



Numerical, Analytical, Experimental Study of Fluid Dynamic Forces in Seals: Volume 3; Description of Spiral-Groove Codes Spiralg and Spirali (Paperback)

By Anita D Liang

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. The objectives of the program were to develop computational fluid dynamics (CFD) codes and simpler industrial codes for analyzing and designing advanced seals for air-breathing and space propulsion engines. The CFD code SCISEAL is capable of producing full three-dimensional flow field information for a variety of cylindrical configurations. An implicit multidomain capability allow the division of complex flow domains to allow optimum use of computational cells. SCISEAL also has the unique capability to produce crosscoupled stiffness and damping coefficients for rotordynamic computations. The industrial codes consist of a series of separate stand-alone modules designed for expeditious parametric analyses and optimization of a wide variety of cylindrical and face seals. Coupled through a Knowledge-Based System (KBS) that provides a user-friendly Graphical User Interface (GUI), the industrial codes are PC based using an OS/2 operating system. These codes were designed to treat film seals where a clearance exists between the rotating and stationary components. Leakage is inhibited by surface roughness, small but stiff clearance films, and viscous pumping devices. The codes have demonstrated to be a valuable resource for seal.

## Reviews

It becomes an incredible book that we actually have possibly study. It really is rally exciting through studying period of time. I am very easily could get a satisfaction of reading through a written book.

-- Gianni Hoppe

A really awesome pdf with perfect and lucid reasons. It is actually rally fascinating through reading period of time. Your lifestyle period will probably be transform as soon as you total looking over this ebook.

-- Alford Kihn