Vibration Characteristics of Rotors with Massive Overhangs

Boris Ryjik
Otto-von-Guericke-Universität Magdeburg

ABSTRACT

The paper contains an analysis of problems encountered with the balancing of rotors with massive overhangs. It presents a summary of difficulties with vibration adjustment of such rotors, an analysis of peculiarities of their vibration characteristics and considerations about the main factors influencing on vibration behavior. The paper includes examples of computations for turbogenerator rotors and some recommendations for their preliminary investigation at the stage of design and for the technology of balancing.

Keywords: rotor, overhang, balancing, critical speeds