

Phase 3: Validation Planning

Planning the function tests for safety functions



AUTOMATION

Product information
8168_en_01

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The proportion of dangerous systematic errors relating to safety functions is well above 60% of all possible errors. Measures aimed at preventing this type of error are described in the standards for functional safety.

One effective measure is the specification of function tests. With this specification, the function tests are performed during validation (phase 7) of the safety functions.

This is important if you are responsible either for the functional safety of machines or the documentation, or if you are a project manager, planner, designer or tester of safety functions.

User benefits

By relying on our certified safety experts for support right from the validation planning of your planned safety functions, you will ensure maximum safety for man, machine, and environment.

This means:

- Conformance with standards
- Conformance with directives
- A reduction in dangerous systematic errors
- Documentation specifications or standardized documentation templates
- Time savings
- Fewer resources used

Requirement

The safety functions are described in full, in detail, and unambiguously in the approved technical specification.

Description of performance

Depending on your requirements, we can provide support during the planning of function tests (black box tests) for all safety functions.

We offer competent and comprehensive advice in relation to the document structure of the black box test specification and the content required for the complete and clear specification of the tests. You will also receive information on how the black box test specification should be checked in order to ensure that it can subsequently be used to test the safety functions.

If required, we can work together to draw up the black box test specification. During this process, we will consider with you all safety functions in all possible operating states and modes. Based on this information, we will plan the function tests of the individual safety functions for regular and irregular conditions.

The created black box test specification also allows the test results to be recorded in a log book while the test is being performed.

Duration

The duration of our services depends on your requirements. We discuss your machine experts' previous experiences to agree on the time required for your individual case. This may be a general consultation lasting half a day or may involve intensive consultation or process support over a number of days.

For large-scale projects we are also happy to provide support for a longer period.

Costs

We will be happy to prepare a non-binding quote for you.

To request this, speak to your personal sales partner directly or contact our headquarters in Blomberg.

Do you want to expand your in-house expertise?

The following training will help you with validation planning:

Safety Lifecycle P2-P4	Order No. 2700792
INTERBUS Safety Diagnostics	Order No. 2884680
PROFI-safe Diagnostics	Order No. 2692364

By offering you custom-made training tailored precisely to your needs, we can impart the specific knowledge you need for your safety environment.

The following may also be of interest to you when it comes to the safety lifecycle of your application:



Do you want to find out quickly whether you are on the right track to achieving functional safety? Then simply use our functional safety app check! By using a checklist, you can find out interactively whether you meet the essential requirements of the Machinery Directive. Simply search for the term *Safety* in the App Store.