**MAGNETO-RHEOLOGOCAL FLUID**

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**Abstract**

Magneto rheological fluids commonly known as MR fluids are suspensions of solid in liquid whose properties changes drastically when exposed to magnetic field. Magneto rheological (MR) fluids are materials that respond to an applied field with a dramatic change in their rheological behavior. The essential characteristic of these fluids is their ability to reversibly change from a free-flowing, linear, viscous liquid to a semi-solid with controllable yield strength in milliseconds when exposed to a magnetic field.

MR fluids find a variety of applications in almost all the vibration control systems. It is now widely used in automobile suspensions, seat suspensions, clutches, robotics, design of buildings and bridges, home appliances like washing machines etc.
The key to success in all of these implementations is the ability of MR fluid to rapidly change its rheological properties upon exposure to an applied magnetic field.