Status: passed
Test case: Plausibility check
Start time: 10:04:16   35s

TESTING VIRTUALLY & WORRY-FREE

TEST AUTOMATION WITH ISG-DIRIGENT

AUTOMATICALLY SECURE(D)

_ Centralized & automated testing

With ISG-dirigent, you can test the simulation models of your components or machines and plants on their functionality, as well as automatically ensure the quality of your control software by checking it for various scenarios. Our software enables not only the safe testing of typical failure scenarios but also the testing before the completion and delivery of your machine, your plant or your simulation model, with only a little effort at the same time.

_ Detecting errors at an early stage

Thanks to reproducible test scenarios, detailed documentation, and the increased scope of testing, ISG-dirigent enables targeted, early error diagnosis and thus increased reliability and software quality.

INTUITIVE

You do not need any special programming skills for the graphical modeling of the test modules.
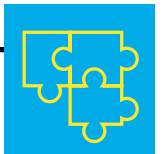
FEASIBLE AT ANY TIME

Integration via DevOps means that test sequences can be started in ISG-dirigent at any time. This allows you to test flexible and not dependent on fixed working hours.

CUSTOMIZABLE

In ISG-dirigent it is possible to extend test scenarios individually. Thus, the modularity of the machine or plant can be mapped realistically, and tests can be performed efficiently.
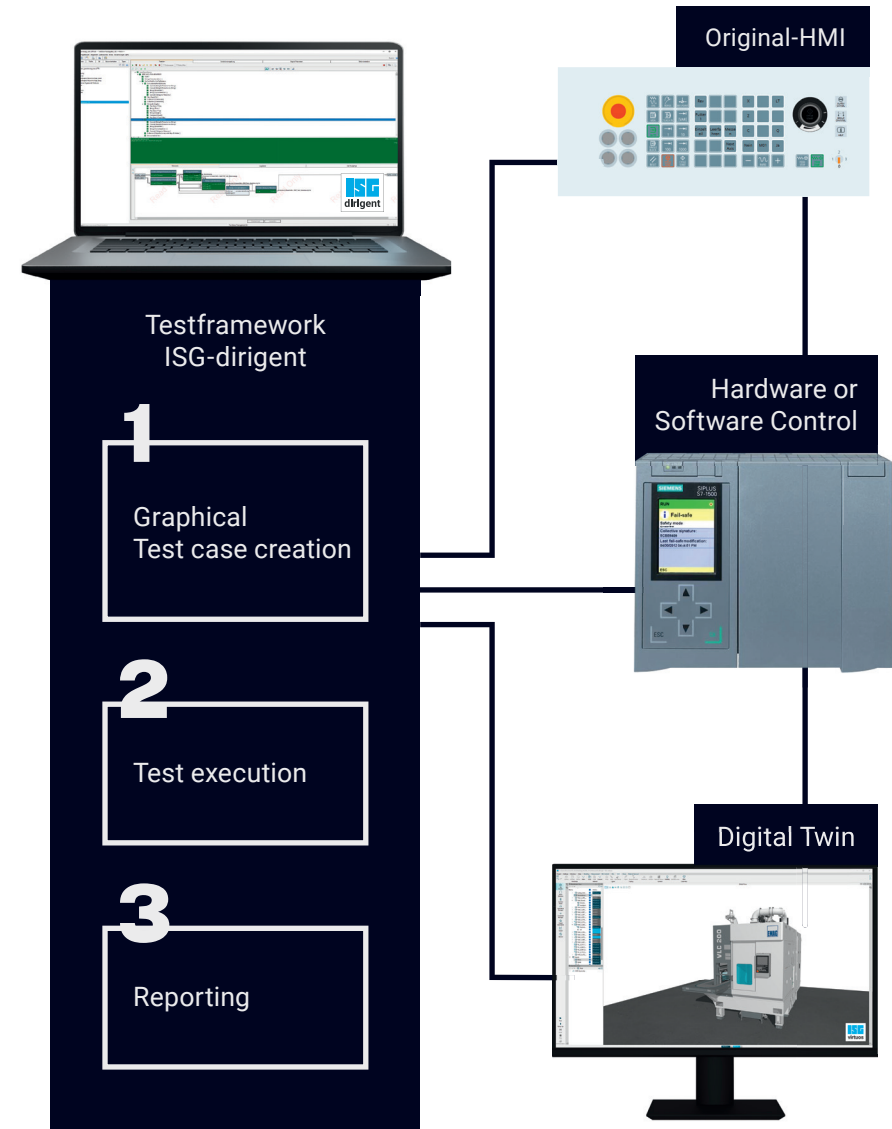
TEST SETUP

