supply to the nitrogen gas pressure regulator; and

a dielectric gas receiving connector connectable to a dielectric gas inlet supply to connect the dielectric gas inlet supply to the dielectric gas pressure regulator.

6. The gas box of claim 5, further comprising:

a base, wherein the gas supply connector, vacuum supply connector, vacuum receiving connector, nitrogen gas receiving and dielectric gas receiving connector are mounted to the base.

7. The gas box of claim 6, further comprising:

an intermediate substrate, wherein the channeling block is mounted to the intermediate substrate, wherein the intermediate substrate is separable in a vertical direction from the base, wherein the base and the intermediate substrate have matching interfaces that releasably connect the gas supply connector, vacuum supply connector, vacuum receiving connector, nitrogen gas receiving and dielectric gas receiving connector to the channeling block.

8. The gas box of claim 7, further comprising:

a mounting plate secured to the intermediate substrate; and

a valve control connector secured to the mounting plate through which electrical signals can be provided to the vacuum regulator, nitrogen gas regulator and dielectric gas regulator.

9. The gas box of claim 5, further comprising:

a transposition block to connect the vacuum receiving connector, nitrogen gas receiving and dielectric gas receiving connector to the channeling block and transpose flow of gasses from horizontally parallel in a first direction to vertically parallel in a second direction that is at right angles to the first direction.