muestro



Industrial Manufacturing As a Service

Strategies and models for flexible, resilient, and reconfigurable value networks through Trusted and Transparent Operations

The Pro

M4ESTRO aspires to create a reliable and transparent end-to-end platform using a Manufacturing as a Service (MaaS) approach to offer resilience and timely preparedness to the manufacturing industry during disruptive times.

M4ESTRO will define and implement a novel Smart and Trusted Network of Manufacturing professionals who will be the members of the platform. The network will be capable of implementing effective reconfigurations for manufacturing value chains in response to disruptive events based on the MaaS concept.





3 use case pilots

- (1) Manufacturing services for components in the aerospace and automotive sectors,
- (2) Tool manufacturing for the aerospace sector, and
- (3) Management of the Electronic Board's value network.

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Pillar 1: Resilient, transparent and flexible manufacturing processes in value chains Includes multi-source sensing of supply chain disruption indicators, implementation of reconfiguration models to adapt for internal and external



Pillar 2: Resilient equipment, AI and trusted data for adaptive manufacturing Is based upon the industrial strategies for modelling and simulating MaaS operations, ensures the reliability of the M4ESTRO platform in terms of



Pillar 3: Resilient Simulations to the Industrial Metaverse for responsive manufacturing Includes the development of Hybrid Twins and interfaces to the Industrial Metaverse as well as multi-variable and multi-actor methods to conduct process simulations and for



Pillar 4: Human centered Manufacturing Resilience and Sustainability Adopts tools and explanatory interfaces to support workers for better interaction and

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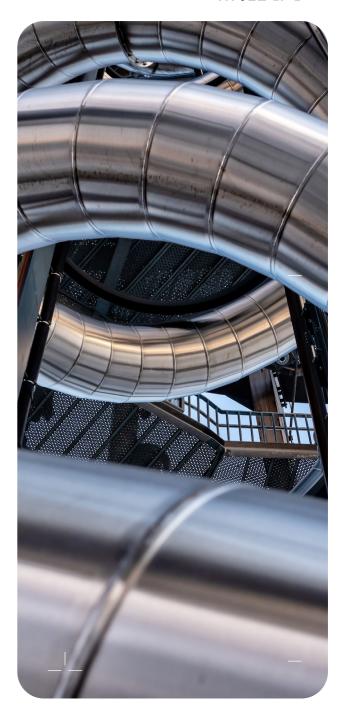
, Pillars

disruptions, Al-tool for network optimization transmitting results to a Resilience Predictor for visualization through a scoreboard analyzer app.

data sharing and smart servicelevel agreements and contracts for a reliable value chain within the network.

predictive operational purposes. The simulation results will be used to generate optimized scenarios for network resilience following a disruption.

understanding of the events as well as training modules for optimised use of the platform.



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