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## An adaptable framework to provide AR-based work instructions and assembly state tracking using an ISA-95 ontology

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### Abstract

The high degree of digitalization in modern manufacturing systems and the increase in the systems that need to exchange data so that the production information reaches the target employee has pushed forward the need to apply standardized ontologies. This article presents how a modular framework to create and provide AR-based work instructions coupled with image-based state tracking can be modelled in an ontology based on the industrial ISA-95 standard to represent the data exchange among the different modules. The proposed modelling of the data exchanged in such a framework is validated in a use case from the agriculture machinery industry.

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