

Intelligent Motion Control Platform for Smart Mechatronic Systems www.i-mech.eu

Aim

The **I-MECH** consortium aims at bridging the gap between the latest research results and best industrial practice in motion control systems and deliver cutting-edge smart mechatronic solutions.

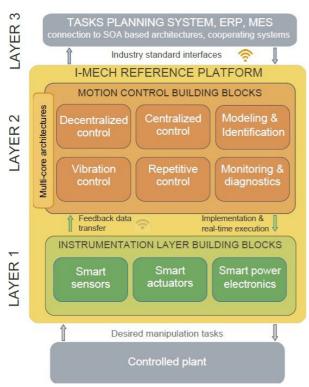
Five **pilots** are used to demonstrate building block functionality on *machinery* developed by our consortium partners.

Five use cases serve to demonstrate I-MECH functionality on *automation products* developed by I-MECH consortium partners.

Two **demonstrators** are used to show the functionality of the I-MECH platform on *production lines.*

Platform

The **I-MECH** strategic research agenda is focused on the lower layers of the motion control system – we refer to these as *Layer 1*, the instrumentation layer, and *Layer 2*, the control layer. Enhancements to these layers bring significant performance improvements to *Layer 3* (System behavior, batch scheduling & diagnostics) which, together, enable cyber-physical systems way beyond the current state of the art.



Relevance and Impact

I-MECH significantly strengthens European industrial competitiveness through the design and implementation of improved mechatronic smart systems. I-MECH outputs have impact on the entire value chain of the production automation market. The high added value of I-MECH reference platform is being directly verified through pilots in the fields of:

- ✓ additive manufacturing / printing
- ✓ back-end semiconductor industry
- high-speed packaging
- ✓ big CNC machining
- healthcare robotics



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