Claims

1 Apparatus for forming a sealing end from a length of flexible tubing having memory, the apparatus comprising;

a tubing support having

a spigot sized to fit over the flexible tubing; and

a sleeve sized to maintain an end of the flexible tube rolled back over the tubing support,

wherein the sleeve and tubing support are each provided with complementary formations for mating with each other.

2 Apparatus as claimed in claim 1, wherein the spigot is sized for a location fit over the flexible tubing and the sleeve is sized for an interference fit over the end of the flexible tube rolled back over the tubing support.

3 Apparatus as claimed in claim 1, wherein the spigot is sized for a loose fit over the flexible tubing.

4 Apparatus as claimed in any one of claims 1 - 3, wherein the tubing support further includes a lip extending substantially perpendicularly to the spigot.

5 Apparatus as claimed in any one of claims 1 - 3, wherein the sleeve further includes a lip extending substantially perpendicularly to the sleeve.

6 Apparatus as claimed in any one of claims 1 - 3, wherein both the tubing support and the sleeve are provided with lips extending substantially perpendicularly to the spigot and sleeve, and the lips extending towards each other in use.

7 Apparatus as claimed in claim 6, wherein tubing support lip is provided with a step, and the sleeve lip is in the form of a rim, the step and the rim enabling a connection between the tubing support and sleeve.

8 Apparatus as claimed in claim 4, wherein the lip is provided with a channel and the sleeve is provided with one or more projections sized to mate into the

channel on correct positioning of the tubing support and sleeve, connecting the tubing support and sleeve together.

9 Apparatus as claimed in claim 4, wherein the lip is provided with one or more projections, and the sleeve is provided with a channel sized to mate over the projections on correcting positioning of the tubing support and sleeve, connecting the tubing support and sleeve together.

10 Apparatus as claimed in any preceding claim, wherein the spigot is provided with distal end adapted to abut to tubing having a smaller diameter.

11 Apparatus as claimed in any one of claims 1 to 9, wherein the spigot is provided with distal end adapted to abut to tubing having a larger diameter.

12 Apparatus as claimed in claim 11, wherein the spigot is thickened along a length thereof, providing a greater radius over which the tube can be rolled back.

13 Apparatus as claimed in claim 12, wherein the thickened spigot is tapered and rounded

14 Apparatus as claimed in any preceding claim, wherein an external surface of the spigot incorporates a series of protrusions or barbs to hold the rolled back end of the tube.

15 Apparatus as claimed in any preceding claim, wherein the apparatus is made from thermoplastic, for example PVDF.

16 Apparatus for forming a sealing end from a length of flexible tubing, the apparatus comprising:

a tubing support having

a spigot sized for a location fit over the flexible tubing; and

a lip extending substantially perpendicular to the spigot; and

a sleeve sized to fit over an end of the flexible tubing rolled back over the tubing support.

17 Apparatus as claimed in any preceding claim, wherein the sleeve forms a flanged connector.

18 Apparatus as claimed in any one of claims 1-15 or 16, wherein the sleeve forms an abutment connector, having a flanged end.

19 Apparatus as claimed in claim 18, wherein the flanged end includes a formation for mating with a corresponding formation at an abutment joint.

20 Apparatus as claimed in claim 4, further comprising a flanged connector having
a catch sized to engage with the tubing support lip;
a tubular section, designed in use to be parallel to the length of tubing; and
a flange, sized for clamping to another flange of another flanged connector.

21 A method of connecting two lengths of flexible tube, the method comprising
rolling an end of each length of the tubing back on itself;
supporting each rolled back end using apparatus according to claims 1-15 or 16; and
urging the rolled back ends together to create a fluid tight connection.

22 A method as claimed in claim 21, wherein the fluid tight connection is held using the apparatus of claims 17, 18 or 20.

23 A method of forming a sealing end from a length of flexible tubing, the method comprising
pushing a tubing support according to any one of claims 4 or 16 over an end of a tube such that the lip is furthest from the end of the tube and the spigot is positioned a short distance from the end of the tube;
rolling the end of the tube back over the spigot, the length of rolled back tube not extending past the lip or end of the spigot;
pushing a sleeve according to any one of claims 1-15 or 16 over the rolled back end; and

connecting the tubing support and sleeve.

24 A method of forming a fluid tight seal from two sealing ends according to claim 23, wherein two rolled back end are clamped together creating the fluid tight seal.

25 A method as claimed in claim 24, wherein the rolled back ends are clamped together using the application of any one of claims 17, 18 or 20, creating the fluid tight seal.