CLAIMS

What is claimed is:

1. A subsea connection for a pressurized fluid flow path, comprising:

a body comprising:

a body flow path;

a body recess formed within the body; and

a corrosion resistant material positioned within the body recess to form a corrosion resistant layer;

a spool attachable to the body, the spool comprising:

a spool flow path in fluid communication with the body flow path with the spool attached to the body; and

a spool recess formed at an end of the spool; and

another corrosion resistant material positioned within the spool recess to form another corrosion resistant layer; and

a seal, wherein the seal is actuatable against the corrosion resistant layers to form a seal between the body and the spool.

2. The connection of claim 1, wherein the seal comprises an elastomeric sealing element positioned radially about the spool.

3. The connection of claim 1, wherein the spool recess is formed about a radial outer surface of the spool.

4. The connection of claim 2, wherein the spool recess is formed at an axial end of the spool.

5. The connection of claim 2, wherein the elastomeric sealing element is positioned between the corrosion resistant layers.

6. The connection of claim 1, wherein the spool is weldless for use within high-pressure high-temperature applications and the connection is compliant with API 17TR8 standards.

7. The connection of claim 1, further comprising a flange positioned about the spool and configured to couple to the body.

8. The connection of claim 6, further comprising a collar positioned about and threadedly engaged with the spool, the collar comprising a load shoulder such that the flange is engageable with the load shoulder when coupled to the body and the body is connected with the spool.

9. The connection of claim 1, wherein the seal comprises a metal-to-metal seal.

10. The connection of claim 1, wherein the body comprises a valve configured to couple to a port of a subsea blowout preventer to control fluid flow between the subsea blowout preventer and a choke-and-kill line.

11. The connection of claim 1, wherein the body comprises a valve such that the spool is configured to couple to the valve at one end and couple to another valve at another end.

12. The connection of claim 1, wherein the end of the spool is receivable within the body to couple the spool to the body.

13. The connection of claim 1, wherein a gap is formed between the end of the spool and the body.

14. The connection of claim 1, wherein at least one of the corrosion resistant layers comprises a nonferrous alloy comprising titanium, nickel, cobalt, chromium, and/or molybdenum.

15. A subsea system, comprising:

a subsea blowout preventer comprising a choke-and-kill line port;

a valve attachable with the subsea blowout preventer and comprising a flow path in fluid communication with the choke-and-kill line port when connected with the subsea blowout preventer;

a spool attachable with the valve, the spool comprising:

a spool flow path in fluid communication with the flow path of the valve with the spool attached to the valve;

a corrosion resistant alloy (CRA) material layer formed on the spool; and

a seal, wherein the seal is actuatable against the CRA material layer to form a seal between the valve and the spool.

16. The system of claim 15, wherein the subsea blowout preventer comprises another choke-and-kill line port formed within the subsea blowout preventer, the system further comprising:

another valve configured to couple with the subsea blowout preventer and comprising a flow path configured to be in fluid communication with the other choke-and-kill line port; and

the spool configured to couple to the valve at one end and couple to the other valve at another end such that the flow paths of the valves are in fluid communication with each other through the spool flow path.

17. The system of claim 15, wherein the spool is weldless for use within a high-pressure and high-temperature environment and is compliant with API 17TR8 standards.

18. The system of claim 15, wherein:

the spool comprises a recess formed therein; and

the CRA material layer is deposited within the recess.

19. A method of establishing a pressurized fluid flow path subsea, the method comprising:

coupling a spool to a body to establish fluid communication between a flow path of the spool with a flow path of the body; and

forming a seal between the body and the spool, the seal formed against a corrosion resistant layer positioned within a spool recess formed at an end of the spool and another corrosion resistant layer positioned within a body recess formed within the body.