What is Claimed is:

1. A sealing assembly for a bearing assembly, the bearing assembly having a fixed portion attached to a riser of a subsea wellhead and a rotating portion attached to a rotating tubing string that extends through the riser, the sealing assembly comprising:

   a plurality of sealing elements, each sealing element comprising a seal body having an inner sealing surface designed to seal against a tubular body;

   one or more sleeves that removably attach between adjacent sealing elements, the adjacent sealing elements being attached to the one or more sleeves in axial alignment, wherein a chamber is formed by the adjacent sealing elements and the corresponding sleeve;

   a bearing attachment for attaching a first and upper sealing element of the plurality of modular sealing elements to the rotating portion of the bearing assembly such that the plurality of modular sealing elements extend downward in series from the bearing assembly and rotate with the rotating tubing string.

2. The sealing assembly of claim 1, wherein the sealing element has a first end and a second end, the first end being attached to the sealing sleeve and the inner sealing surface is positioned toward the second end.

3. The sealing assembly of claim 1 or claim 2, wherein each sealing element defines an inner sealing diameter.

4. The sealing assembly of claim 3, wherein at least one sealing element has a different inner sealing diameter than another sealing element.

5. The sealing assembly of any one of claims 1-4, wherein the one or more sleeves further comprise connection seals at each of a first end and a second end of the one or more sleeves.

6. The sealing assembly of any one of claims 1-5, wherein each sleeve attaches to a first end of a respective sealing element, such that an upper sealing element extends into the chamber.

7. The sealing assembly of claim 6, wherein the inner sealing surface is positioned toward a second end of the sealing element.

8. The sealing assembly of any one of claims 1-7, wherein the one or more attachment sleeves have first and second ends and the first end is sized to nest with adjacent sleeves such that each of the first and second ends are simultaneously attached to a respective sealing element.

9. The sealing assembly of claim 8, further comprising a cap ring that engages the second end of the attachment sleeve at the end of the series of sealing elements.

10. The sealing assembly of any one of claims 1-9, wherein each sealing element comprises a rigid attachment portion for attaching to the sleeve and an elastomeric sealing portion that is carried by the attachment portion.

11. The sealing assembly of any one of claims 1-10, further comprising at least one sensor for sensing at least one of the pressure and the temperature within at least one chamber.

12. The sealing assembly of claim 11, wherein the at least one sensor transmits the readings wirelessly.

13. The sealing assembly of any one of claims 1-12, wherein each sealing element carries a sensor for sensing at least one of pressure and temperature.

14. The sealing assembly of claim 13, wherein sensors transmit the readings wirelessly.

15. A sealing assembly for a bearing assembly, the bearing assembly having a fixed portion attached to a riser of a subsea wellhead and a rotating portion attached to a rotating tubing string that extends through the riser, the sealing assembly comprising:

a plurality of sealing elements, each sealing element comprising a seal body having an inner sealing surface designed to seal against a tubular body;

one or more sleeves that removably attach between adjacent sealing elements, the adjacent sealing elements being attached to the one or more sleeves in axial alignment wherein the one or more attachment sleeves have first and second ends and the first end is sized to nest with adjacent sleeves such that each of the first and second ends are simultaneously attached to a respective sealing element;

a bearing attachment for attaching a first and upper sealing element of the plurality of modular sealing elements to the rotating portion of the bearing assembly such that the plurality of sealing elements extend downward in series from the bearing assembly and rotate with the rotating tubing string.