_ Control & HMI interfaces

Access and control of various PLC and
CNC control systems from Siemens,
Beckhoff, Fanuc and Codesys and more,
as well as connection to HMIs for
automated execution of user interactions

_ Simulation interfaces

Access and testing of simulation models in
our simulation software ISG-virtuos

+ Automated testing with a real
control system on virtual plants

+ Increased software quality
through increased test scope

+ Reliable results due to the
exclusion of human errors
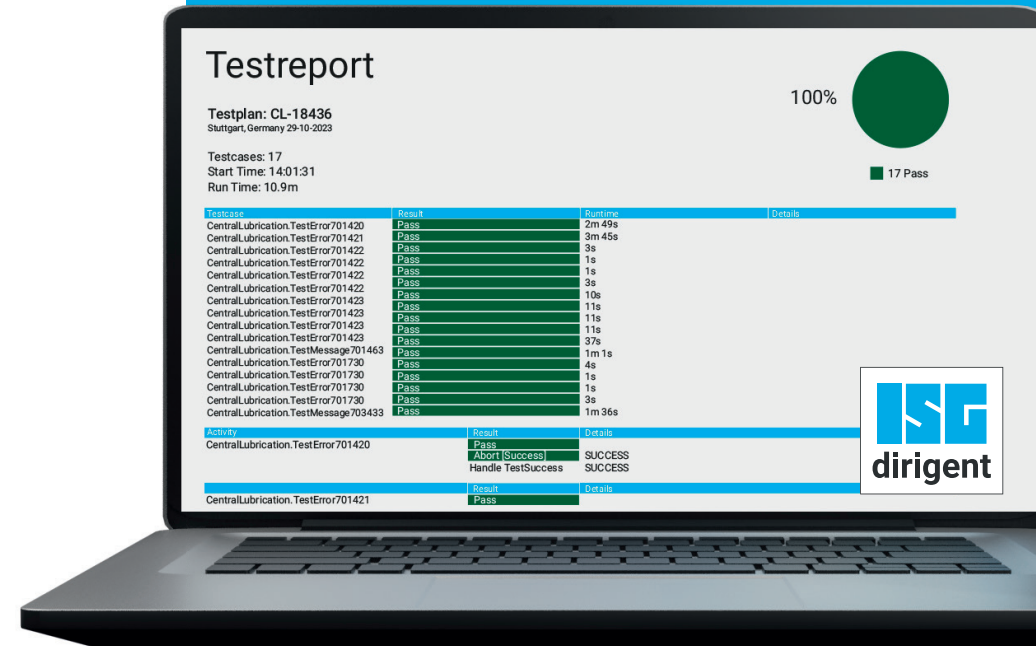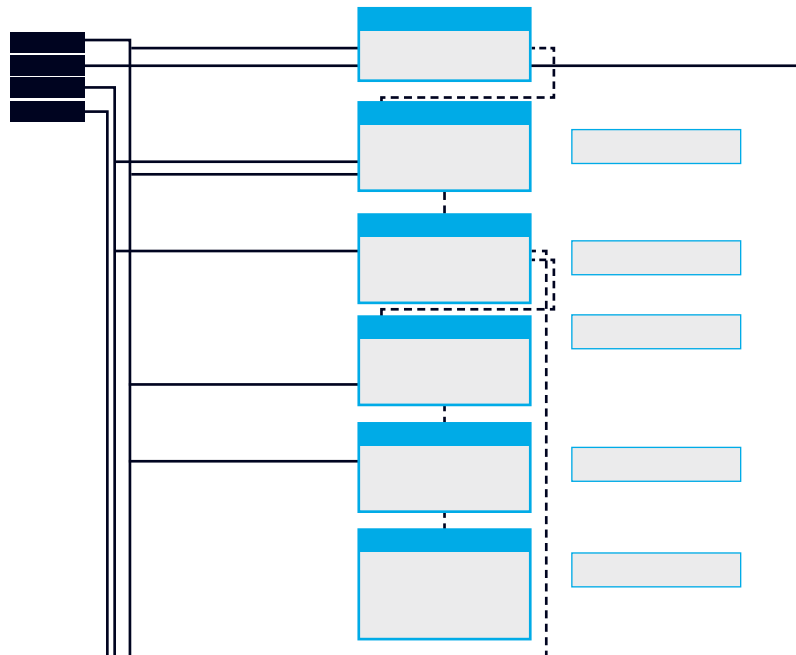
+ Reproducible test results with
documentation included

