CLAIMS

1. A fluid substrate comprising:

a manifold including a circular opening as a tube stub plug hole;

a tube stub plug comprising a seal surface, a tube stub, and a flow path, wherein the tube stub plug aligns with a top surface of the manifold, the flow path runs through the tube stub plug from the seal surface to the tube stub, wherein a portion of the tube stub extends beyond an outer surface of the manifold, and wherein the tube stub plug coupled with the manifold at the circular opening,

wherein an anti-rotation feature prevents the tube stub plug from rotating with respect to the manifold.

2. The fluid substrate of claim 1, wherein the anti-rotation feature is included in the tube stub plug.

3. The fluid substrate of claim 1, wherein the anti-rotation feature is included in the manifold.

4. The fluid substrate of claim 1, wherein the tube stub plug further comprises

a circular shape and a tube stub plug through hole, and

the anti-rotation feature comprises an element coupled with the tube stub plug through hole and couples the manifold and the tube stub plug.

5. The fluid substrate of claim 2, wherein the anti-rotation feature runs through the tube stub plug.

6. The fluid substrate of claim 1, wherein the tube stub projects from the manifold at a right angle.

7. The fluid substrate of claim 1, wherein the tube stub plug is secured to the manifold using a threaded connection.

8. The fluid substrate of claim 1, wherein the tube stub plug further comprises a stepped portion adjacent the tube stub.

9. The fluid substrate of claim 1, wherein the tube stub plug further comprises a plurality of countersunk holes.

10. The fluid substrate of claim 9, further comprising a tack weld in each of the plurality of countersunk holes.