Machinaide project
2019–2023

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Workpackage 2 leader in Machinaide project
Better Digital Twins for seamless digitalisation

- Machinaide creates solutions to connect industrial ecosystems
- Human Machine Interfaces (HMI) for the Digital Twins, Internet 4.0 and Industrial Internet of Things and machines
- Applications to present processed information from Digital Twins
Work Packages

- **WP1**: Use Cases, requirements and evaluation
- **WP2**: Interoperability between Digital Twin ecosystems
- **WP3**: Processing of multiple Digital Twin’s data
- **WP4**: Innovative Human Machine Interfaces for DT’s and services
- **WP5**: Information usage across the machine Life cycle
- **WP6**: Business models
- **WP7**: Dissemination
- **WP8**: Project management
Smart factory ecosystem

KONECRANES®
Smart crane “Ilmatar” and crane ecosystems

RollResearch
Virtual Grinding machine with real control hardware

IDEAL GRP
Software and applications

REMION

Aalto Industrial Internet Campus

Aalto University
Pauli Salminen

Business models
Thank you! Questions?

Our experts can reply your questions in the following presentations:

- Communication of digital twin
  Riku Ala-Laurinaho & Joel Mattila, Aalto University

- A time machine for the digital twin in process simulation
  Harri Taskinen & Niclas Busck, IDEAL GRP

- Future of crane digital twins and their connectivity with ecosystems
  Valtteri Peltoranta, Konecranes

- A mixed reality interface for digital twin based crane
  Tu Xinyi, Aalto University

- Scalable IoT data pipeline with Apache Flink @ AWS
  Miika Valtonen, Remion

- A sneak peek: Online high-dimensional modeling of industrial crane data
  Tuomas Keski-Heikkilä, Aalto University

- Virtual grinding machine
  Thomas Widmaier, RollResearch International

- GraphQL interface for OPC UA
  Riku Ala-Laurinaho, Aalto University