

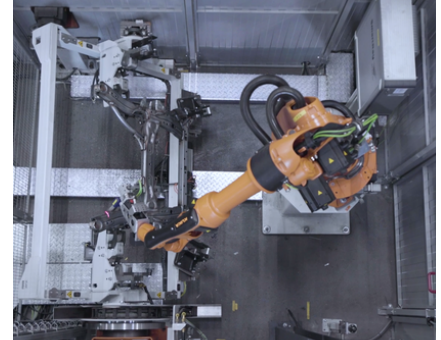
Driving Efficiency and Quality

Why Manufacturers Choose SmartRay's AI-Driven Weld Inspection

JOSY

Automotive manufacturers are under more pressure than ever to increase quality, reduce waste, and speed up production, all while managing labor shortages and rising energy costs. SmartRay, a leader in high-precision 3D inspection technology, delivers tangible

solutions to these challenges with its AI-powered weld inspection system JOSY. Unlike many Industry 4.0 concepts that remain theoretical, SmartRay offers real, deployable AI applications that are already transforming production processes today.

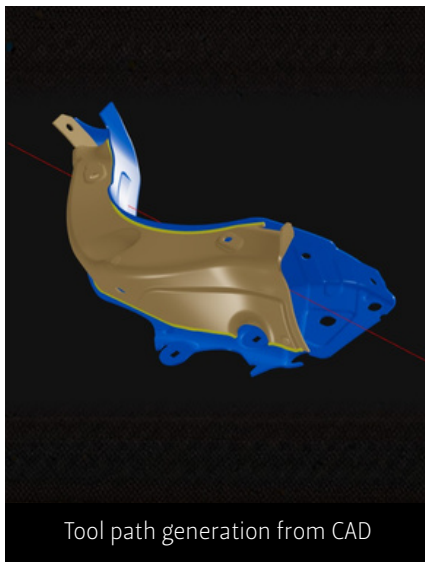


A Practical Path to Industry 4.0 — From CAD to Inspection

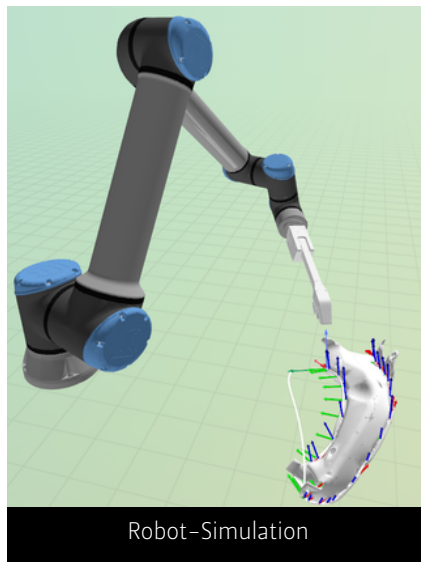
SmartRay's innovation is rooted in its holistic workflow. It begins with customer CAD data, which is utilized to automatically generate robot inspection paths,

followed by a validation process through digital simulation. Subsequently, the JOSY system is employed for inline AI inspection, complemented by a statistical

analysis of weld quality. Ultimately, this process facilitates future closed-loop adjustments in actual production settings.



Tool path generation from CAD



Robot-Simulation



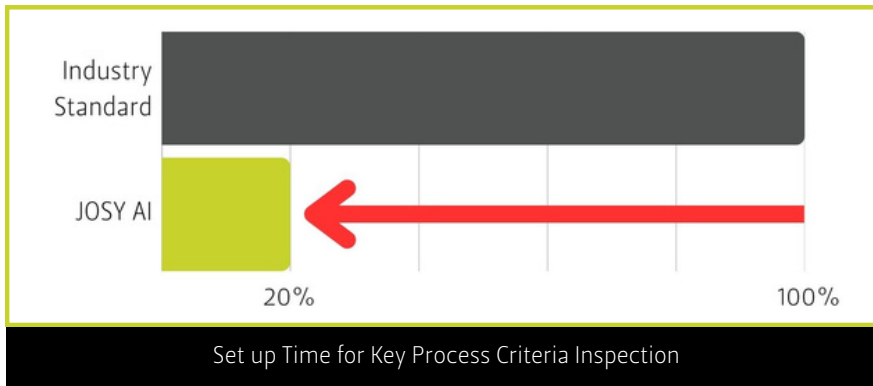
Weld inspection with MICO-sensor

Presented recently at EY's European Industrial AI Innovation Hub, this workflow demonstrates a complete digital thread extending from product design to

automated process optimization. Visitors saw how SmartRay's system reduces manual programming, eliminates errors, and delivers 100% inspection

