



Object oriented configuration

Control Builder A is a software suite designed to configure and program Safeguard and other ABB controllers. It contains Application Builder, Function Chart Builder, Bus Configuration Builder and the optional On-line Builder. Safety Builder also works in conjunction with this suite.

Application Builder can store default values to be used throughout a whole process control project. Application Builder assures that you always work on the application data with the correct Builder program. It supports exchange of configuration data between different nodes and across different projects.

The different Builder programs can all be started from within Application Builder

Structured function block programming

Libraries of function blocks for use in Function Chart Builder are available for both Safeguard and for normal process control purposes.

Single entry and storage of data

Every field device connected to the Safeguard has its own individual record in the Safeguard

database, identified by its tag name. Database elements for all devices are available at a mouse-click.

Safety Builder, a Cause & Effect programming tool

Safety Builder is a Cause & Effect programming tool for Safeguard 400 Series. It is utilized to design, verify and document Cause & Effect matrices.

A cause and effect matrix is a presentation of the relation between a set of process inputs and the response they trigger. The application logic and its connections to the signal database are automatically generated from the tool, ready-made for installation in the Safeguard 400 Series controllers. Safety Builder supports design of hierarchical safety shutdown levels and may be used preferably be used to organize the overall plant shutdown strategy. Safety Builder supports both process safety and fire and gas applications.

Everything is prepared

Predefined functions are available on all levels – signal description, function blocks, operator functions and communications.

Precompleted forms are provided for definition of all the process signals to be connected. All parameters are predefined to give you a carefully chosen standard function. You change only the parameters you need to change (tag-name, alarm limits etc.)

Connection to the operator workplace is made the moment the signal is defined. It only requires confirmation by entering a simple command and the signal name.

Some examples of predefined operator functions are event and alarm handling, bypass management, signal object displays, system diagnostics, and query-based reporting.

Application Solutions

In order to make application engineering less complicated, ABB Safety has assembled a series of application solutions, which contain ready-made display elements, dialogs and user elements (PC elements specific to the application in question). Application Solutions generally consist of:

- Display Elements and Dialogs for applications specific to Safeguard for the safety Workplace. These display elements and dialogs are not included in the Safeguard option in the Operator Workplace.
- User elements are the preferred library of elements for safety-specific application logic. The elements are predefined by means of the UDPC (User defined PC elements) utility. The term 'User Elements' (abbreviated UE) is used to distinguish these elements from standard PC elements.
- User defined events and event texts.
- A manual, which describes and lists all features and aspects of the application unit in detail, and instructs the user in how to configure it.

Currently released application solutions include:

- Fire & Gas Applications
- Emergency Shutdown Applications
- High Integrity Dual Loop Applications



ABB AS
Hasleveien 50
PO Box 6540 Rodelokka
N-0501 Oslo, Norway
Phone: +47 22 87 20 00
Fax: +47 22 87 27 77
www.abb.com/control
e-mail: safety@no.abb.com

ABB
Automation Technology Products
SE-721 59 Västerås, Sweden
Phone: +46-(0)21342000
Fax: +46-(0)21137845
www.abb.com/processautomation
e-mail: processautomation@se.abb.com

**For additional information
visit us at www.abb.com/control
and click on Safety Systems in
the left hand menu**