

MR FLUID HAPTIC INTERFACE



CHALLENGES

Human-machine interactions largely exploit the sense of vision, with the risk of saturating the user. Conveying sensory information through a quality haptic interface can **enrich the dialogue with the user** and offer **new forms of interaction** between humans and increasingly complex systems.



INNOVATION & ASSETS

Magneto-Rheological Fluids (MR) enable the design of innovative interfaces for generating rich and varied haptic patterns in a way which is completely safe for the user:

- **Adaptable to different mechanical architectures** (rotation, translation, mixed).
- **Wide range of force or torque** with moderate power consumption and little volume.
- **Very high perceived haptic quality** (total absence of vibrations and noise, very fast response time and adapted to the sense of touch).



APPLICATIONS

- Automotive industry
- Aeronautics (Flight Control)
- Active control of mechanical systems (shock absorption, adaptive system rigidity, etc.)

