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Sommario/riassunto

"The analysis of dynamic properties of rotating machinery has for many years been the subject of numerous research works carried out in many scientific centers. From modern day rotating machinery it is required to work with increasingly difficult operating parameters while maintaining a light and compact design. Increased efficiency, reliability and precision are also required. Rotating machinery with hydrodynamic bearings are used in many sectors of the economy, e.g. energy, transport, aviation and military. Very often they are a key element of large technical objects. In steam turbines used for energy conversion, one of the key components are hydrodynamic plain bearings. These machines are referred to as "critical machinery", i.e. they are required to be immensely reliable. Unplanned downtime due to poor technical condition leads to significant financial losses. They are therefore monitored and thoroughly analyzed."--