Claims

1. A valve assembly, comprising:

a valve housing; and

a handle that is movable about an actuation axis to actuate a valve actuator within the valve housing between an open position and a closed position;

wherein the handle has a first opening and the valve housing has a second opening, wherein when the valve actuator is in the closed position the first opening aligns with the second opening to enable receipt of a lockout member that prevents movement of the valve actuator from the closed position to the open position;

characterized in that the valve actuator is a multi-turn actuator;

in which the open position of the multi-turn actuator includes rotational amounts from the closed position of 360 degrees and greater than 360 degrees.

2. The valve assembly of claim 1, wherein the handle has a pair of first openings at opposite sides of the handle and the valve housing has a pair of second openings at opposite sides of the valve housing, and wherein when the valve actuator is in the closed position the pair of first openings and the pair of second openings are aligned to enable receipt of the lockout member.

3. The valve assembly of claim 1, wherein the first and second openings extend transverse to the actuation axis.

4. The valve assembly of claim 3, wherein the first and second openings are oriented perpendicular to the actuation axis.

5. The valve assembly of claim 3, wherein the first and second openings are oriented at a non-zero angle relative to a horizontal plane perpendicular to the actuation axis.

6. The valve assembly of claim 5, wherein the non-zero angle is about 2.5 to 3 degrees.

7. A valve assembly, comprising:

a valve housing; and

a handle that is movable about an actuation axis to actuate a valve actuator within the valve housing between an open position and a closed position;

wherein the handle has a first opening and the valve housing has a second opening, wherein when the valve actuator is in the closed position the first opening aligns with the second opening to enable receipt of a lockout member that prevents movement of the valve actuator from the closed position to the open position;

charactised in that the valve assembly comprises:

an indicator stem configured for slidable movement relative to the handle in response to movement of the handle;

wherein the indicator stem has a third opening, wherein when the valve actuator is in the closed position the first opening aligns with the third opening to enable receipt of the lockout member to prevent movement of the valve actuator from the closed position to the open position.

8. The valve assembly of claim 7, wherein when the valve actuator is in the open position the first opening is out of alignment with the third opening.

9. The valve assembly of claim 7, wherein when the valve actuator is in the open position the first and second openings are out of alignment with the third opening.

10. The valve assembly of claim 7, wherein when the valve actuator is in the open position the first opening is out of alignment with the second opening.

11. The valve assembly of claim 7, wherein the indicator stem has a cam that slides through a vertically extending opening in a wall of the handle as the handle moves to actuate the valve actuator between the closed position and the open position.

12. The valve assembly of claim 7, wherein the handle has a pair of first openings at opposite sides of the handle and the valve housing has a pair of second openings at opposite sides of the valve housing, and wherein when the valve actuator is in the closed position the pair of first openings, the pair of second openings, and the third opening are aligned to enable receipt of the lockout member.

13. The valve assembly of claim 1, wherein the first opening angularly aligns with the second opening about the actuation axis when the valve actuator is in the closed position.

14. The valve assembly of claim 1, wherein the position of the first opening when the valve actuator is in the open position is 90 degrees away from the position of the first opening when the valve actuator is in the closed position.

15. The valve assembly of claim 1, wherein the first opening axially aligns with the second opening along the actuation axis when the valve actuator is in the closed position.