



### Sistemi smart damping

The project financed by Emilia-Romagna aims at developing a vibration damping system to increase the performances of Mandelli's HMCs.

The new product is composed of active elements, piloting devices and a control module with real-time functions capable of processing the signals coming from a series of sensors (designed to be easily integrated into the HMC) dedicated to the detection of vibrations and monitoring of malfunctioning. During the machining active phases, the control module processes and elaborates the data and, if necessary, starts the active elements to damp the vibrations.

The project will be developed with the cooperation of two partners:

- *Consorzio MUSP* will be the technology consultant and researcher during the data test and analysis phase
- *Hypertec Solutions* will take care of the design phase of the systems necessary to connect the active elements to the hydraulic panel and related control system.