CLAIMS

1. A split valve assembly comprising two valve portions complementarily shaped such that the first can sealingly engage with and co-operate with the second to allow the movement of material therethrough, each valve portion comprising a housing, a valve seat and a valve closure member moveable between a first position in which the valve closure member is displaced from the valve seat and the valve is open, and a second position in which the valve closure member co-operates with the valve seat and the valve is closed, wherein the assembly has a first configuration in which the first and second valve portions engage with one another, the valve closure members being closed, and a second configuration in which the two valve portions are disengaged from one another, the first valve portion having locking means moveable relative to the second valve portion to selectively lock and unlock the two valve portions together, said locking means received by the second valve portion which comprises a shim.

2. A split valve assembly as claimed in claim 1 wherein the locking means may comprise a locking pair, one member of which is moveable relative to the other and capable of selectively engaging with the other member to lock and unlock portions together.

3. A split valve assembly as claimed in claim 2 wherein the locking pair may comprise a male and female member complementarily shaped to one another.

4. A split valve assembly as claimed in claim 3 wherein the male member is preferably moveable relative to the female member.

5. A split valve assembly as claimed in claim 4 wherein the male member is capable of translational movement.

6. A split valve assembly as claimed in any previous claim wherein, the male member comprises a pin and the female member comprises a complementarily shaped blind bore for receiving the male member.

7. A split valve assembly as claimed in any previous claim wherein the male member is preferably disposed in the active valve portion and the female in the passive valve portion.

8. A split valve assembly as claimed in any previous claim wherein the shim receives the pin and is located inthe second valve portion.

9. A split valve assembly as claimed in claim 8 wherein the shim is releasably secured in the second valve portion.

10. A split valve assembly as claimed in claim 9 wherein the means for releasably securing the shim to the second valve portion comprises fastening means.

11. A split valve assembly as claimed in claim 10 wherein the fastening means is a screw.

12. A split valve assembly as claimed in any previous claim wherein the shim is replaceable.

13. A split valve assembly as claimed in any previous claim wherein the shim is manufactured from a different material to that of the male member.

14. A split valve assembly as claimed in any previous claim wherein the shim comprises a base and a wedge portion.

15. A split valve assembly as claimed in claim 14 wherein the wedge portion is orientated such that the tapered end is proximal to the bore opening.

16. A split valve assembly as claimed in claim 15 wherein the base portion of the shim comprises an aperture through which securing means may pass to secure the shim in place.

17. A split valve assembly as claimed in claim 16 wherein the pin and wedge portion of the shim are complimentarily shaped.

18. A split valve assembly as claimed in any previous claim wherein the valve assembly is a split butterfly valve, split ball valve or any other split valve.

19. A split valve assembly as claimed in any previous claim wherein the valve portions are manufactured from 316L and 304 Stainless Steel, Alloy 22 and C276 Nickel alloys.

20. A split valve assembly as claimed in claim 19 wherein the Locking Pins are manufactured from Aluminium Bronze, Phosphar Brinze, other Bronze grades, hard speciality grades of stainless steel such as 431 and 17-4PH.

21. A split valve assembly as claimed in claim 20 wherein the shim is manufactured from 316L or 304 Stainless Steel or one of the harder speciality grades of stainless steel such as 431 or 17-4PH.

22. A shim for a split valve assembly having first and second valve portions and locking means comprising a male and female member, said shim

comprising a base portion and a wedge portion, the wedge portion extending from the base and having a tapered profile, the base having means for securing it to a valve portion.

23. A shim as claimed in claim 22 wherein the male member comprises a pin and the female member comprises a complementarily shaped blind bore for receiving the male member.

24. A shim as claimed in claim 23 wherein the male member is preferably disposed in the active valve portion and the female in the passive valve portion.

25. A shim as claimed in claim 24 having releasable securing means for releasably securing it to a valve portion.

26. A shim as claimed in claim 25 wherein the means for releasably securing the shim to the second valve portion comprises fastening means.