Original-HMI

Testframework
ISG-dirigent

1

Graphical
Test case creation

Hardware or
Software Control

2

Test execution

3

Reporting

Digital Twin

TEST PROCESS

Test case creation and test execution

Test cases that are generated with ISG-dirigent can also be stopped, adjusted, and resumed at any time during runtime. Thanks to breakpoints, it is also possible to test step-by-step, allowing intermediate states to be checked.

The test cases are created of several modules that are imported into the graphical modeling editor by drag-and-drop. The status of the individual blocks, including the respective input and output data, is recorded in the process log.

Test report

The test report (.log/.pdf) generated at the end of each test run shows the status of the individual sub-steps as well as the overall result. Therefore, have an audit-proof documentation.

- Adjustable level of detail and transparent design
- Immediate detectability of failed test cases through different colors
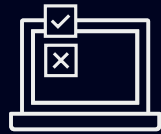- Display of error locations and the associated parameters

FIT FOR TESTING

**YOUR ROADMAP TO TEST AUTOMATION
WITH ISG-DIRIGENT**

Product presentation

During the product presentation, you will receive all the important information about us and ISG-dirigent. At the same time, we develop a roadmap for the next steps.

Pilot phase

In our workshop, we offer you an introduction to test automation with ISG-dirigent. In addition, you will implement a first test project on the basis of a specific reference project with us. Thereby, we create the base for a successful and also independent implementation of further test projects.

Productive phase

You are now able to generate test cases, test plans, and test libraries on your own.
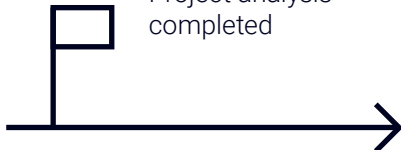
If desired, we will gladly continue to assist you with implementing your test projects or we can carry out the complete creation of test cases and test projects.

TESTING IN TERMS OF THE DIGITAL FACTORY

The test process is being integrated earlier (front-loading) and runs parallel (simultaneous engineering) to the development process.
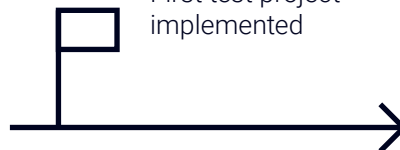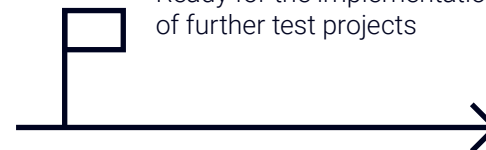
Milestone
Project analysis completed

Milestone
First test project implemented

Milestone
Ready for the implementation of further test projects

GET STARTED
WITH ISG-DIRIGENT

Would you like to automate the test processes of your simulation models and control software with the help of ISG-dirigent? Then get in touch with us now:

