Claims

1. An isolation assembly configured to be disposed in a wellbore through a fluid-producing formation, comprising:

one joint of a tubing section comprising at least two ports;

at least two inflow control devices, wherein each inflow control device is coupled to the tubing section at a respective port of the at least two ports; and

an isolation element positioned between the at least two inflow control devices, the isolation element being configured to fluidly isolate the at least two ports from each other.

2. The isolation assembly of claim 1, wherein the isolation element comprises a swellable solid material configured to expand radially.

3. The isolation assembly of claim 2, wherein the swellable solid material comprises a rubber element.

4. The isolation assembly of claim 1, wherein the isolation element comprises a chemical compound configured to expand radially in response to pressure in a wellbore in which the tubing section is disposed.

5. The isolation assembly of claim 4, wherein the chemical compound comprises an epoxy.

6. The isolation assembly of claim 1, wherein the isolation element comprises a mechanical isolation element.

7. The isolation assembly of claim 1, wherein the mechanical isolation element comprises a packer.

8. The isolation assembly of claim 1, wherein the isolation element comprises an inflatable material.

9. The isolation assembly of claim 1, wherein each inflow control device comprises an autonomous inflow control device configured to restrict a first production fluid differently from a second production fluid.

10. The isolation assembly of claim 1, wherein each inflow control device is positioned external to the tubing section at a respective port of the at least two ports.

11. The isolation assembly of claim 1, further comprising at least two filtering elements, wherein each filtering element is positioned external to the tubing section at a respective inflow control device.

12. An isolation assembly configured to be disposed in a wellbore through a fluid-producing formation, comprising:

a joint of a tubing section comprising at least two ports;

at least two inflow control devices, wherein each inflow control device is coupled to the tubing section at a respective port;

at least two filtering elements, wherein each filtering element is coupled to the tubing section at a respective inflow control device; and

an isolation element positioned between the at least two inflow control devices, the isolation element being configured to fluidly isolate the at least two ports from each other.

13. The isolation assembly of claim 12, wherein each filtering element comprises a wire wrap screen.

14. The isolation assembly of claim 12, wherein each filtering element comprises a mesh screen.

15. The isolation assembly of claim 12, wherein each filtering element comprises a porous medium, wherein the porous medium comprises a material having one or more pores adapted to allow a fluid to flow through the porous medium and to prevent one or more particles from flowing through the porous medium.

16. The isolation assembly of claim 12, wherein each inflow control device comprises an autonomous inflow control device configured to restrict a first production fluid differently from a second production fluid.

17. An isolation assembly configured to be disposed in a wellbore through a fluid-producing formation, comprising:

a joint of a tubing section comprising at least two ports;

at least two autonomous inflow control devices, wherein each autonomous inflow control device is coupled to the tubing section at a respective port;

at least two filtering elements, wherein each filtering element is coupled to the tubing section at a respective inflow control device; and

an isolation element positioned between the at least two autonomous inflow control devices, the isolation element being configured to fluidly isolate the at least two ports from each other.

18. The isolation assembly of claim 17, wherein each autonomous inflow control device is configured to restrict a flow of a first production fluid or a second production fluid through the respective port, wherein the restriction of the first production fluid is different from the restriction of the second production fluid.

19. The isolation assembly of claim 17, further comprising at least one end ring configured to prevent axial expansion of the filtering element.

20. The isolation assembly of claim 19, wherein the at least one end ring is adapted to provide a protrusion, wherein the protrusion is positioned external to the isolation element and is adapted to extend radially in response to force applied by a radial expansion of the isolation element.

Claims

1. An isolation assembly configured to be disposed in a wellbore through a fluid-producing formation, comprising:

one joint of a tubing section comprising at least two ports;

at least two inflow control devices, wherein each inflow control device is coupled to the one joint at a respective port of the at least two ports; and

an isolation element positioned between the at least two inflow control devices, the isolation element being configured to fluidly isolate the at least two ports from each other.

2. The isolation assembly of claim 1, wherein the isolation element comprises a swellable solid material configured to expand radially.

3. The isolation assembly of claim 2, wherein the swellable solid material comprises a rubber element.

4. The isolation assembly of claim 1, wherein the isolation element comprises a chemical compound configured to expand radially in response to pressure in a wellbore in which the tubing section is disposed.

5. The isolation assembly of claim 4, wherein the chemical compound comprises an epoxy.

6. The isolation assembly of claim 1, wherein the isolation element comprises a mechanical isolation element.

7. The isolation assembly of claim 1, wherein the mechanical isolation element comprises a packer.

8. The isolation assembly of claim 1, wherein the isolation element comprises an inflatable material.

9. The isolation assembly of claim 1, wherein each inflow control device comprises an autonomous inflow control device configured to restrict a first production fluid differently from a second production fluid.

10. The isolation assembly of claim 1, wherein each inflow control device is positioned external to the tubing section at a respective port of the at least two ports.

11. The isolation assembly of claim 1, further comprising at least two filtering elements, wherein each filtering element is positioned external to the tubing section at a respective inflow control device.

12. An isolation assembly configured to be disposed in a wellbore through a fluid-producing formation, comprising:

a joint of a tubing section comprising at least two ports;

at least two inflow control devices, wherein each inflow control device is coupled to the one joint at a respective port;

at least two filtering elements, wherein each filtering element is coupled to the joint at a respective inflow control device; and

an isolation element positioned between the at least two inflow control devices, the isolation element being configured to fluidly isolate the at least two ports from each other.

13. The isolation assembly of claim 12, wherein each filtering element comprises a wire wrap screen.

14. The isolation assembly of claim 12, wherein each filtering element comprises a mesh screen.

15. The isolation assembly of claim 12, wherein each filtering element comprises a porous medium, wherein the porous medium comprises a material having one or more pores adapted to allow a fluid to flow through the porous medium and to prevent one or more particles from flowing through the porous medium.

16. The isolation assembly of claim 12, wherein each inflow control device comprises an autonomous inflow control device configured to restrict a first production fluid differently from a second production fluid.

17. An isolation assembly configured to be disposed in a wellbore through a fluid-producing formation, comprising:

a joint of a tubing section comprising at least two ports;

at least two autonomous inflow control devices, wherein each autonomous inflow control device is coupled to the one joint at a respective port;

at least two filtering elements, wherein each filtering element is coupled to the joint at a respective inflow control device; and

an isolation element positioned between the at least two autonomous inflow control devices, the isolation element being configured to fluidly isolate the at least two ports from each other.

18. The isolation assembly of claim 17, wherein each autonomous inflow control device is configured to restrict a flow of a first production fluid or a second production fluid through the respective port, wherein the restriction of the first production fluid is different from the restriction of the second production fluid.

19. The isolation assembly of claim 17, further comprising at least one end ring configured to prevent axial expansion of the filtering element.

20. The isolation assembly of claim 19, wherein the at least one end ring is adapted to provide a protrusion, wherein the protrusion is positioned external to the isolation element and is adapted to extend radially in response to force applied by a radial expansion of the isolation element.