Claims:

1. A dispensing head comprising:

a first spindle configured for movement in a vertical direction;

a first nozzle operatively attached to the spindle; and

a heater device removably attachable to the dispensing head, the heater device including:

a heat source; and

an opening configured to receive the first nozzle, wherein the heat source is configured to heat the first nozzle above an ambient temperature,

wherein the heater device remains stationary relative to a main body of the dispensing head during picking and placing by the first spindle.

2. The dispensing head of claim 1, wherein the dispensing head includes a heater assembly surrounding the first nozzle configured to transfer heat to the first nozzle through at least one of convection, conduction, and radiance.

3. The dispensing head of claim 1, wherein the first spindle is adapted for full 360° rotation while the heat source heats the first nozzle.

4. The dispensing head of claim 1, further comprising a second spindle configured for movement in a vertical direction and a second nozzle operatively attached to the second spindle, wherein the heater device includes a second opening configured to receive the second nozzle, wherein the heat source is configured to heat the second nozzle by at least one of convection and radiance.

5. The dispensing head of claim 4, wherein the heat source is configured to provide a uniform temperature profile over the first nozzle and the second nozzle.

6. The dispensing head of claim 1, wherein the heat source includes a heating element and a heat sink.

7. The dispensing head of claim 1, wherein the heater device includes an insulated housing including a heated chamber.

8. The dispensing head of claim 1, wherein the first nozzle is configured to move proximate the heat source and become heated when the first nozzle is not picking or placing an electronic component.

9. The dispensing head of claim 1, wherein the first nozzle is configured to contact the heat source during heating.

10. An assembly system comprising:

a dispensing head including:

a spindle configured for movement in a vertical direction;

a nozzle operatively attached to the spindle; and

a heater device mountable to the dispensing head, the heater device including:

a heat source; and

an opening configured to receive the spindle , wherein the heat source is configured to heat the spindle by at least one of convection, conduction, and radiance; and

a positioning system configured to move the dispensing head;

wherein the dispensing head is configured to at least partially assemble an unfinished product, wherein the heater device remains stationary relative to a main body of the dispensing head during picking and placing by the first spindle.

11. A method of heating a nozzle comprising:

providing a dispensing head including:

a first spindle configured for movement in a vertical direction;

a first nozzle operatively attached to the spindle;

attaching a heater device to the dispensing head, the heater device including:

a heat source;

an opening; and

receiving the first spindle and the first nozzle by the opening;

heating the first spindle and the first nozzle with the heat source above an ambient temperature;

moving the first spindle relative to a main body of the dispensing head; and

maintaining the heater device in a stationary position relative to the main body of the dispensing head during the moving of the first spindle.

12. The method of claim 11, wherein in the heater device further includes a heater assembly surrounding the first spindle and the first nozzle, the method further comprising transferring heat to the first spindle and the first nozzle through at least one of convection, conduction, and radiance.

13. The method of claim 11, further comprising fully rotating the first spindle 360° while the heat source heats the first spindle and the first nozzle.

14. The method of claim 11, wherein the dispensing head further includes a second spindle configured for movement in a vertical direction and a second nozzle operatively attached to the second spindle, wherein the heater device includes a second opening, the method further comprising:

receiving the second spindle and the second nozzle in the second opening; and

heating the second spindle and the second nozzle with the heat source above the ambient temperature.

15. The method of claim 14, further comprising providing, by the heat source, a uniform temperature profile over the first nozzle and the second nozzle.

16. The method of claim 11, wherein the heating occurs in an insulated housing that creates a heated chamber within the heater device.

17. The method claim 11, further comprising moving the first nozzle proximate the heat source; and heating the first nozzle with the heat source when the first nozzle is not carrying an electronic component.

18. The method of claim 11, further comprising contacting the first nozzle with the heat source during heating.