

Collaborative Demonstrator Linear Axis & Welding Controller

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29th March 2017



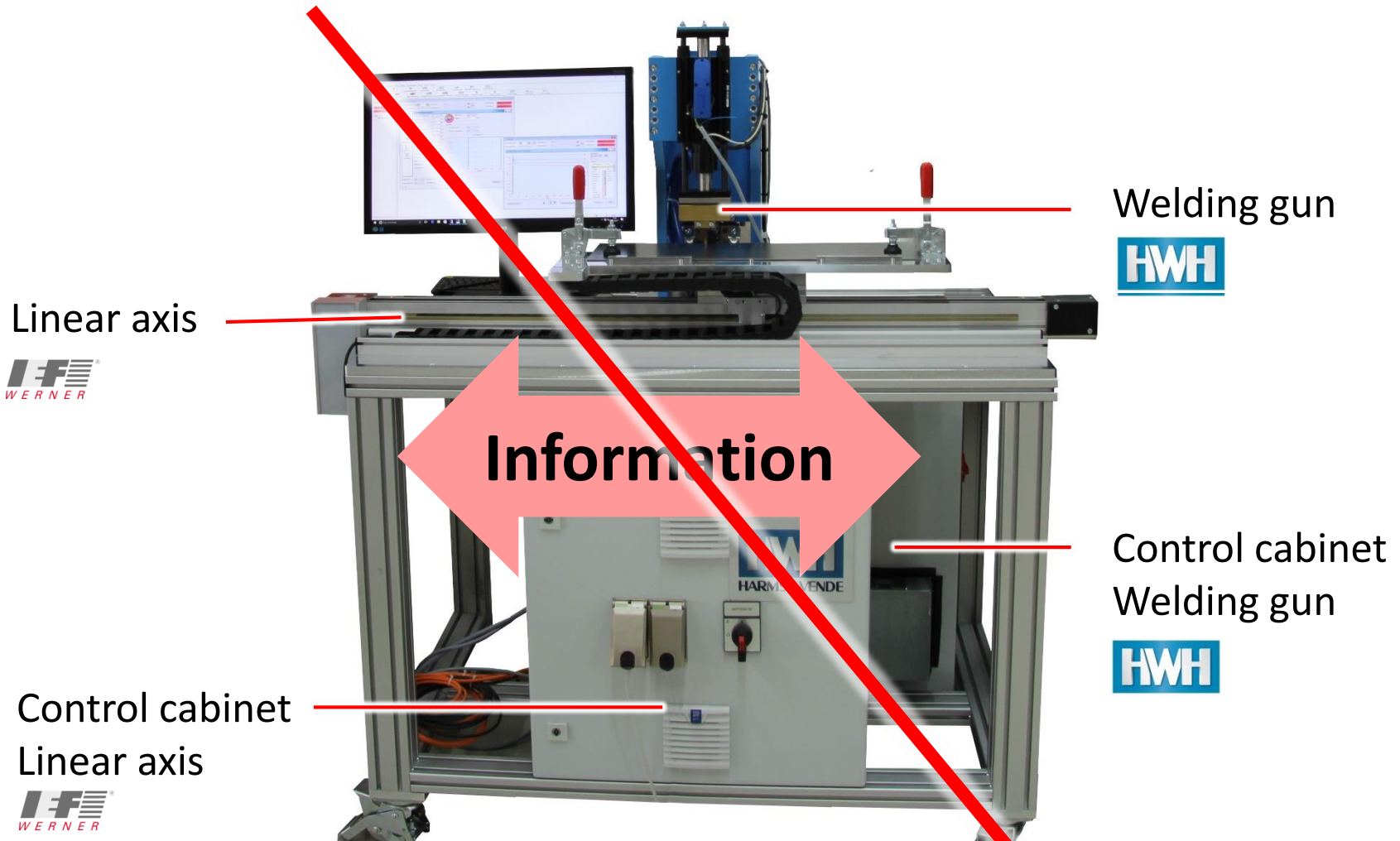


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SelSus

Demonstrator



WHY ???

- Optimization of Time, Cost and Quality in Production without additional costs itself
- Add Value to existing devices by Knowledge-Driven Optimization
- In simple words:
Demonstrate SelSus approach is working (also on component level)



Use Cases & Technical Approach

#1 Use case – Component Self Description

- Supply of static, dynamic and historical data of the component
- Establishing connection to cloud service (via REST)

#2 Use case – Model based Value Adding Information

- Dynamic data analysis and aggregation for degradation
- Bayesian model based decision support system

#3 Use case – Self Optimizing Components

- Autonomous adaptation of control parameters, aiming for efficient usage
- Based also on data provided by other instances / vendors

Benefits

- Integration of degradation models into the linear axis and the welding gun enables automatic **determination of the components' remaining capacities**
- The online lifetime and maintenance prediction enables optimized **planning of service efforts** in conjunction with other data sources (i.e. ERP)
- The combination of additional signal values (also from 3rd party) **improve the overall process stability** and **give added value** to own devices

**Collaborative demonstrator represents
knowledge-driven system
generating added value to all parties**



Thank you for your attention...



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