CLAIM AMENDMENTS

1. A bean roasting system, comprising:

a roasting drum having a lower inside surface defining an opening;

a hatch having an upper surface; ~~and~~

an actuator configured to position the hatch in at least two positions including an upper position and a lower position, the hatch seals the opening in the lower inside surface of the roasting drum when the hatch is in the upper position~~,~~ ;

an agitator disposed inside the roasting drum and coupled to an agitator motor; and

a controller configured to operate the actuator to lower the hatch from the upper position to the lower position, the agitator motor operable to agitate beans inside the roasting drum to exit through the opening in the lower inside surface of the roasting drum when the hatch is in the lower position.

2. The bean roasting system of claim 1, wherein the opening in the lower inside surface of the roasting drum is bounded by a vertical inwardly facing edge, the hatch having a vertical outwardly facing edge extending downwardly from the upper surface which closely matches the vertical inwardly facing edge.

3. The bean roasting system of claim 1, wherein the roasting drum defines a horizontal central axis, the opening in the lower inside surface of the roasting drum has a major axis that is substantially parallel to the central axis of the roasting drum.

4. The bean roasting system of claim 1, wherein the roasting drum defines a horizontal central axis and defines an axial distance between a back end of the roasting drum and a front end of the roasting drum, the opening in the lower inside surface has a major dimension that spans most of the axial distance.

5. The bean roasting system of claim 1, wherein the hatch is rotationally mounted to a lower outside surface of the roasting drum about a hinge axis, the actuator rotates the hatch between the upper and lower positions.

6. The bean roasting system of claim 5 wherein, the roasting drum defines a horizontal central axis, the hinge axis is substantially parallel to the central axis of the roasting drum.

7. The bean roasting system of claim 6, wherein the hatch has a major axis that is substantially parallel to the hinge axis.

~~8. The bean roasting system of claim 1 further comprising an agitator disposed inside the drum and coupled to an agitator motor.~~

~~9. The bean roasting system of claim 8 further comprising a controller configured to:~~

~~operate the actuator to lower the hatch from the upper position to the lower position; and~~

~~operate the agitator motor to agitate beans inside the drum to exit through the opening in the lower surface of the roasting drum.~~

8~~10~~. The bean roasting system of claim ~~9~~ 1, wherein the controller is further configured to operate the actuator to raise the hatch from the lower position to the upper position.

9~~11~~. The bean roasting system of claim 1, wherein the hatch includes an upper sheet and a lower sheet.

10~~12~~. The bean roasting system of claim 9~~11~~, wherein the upper sheet is coupled to the lower sheet by one or more of a screw, a press fit pin, and a rivet.

11~~13~~. The bean roasting system of claim 9~~11~~, wherein the lower sheet includes an upward facing surface for sealing to a lower outside surface of the roasting drum when the hatch is in a closed position.

12~~14~~. The bean roasting system of claim 9~~11~~, further comprising:

a bracket attached to the lower sheet; and

a linkage coupling the bracket to the actuator.

13~~15~~. The bean roasting system of claim 9~~11~~, wherein the upper sheet defines an outwardly facing edge which closely matches an inwardly facing edge of the opening.

14~~16~~. A bean roasting system comprising:

a roasting drum defining a horizontal axis, a back end and a front end, the roasting drum having a lower inside surface defining an opening;

_____a hatch having an upper position to seal the opening in the lower inside surface of the roasting drum;

_____an actuator coupled to the hatch;

_____an agitator having agitator blades mounted to an axial shaft, the axial shaft having a posterior end;

_____an agitator motor coupled to the posterior end of the axial shaft proximate to the back end of the roasting drum;

_____a door mounted rotationally relative to the roasting drum, the door having a glass plate for viewing contents of the roasting drum when the door is closed relative to the roasting drum; and

_____a controller configured to:

operate the actuator to lower the hatch from the upper position to a lower position, thereby unsealing the opening in the lower inside surface of the roasting drum; and

operate the agitator motor to rotate the agitator blades to empty contents of the roasting drum through the opening in the lower inside surface of the roasting drum.

15~~17~~. The bean roasting system of claim 14~~16~~, wherein the controller is further configured to operate the actuator to raise the hatch to reseal the opening in the lower inside surface of the roasting drum.

16~~18~~. The bean roasting system of claim 14~~16~~, wherein the hatch includes an upper sheet and a lower sheet.

17~~19~~. The bean roasting system of claim 16~~18~~, wherein the lower sheet includes an upward facing surface that extends beyond the lower sheet and seals to a lower outside surface of the roasting drum when the hatch is the upper position.

18~~20~~. The bean roasting system of claim 16~~18~~, further comprising a bracket attached to the lower sheet and a linkage coupling the bracket to the actuator.