

What is Claimed is:

1. A method for inspection of a container having liquid product therein, the method comprising:  
    orienting the container in an upright configuration with a bottom wall of the container extending in a generally horizontal plane;  
    disposing a line-of-sight diversion member below the container such that the bottom wall of the container is visible therethrough when viewed from a forward position in front of the container.
2. The method of claim 1, further comprising shifting the container and the line-of-sight diversion member laterally within an inspection booth to sequentially align the container and the line-of-sight diversion member with white and black top surface portions of the inspection booth.
3. The method of claim 1 or 2, wherein disposing the line-of-sight diversion member below the container comprises disposing a beam splitter below the container; and further comprising illuminating the container through the beam splitter with an illumination source.
4. The method of claim 3, further comprising filtering a line-of-sight through the beam splitter with one or more polarizers.
5. The method of any one of the preceding claims, wherein disposing the line-of-sight diversion member below the container comprises:  
    coupling a mount to an inspection booth via first connection interface of the mount; and  
    coupling a connecting arm having a housing mounted thereto to the mount via a second connection interface of the mount, the housing having the line-of-sight diversion member received therein.
6. The method of claim 5, wherein coupling the connecting arm to the mount via the second connection interface comprises disposing a slotted end of the connecting arm in an elongate opening of the mount, such that the connecting arm can be shifted laterally within the elongate opening.

7. The method of claim 5, wherein coupling the connecting arm to the mount via the second connection interface comprises magnetically coupling magnet interfaces of the connecting arm and mount together.

8. A container inspection assembly for use with an inspection booth, the container inspection assembly comprising:

a housing;

a line-of-sight diversion member mounted to the housing and oriented to provide a redirected line-of-sight from a position forwardly of the housing to above the housing.

9. The container inspection assembly of claim 8, wherein the line-of-sight diversion member comprises a mirror or prism.

10. The container inspection assembly of claim 8, wherein the line-of-sight diversion member comprises a beam splitter; and the housing further comprises an opaque rear surface disposed rearwardly of the beam splitter.

11. The container inspection assembly of any one of claims 8 to 10, wherein the housing comprises at least one of a front wall having a front opening therein or a top wall having a top opening therein, the front opening or top opening having a shape corresponding to a cross-sectional shape of the container.

12. The container inspection assembly of any one of claims 8 to 11, further comprising one or more filters coupled to the housing and oriented to filter the redirected line-of-sight, the one or more filters comprising orthogonal and/or linear polarizers.

13. The container inspection assembly of any one of claims 8 to 12, further comprising a light source coupled to the housing, the light source oriented to illuminate a container positioned over the housing.

14. The container inspection assembly of any one of claims 8 to 13, further comprising a lens coupled to the housing to be within the redirected line-of-sight and configured to provide a magnification thereto.

15. The container inspection assembly of any one of claims 8 to 14, further comprising a mounting assembly including a connecting arm coupled to the housing and a mount having a first connection interface configured to couple to an inspection booth and a second connection interface configured to couple to the connecting arm.

16. The container inspection assembly of claim 15, wherein the second connection interface comprises an elongate opening and the connecting arm comprises a slotted end configured to be slidably received within the elongate opening such that the connecting arm can be shifted laterally within the elongate opening.

17. The container inspection assembly of claim 15, wherein the second connection interface comprises a magnetic interface and the connecting arm further comprises a magnetic coupling disposed at an end thereof configured to couple to the magnetic interface.

18. The container inspection assembly of claim 17, wherein the connecting arm further comprises a hinge allowing the housing to be movable with respect to the mount.

19. The container inspection assembly of any one of claims 8 to 18, further comprising an inspection booth including a top surface having black and white portions.

20. The container inspection assembly of claim 19, wherein the inspection booth further comprises light sources extending along front and rear edges of the black and white portions.