A new way for testing in the autonomous factory Simulation based Testing

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SIEMENS

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Autonomous Factory

#11325 ROBOSTAR
OPERATION: PRINTING
STATUS: EXECUTION
IN TIME | IN BUDGET | IN QUALITY

Link to the complete video
Use case: Testing FlexGrasp.AI

Situation and test challenges

Test challenges
- Reproduceable test scenarios
- Automate test scenarios
- High scenario variance
- Measurable test coverage
- Run test – independent of HW
- Fast feedback loops

Starting situation
- Robot cells
- No test automation
- Low variance
- Long feedback loops
- Difficult to reproduce
- No test coverage
Use case: Testing FlexGrasp.AI
The solution
Use case: Testing FlexGrasp.AI

Results

The following goals have been achieved:

- ✔ Reproducible test scenarios
- ✔ Automate test scenarios
- ✔ High scenario variance
- ✗ Measurable test coverage
- ✔ Run test – independent of HW
- ✔ Fast feedback loops
- ✗ Virtual world too “clean”

Impact:
Increase test efficiency
Increase confidence in the product
Validation of Intelligent Systems (FlexGrasp.AI)  
Customer Value and Business Impact

**Customer Value:**
Improve product quality 
and increase confidence 
in delivered product

**Business Impact:**
Key technology for 
testing AI components
Any further questions?

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