**Proposal for new technical committee of ESRA – Technical Sector**

**Risk Analysis and Safety in Machinery**

The aim is to promote discussion between academic research and industrial state-of-the-art solutions proposed in the field of standardization of safety-related topics covered by the Machinery Directive (2006/42/EC) and the upcoming Machinery Regulation (2023/1230), which will be applicable starting from January 2027.

The upgrade of the current state-of-the-art technical solutions (standardization requirements) and the necessity to address the safety risks related to new technologies introduced by the Machinery Regulation, such as machinery security, collaborative robots, and Artificial Intelligence safety aspects, are in the process of significantly changing factory halls and the machinery within them.

This committee aims to contribute to the exchange of experiences between academia and industry in the field of machinery, as defined in the aforementioned Directive and Regulation.

Tests, best practices, examples of theoretical models, and empirical data related to safety and risk analysis on standardization subjects in machinery will be welcomed. Comparisons between different standardization paradigms, with examples, are also encouraged.

**Chair**

Luca Landi – University of Perugia – Italy

**Co- Chair:**

Roberto Gabbrielli – University Pisa – Italy

**Topic experts Members:**

Machine Tools Safety related topics: Heinrich Moedden – VDW – Germany

Agricultural Machinery safety related topics: Fabio Pera – INAIL – Italy –

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**Possible contributors:**

1 - Fabio Pera

Maximum likelihood estimation of probability for impact Resistance of safety guards

Submission-No: 3440

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2-H. Moedden

proposal for the improved workpiece clamping in machine tools and its implementation in product safety standards

Submission-No: 0881

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3-Authors: Nils Bergstrom

Derivation of an Updated Aging Curve for Polycarbonate Vision Panels Used as Safeguards in Machine Tools

Submission-No: 4726

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4- Nils Bergstrom

*Numerical investigation of bending critical eigenmodes and stable operating conditions in the utilization of slim tool extensions: The influence of resonance and nutation*

Submission-No: 3663

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5- R. Gabbrielli

AI-Driven Safety Systems: Reducing Risk in Complex Workplaces and High-Stakes Tasks

Number : 4508

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6- Authors: Luca Landi

Title : Simulation of Short-Range Field of View for Agricultural Machinery Based on Standards Requirements

Submission-No: 1479

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7- , Luca Landi

Title : Industrial warning system with active devices for signal reception and dynamic noise attenuation using artificial intelligence algorithms

Submission-No: 7599

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