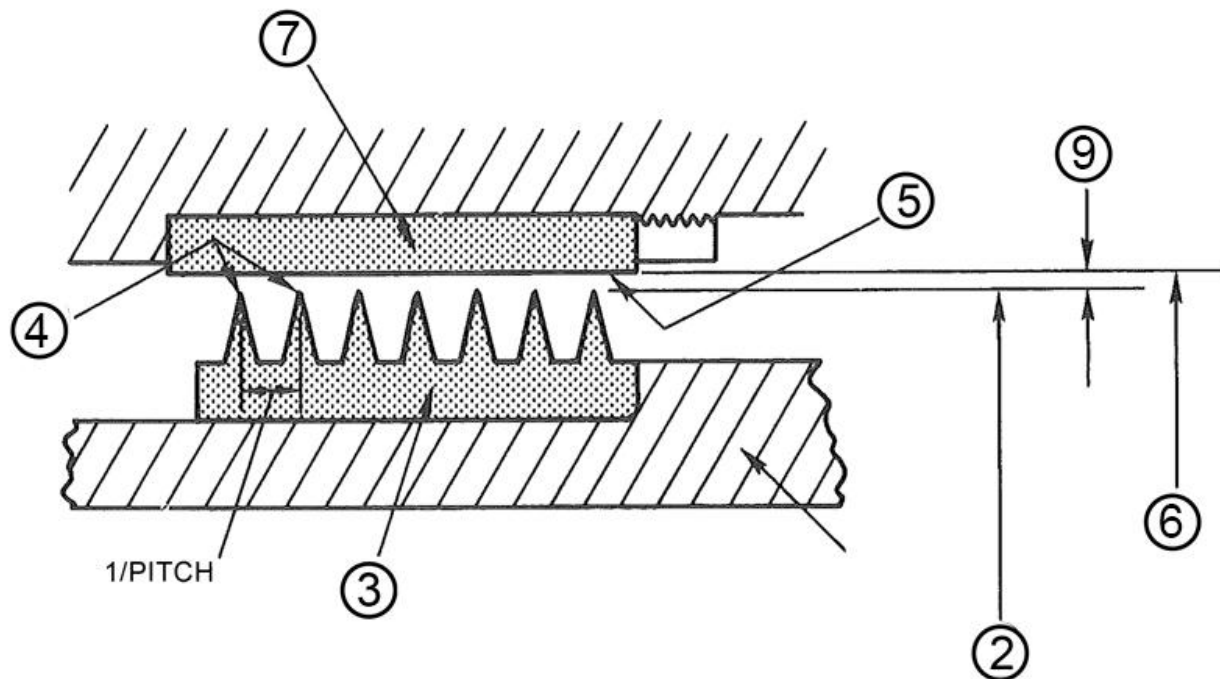


Typical Labyrinth Seals Straight-Thru Labyrinth



- 1. Straight-Thru Labyrinth
- 6. Knife-Edge Diameter
- 3. Knife-Edge Ring
- 4. Knife-Edges
- 5. Land

- 6. Land Diameter
- 7. Land Ring
- 8. Radial Clearance
- 9. Shaft

1. Straight-Thru Labyrinth: A type of labyrinth seal incorporating a constant clearance between knife-edges and a cylindrical sleeve of constant diameter.

2. Knife-Edge Diameter: The diameter which corresponds to the farthest outward protrusion, or to the farthest inward protrusion, of the knife-edge of a labyrinth seal.

3. Knife-Edge Ring: A ring shaped member in a labyrinth seal, in which the knife edges are machined or on which the knife-edges are mounted.

4. Knife-Edges: The narrow, circumferential knife-like edge or lip on a labyrinth seal which combined in series with other knife-edges, accomplished the throttling which achieves the seal.

5. Land: The cylindrical surface of the land ring in a labyrinth seal, which makes the closest approach to the knife-edges.

6. Land Diameter: The diameter of the cylindrical surface which is in closest proximity to the knife-edges and which, in combination with the knife-edges, effects the seal.

7. Land Ring: A ring shaped member in a labyrinth seal, which is either a straight-walled cylinder or a cylinder with axial steps. The land ring forms a clearance with the knife-edges effecting the seal.

8. Radial Clearance: Half of the total difference between the nominal land diameter and the nominal knife-edge diameter.

9. Shaft: Also Known as Bore Seal: A device the outside-diameter surface of which mates with a bore surface. It provides sealing between these two surfaces.