

MAGNETORHEOLOGICAL FLUIDS FOR ACTIVE VIBRATION CONTROL

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Rezumat. *Lucrarea de față își propune să ilustreze proprietățile mecanice, reologice și magnetice ale fluidelor magnetoreologice sub ipoteza utilizării lor în aplicații industriale. Soluțiile dezvoltate până la acest moment de timp în cadrul problematicii amortizării active a vibrațiilor sunt expuse împreună cu avantajele aduse de această tehnologie.*

Abstract. *This is a brief introduction that describes the mechanical, rheological and magnetic properties of the magnetorheological (MR) fluids for feasible engineering applications. The typical ways in which this technology may be used are shown and discussed. As an increasing number of industrial applications take advantage of MR's fluids special properties, the technology gets improved every day in order to provide optimal performance in active damping and dissipative devices. The special case of active squeeze film damping based on MR fluid is also discussed.*

Keywords: magnetorheological fluids, MR fluid, ER fluid, active vibration damping.

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