📞 **+49 711 22992 30**

@ **info@isg-stuttgart.de**

🌐 **www.isg-stuttgart.de/en**

ISG – YOUR TECHNOLOGY PARTNER

For the implementation of your requirements in the area of digital engineering and motion control, ISG-dirigent and our other products as well as our simulation and control experts are at your disposal:

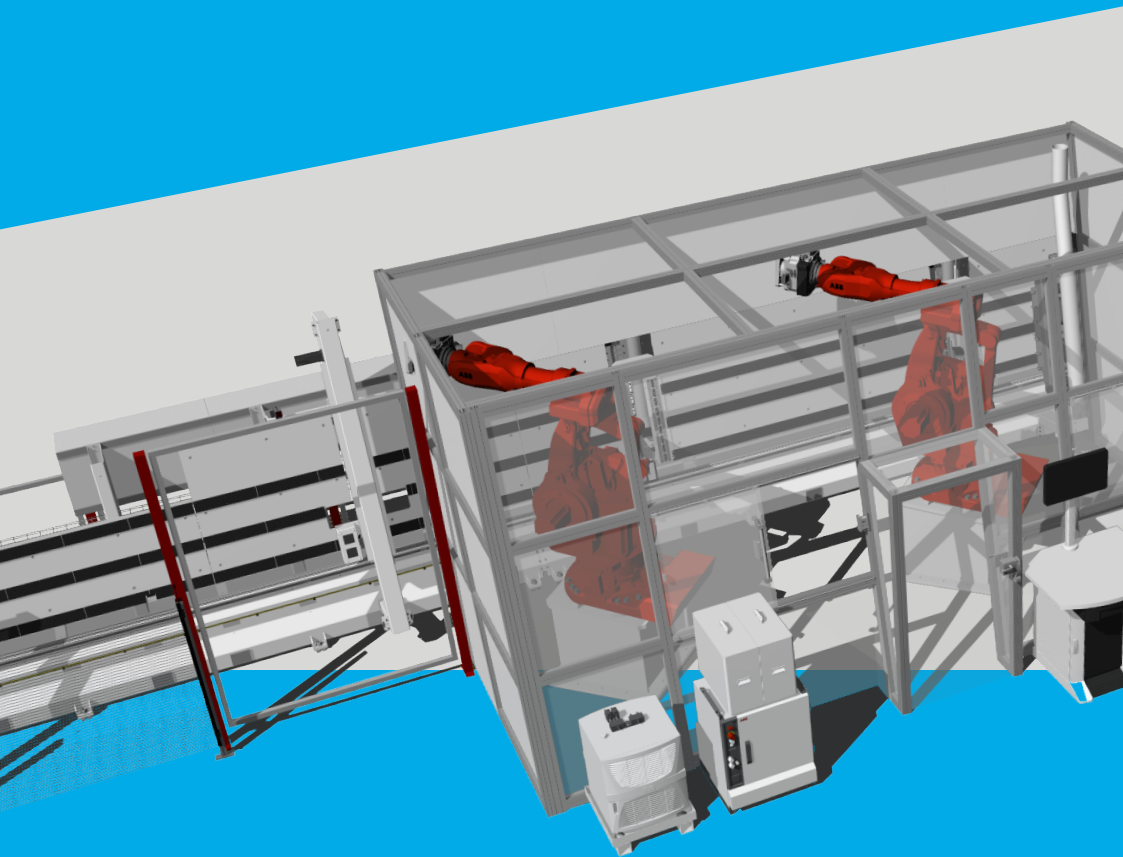**ISG virtuos** — The simulation software for Virtual Commissioning (VC)

ISG kernel — The control software for CNC, Motion Control and robotics

ISG solutions — Your service partner in matters of simulation, digital engineering and VC

TwinStore — The online store for 4D-simulation models

@ISG Industrielle Steuerungstechnik GmbH