27. A shim as claimed in claim 26 wherein the fastening means is a screw.

28. A shim as claimed in claim 22 wherein the tapered end is proximal to the bore opening.

29. A shim as claimed in claim 22 wherein the base of the shim comprises an aperture through which securing means may pass to secure the shim in place.

30. A shim as claimed in claim 23 wherein the face of the wedge portion for engagement with the pin is complementarily shaped thereto.

31. A shim as claimed in claim 30 wherein the wedge portion is arcuate

32. A shim as claimed in claim 31 wherein one side of the shim is arcuate and adapted to be one third to half a complete circle circumference.

33. A shim as claimed in claim 32 wherein the shim has a top bearing surface formed from a first radius of curvature and the lower surface being a second radius of curvature that is greater than the first.

34. A shim as claimed in claim 33 wherein Radius of first radius of curvature is preferably substantially the same as the radius of the pin.

35. A shim as claimed in claim 22 having an extraction hole which is accessible external to the shim for engagement with a tool for the insertion and/or removal of the shim.

CLAIMS

1. A split valve assembly comprising two valve portions complementarily shaped such that the first can sealingly engage with and co-operate with the second to allow the movement of material therethrough, each valve portion comprising a housing, a valve seat and a valve closure member moveable between a first position in which the valve closure member is displaced from the valve seat and the valve is open, and a second position in which the valve closure member co-operates with the valve seat and the valve is closed, in which the assembly has a first configuration in which the first and second valve portions engage with one another, the valve closure members being closed, and a second configuration in which the two valve portions are disengaged from one another, the first valve portion having locking means moveable relative to the second valve portion to selectively lock and unlock the two valve portions together, the locking means received by the second valve portion which comprises a shim.

2. A split valve assembly according to Claim 1, in which the locking means may comprise a locking pair, one member of which is moveable relative to the other and capable of selectively engaging with the other member to lock and unlock portions together.

3. A split valve assembly according to Claim 2, in which the locking pair may comprise a male and female member complementarily shaped to one another.

4. A split valve assembly according to Claim 3, in which the male member is preferably moveable relative to the female member.

5. A split valve assembly according to Claim 4, in which the male member is capable of translational movement.

6. A split valve assembly according to any preceding claim, in which, the male member comprises a pin and the female member comprises a complementarily shaped blind bore for receiving the male member.

7. A split valve assembly according to any preceding claim, in which the male member is preferably disposed in the first, active valve portion and the female in the second, passive valve portion.

8. A split valve assembly according to any preceding claim, in which the shim receives the pin and is located in the second valve portion.

9. A split valve assembly according to Claim 8, in which the shim is releasably secured in the second valve portion.

10. A split valve assembly according to Claim 9, in which the means for releasably securing the shim to the second valve portion comprises fastening means.

11. A split valve assembly according to Claim 10, in which the fastening means is a screw.

12. A split valve assembly according to any preceding claim, in which the shim is replaceable.

13. A split valve assembly according to any preceding claim, in which the shim is manufactured from a different material to that of the male member.

14. A split valve assembly according to any preceding claim, in which the shim comprises a base and a wedge portion.

15. A split valve assembly according to Claim 14, in which the wedge portion is orientated such that the tapered end is proximal to the bore opening.

16. A split valve assembly according to Claim 15, in which the base portion of the shim comprises an aperture through which securing means may pass to secure the shim in place.

17. A split valve assembly according to Claim 16, in which the pin and wedge portion of the shim are complimentarily shaped.

18. A split valve assembly according to any preceding claim, in which the valve assembly is a split butterfly valve, split ball valve or any other split valve.

19. A split valve assembly according to any preceding claim, in which the valve portions are manufactured from 316L and 304 Stainless Steel, Alloy 22 and C276 Nickel alloys.

20. A split valve assembly according to Claim 19, in which the Locking Pins are manufactured from Aluminium Bronze, Phosphar Brinze, other Bronze grades, hard speciality grades of stainless steel such as 431 and 17-4PH.

21. A split valve assembly according to Claim 20, in which the shim is manufactured from 316L or 304 Stainless Steel or one of the harder speciality grades of stainless steel such as 431 or 17-4PH.