We claim:

1. A hose assembly comprising:

an inner core tube;

a connector comprising a stem portion inserted into a distal end of the inner core tube;

an outer metal tube substantially coaxial with and surrounding the inner core tube, the outer metal tube terminating at a distal end axially inward of the distal end of the inner core tube; and

a collar substantially coaxial with and surrounding the distal end of the inner core tube, the collar including an intermediate portion radially compressed against the distal end of the inner core tube to secure the distal end of the inner core tube to the connector stem portion, a first end flared radially outward from the intermediate portion and welded to the distal end of the outer metal tube and a second end radially compressed against an outer surface of the connector and attached to the connector.

2. The hose assembly of claim 1, wherein the outer metal tube comprises a corrugated tube.

3. The hose assembly of claim 2, wherein the first end of the collar comprises a counterbore sized to receive an endmost corrugation of the corrugated tube.

4. The hose assembly of claim 2, wherein the first end of the collar is radially compressed over an endmost corrugation of the corrugated tube.

5. The hose assembly of claim 1, wherein the inner core tube comprises plastic.

6. The hose assembly of claim 1, wherein the inner core tube comprises one of PFA and PTFE.

7. The hose assembly of claim 1, wherein the inner core tube comprises a reinforcement layer secured to a tubular core element.

8. The hose assembly of claim 7, wherein the reinforcement layer comprises a braided material.

9. The hose assembly of claim 1, wherein the outer metal tube and the inner core tube are separated by a radial gap.

10. The hose assembly of claim 1, wherein the stem portion comprises an outer barbed portion for retention of the distal end of the inner core tube.

11. The hose assembly of claim 1, wherein the distal end of the outer metal tube is axially spaced apart from the connector.

12. The hose assembly of claim 1, wherein the collar comprises a leak detection port.

13. The hose assembly of claim 1, wherein the second end of the collar is welded to the connector.

14. The hose assembly of claim 1, wherein the intermediate portion is radially compressed against an outer reinforcement layer of the inner core tube.

15. A method of making a hose assembly, the method comprising:

welding a first end of a collar to a distal end of a metal tube;

inserting a stem portion of a connector into a distal end of a core tube;

inserting the core tube into the metal tube;

positioning the core tube and the connector such that a second end of the collar aligns with the connector and the distal end of the core tube extends axially outward of the distal end of the metal tube and aligns with an intermediate portion of the collar;

radially compressing the intermediate portion of the collar against the distal end of the inner core tube to secure the distal end of the inner core tube to the connector stem portion, with the first end of the collar being flared radially outward from the intermediate portion; and

radially compressing the second end of the collar against an outer surface of the connector.

16. The method of claim 15, wherein radially compressing the second end of the collar against the outer surface of the connector comprises radially compressing the second end of the collar against an annular radial projection on the outer surface of the connector.

17. The method of claim 15, wherein the metal tube comprises a corrugated tube, wherein welding the first end of a collar to the distal end of the metal tube comprises receiving an endmost corrugation of the corrugated tube in a counterbore of the first end portion of the collar.

18. The method of claim 15, further comprising welding the second end of the collar to the outer surface of the connector.

19. A hose assembly comprising:

an inner core tube including a plastic tubular core element and a reinforcement layer surrounding the plastic tubular core element;

a connector comprising a stem portion inserted into a distal end of the inner core tube;

an outer metal tube substantially coaxial with and surrounding the inner core tube, the outer metal tube terminating at a distal end axially inward of the distal end of the inner core tube; and

a collar substantially coaxial with and surrounding the distal end of the inner core tube, the collar including a flared first end welded to the distal end of the outer metal tube, a second end attached to the connector, and an intermediate portion between the first end and the second end, wherein the intermediate portion is radially compressed against the reinforcement layer at the distal end of the inner core tube to secure the distal end of the inner core tube to the connector stem portion.

20. The hose assembly of claim 19, wherein the second end of the collar is welded to the connector.