What is claimed is:

1. An aerostatic or hydrostatic bearing seal assembly comprising:

a first opposing surface that is a circumferential surface or sleeve on a rotatable shaft;

a second opposing surface that is a porous media;

the porous media connected to a seal body and positioned over and covering a plenum in the seal body;

the plenum being connected to a conductive passage for communicating a pressurized fluid to the plenum and the porous media distributing the pressurized fluid between the circumferential surface or sleeve and the porous media to create an annular film between the porous media and the circumferential surface or sleeve; and

wherein the bearing and seal assembly is coupled to and end of a housing that is concentric to the shaft with an o-ring disposed therebetween so that the first and second opposed surfaces form a radial bearing and serve as a seal so that the pressurized fluid between the circumferential surface or sleeve and the porous media prevents the contents contained in the housing from escaping.

2. The aerostatic or hydrostatic bearing seal assembly of claim 1, wherein the bearing seal assembly is coupled to the housing by a compliant mount.

3. The aerostatic or hydrostatic bearing seal assembly of claim 2, wherein the compliant mount is a bellows.

4. An aerostatic or hydrostatic bearing seal assembly comprising:

a rotatable shaft with a runner hard mounted to the rotatable shaft;

a housing located concentric to the shaft and defining a cavity;

an annular seal body having a first ring and a second ring, the annular seal body coupled to the housing; and

the first ring includes a first porous media positioned over a first plurality of concentric annular plenums each having a port that is directly connected to a first conductive passage,

the second ring opposed to the first ring and separated from the first ring by the runner, the second ring includes a second porous media positioned over a second plurality of concentric annular plenums each having a port that is directly connected to a second conductive passage,

the annular seal body includes the first and second conductive passages for communicating pressurized fluid directly to each plenum of the first and second plurality of plenums through the ports, wherein the plenums and the porous media distribute the pressurized fluid between the runner and the first ring and the second ring to create annular films on each side of the runner between the runner and the porous media.

5. The aerostatic or hydrostatic bearing seal assembly of claim 4 wherein the runner and first and second porous media are configured to serve as a thrust bearing.

6. The aerostatic or hydrostatic bearing seal assembly of claim 4 wherein the runner is a slender blade having thickness between 0.1 and 1 mm.

7. An aerostatic or hydrostatic bearing seal assembly comprising:

a first opposing surface that is a first face of a runner coupled to a rotatable shaft;

a second opposing surface that is a first porous media;

a housing located concentric to the shaft and defining a cavity;

an annular seal body coupled to the housing;

wherein the annular seal body includes a plurality of concentric annular plenums arranged concentrically about the shaft, each plenum directly connects to a port, and the first porous media is positioned over the plurality of concentric annular plenums; and

wherein the annular seal body further includes a conductive passage for communicating pressurized fluid to the plurality of concentric annular plenums directly through the ports, wherein the first opposing surface and the second opposing surface are configured to serve as a contact bearing, the plurality of concentric annular plenums and the first porous media are configured to distribute

the pressurized fluid to provide an unloading force between the first and second opposing surfaces.

8. The aerostatic or hydrostatic bearing seal assembly of claim 7, wherein the runner is coupled to the shaft using a compliant mount.

9. The aerostatic or hydrostatic bearing seal assembly of claim 7, wherein the runner is a single blade.

10. The aerostatic or hydrostatic bearing seal assembly of claim 7 wherein the runner is hard mounted to the shaft.

11. The aerostatic or hydrostatic bearing seal assembly of claim 7 wherein the first opposing surface and the second opposing surface are pre-loaded, or biased in a closing direction using springs or other components.