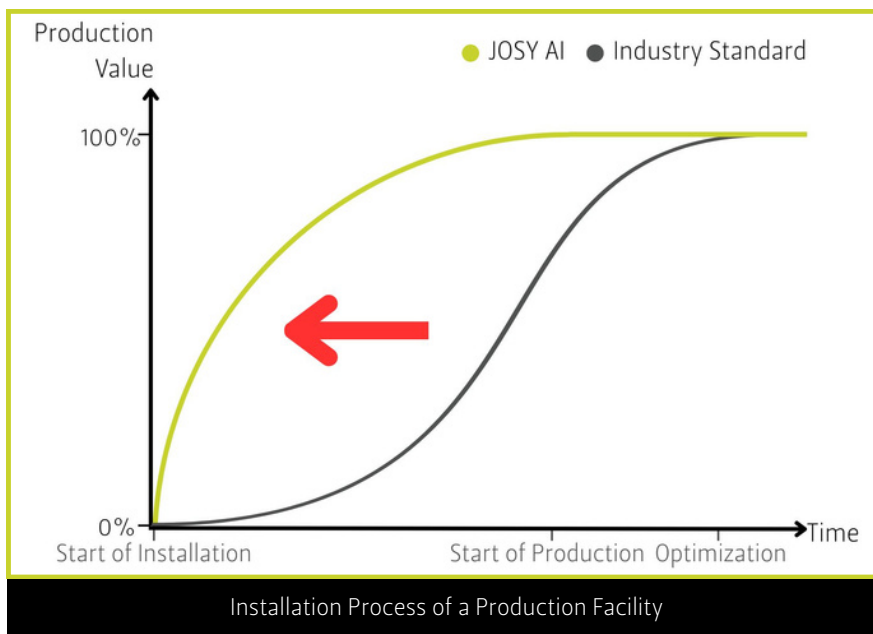
accuracy. The integration of AI technology ensures continuous improvement and adaptability in dynamic industrial environments.

Why Customers Choose JOSY: Clear, Measurable Benefits



1. Up to 80% faster setup and commissioning

JOSY's new AI algorithms detect weld borders instantly – without manual parameterization or on-site training. This reduces integration time by up to 80%, allowing manufacturers to start optimizing processes from the very first part produced.

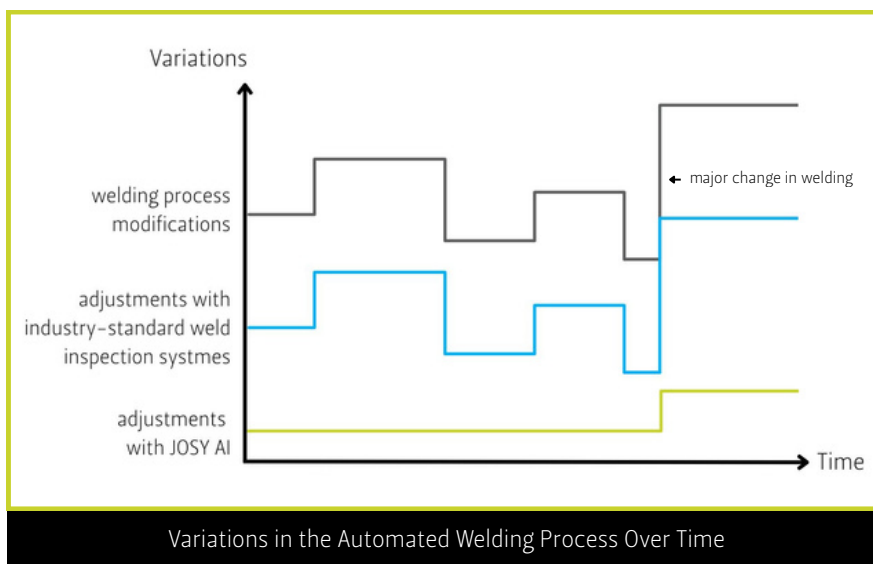


2. Early availability of critical quality data

SmartRay delivers quality insights before mass production begins – a major advantage during vehicle launch phases, where weeks gained can translate into millions saved.

3. Lower maintenance and greater process stability

Welding conditions continuously change in real production. Traditional systems require frequent re-adjustment. JOSY does not. Its AI adapts automatically to variation, maintaining stable inspection performance with minimal operator input.



4. Higher quality, fewer defects, and reduced waste

JOSY's statistical analysis tools not only detect out-of-spec welds, but also identify recurring process issues and their root causes, helping prevent defects instead of repairing them later.

The JOSY Advantage: One Partner For A Seamless Process

Many solution providers concentrate on specific aspects of the workflow, such as inspection, simulation, or analytics. SmartRay distinguishes itself by not only offering individual technologies but also by integrating these elements cohesively—from CAD and planning to inspection and process optimization. This unified, end-to-end approach is what truly sets SmartRay apart across the entire industry landscape.

By choosing SmartRay, customers benefit from:

- A comprehensive, integrated solution
- Proven AI that operates effectively in real-world production environments
- Easier integration and reduced maintenance
- Faster launch times
- Enhanced quality and decreased cost per part
- A future-ready path toward closed-loop factory automation

In short: JOSY doesn't just inspect welds – it transforms welding into a transparent, predictable, and optimizable process that consistently strengthens overall production performance.



Conclusion: A Smarter Way to Build the Cars of Tomorrow



SmartRay enables manufacturers to move beyond traditional inspection toward fully digital, automated production. With its AI-powered JOSY system,

companies achieve faster setup, more stable processes, lower costs, and higher quality — all critical advantages in modern automotive manufacturing.

ABOUT US

We are SmartRay, market leaders in 3D weld inspection and measurement. A German company trusted by global businesses to improve productivity, maximise quality, and reduce costs.

Our core competency is ultra-precise measurement realised through 3D laser triangulation. We offer reliable, repeatable defect inspection to micron levels, protecting quality, optimising processes, and automating production.

This is all delivered through leading-edge sensors retrieving very high levels of inspection data, and processed through SmartRay's proprietary, high-performance analytical reporting software.

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