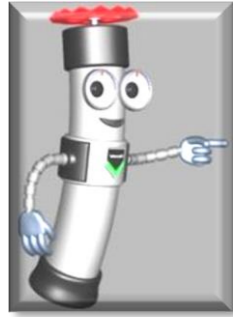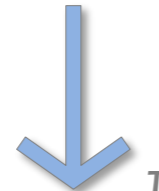# DeltaV-Parser and Reporting Tool
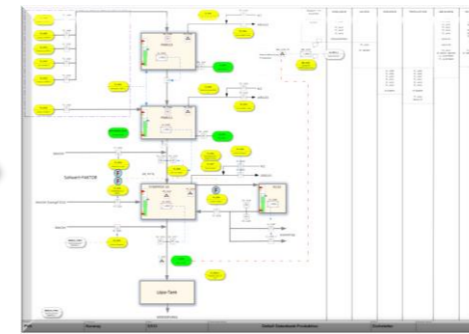
The DeltaV Parser and Reporting Tool provides an opportunity to make the application more transparent

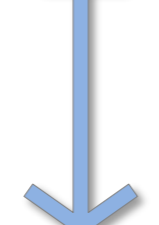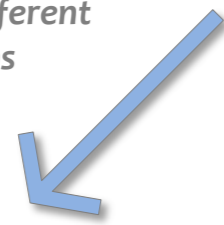## DELTAV CONTROL MODULE

DeltaV Area / UNIT

The Module as VISIO Shape

TC_1114
Heizkreislauf PMK 10

The Module in different presentations

WORD with all Expressions

VISIO-Tech-Schema
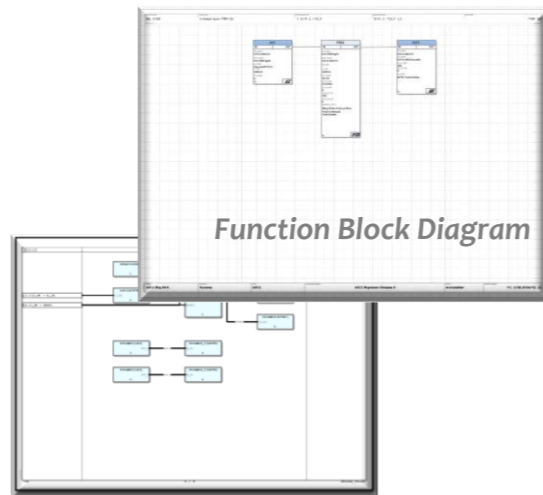
EXCEL-LIST With all Details

VISIO-Drawings with Options SFC and FBD presentation
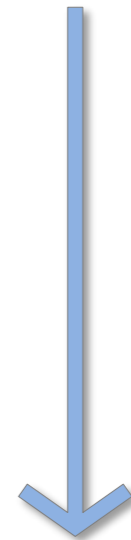
Excel: Cause & Effect Matrix

Function Block Diagram

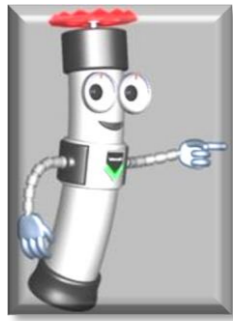1_STR_4_TROCKNUN
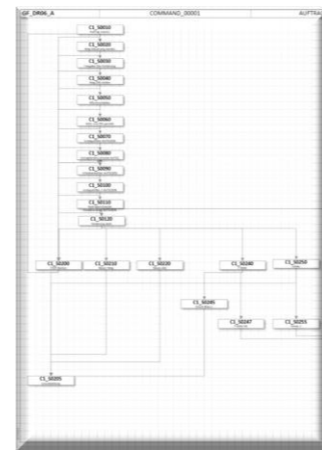
Sequence Function Chart

C&E Reference-Matrix

Document-Hyperlinks
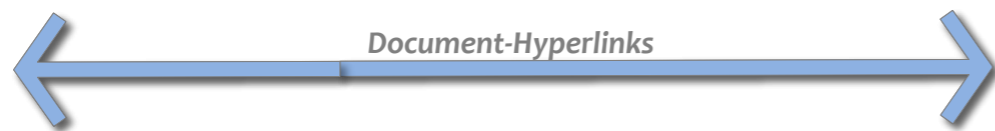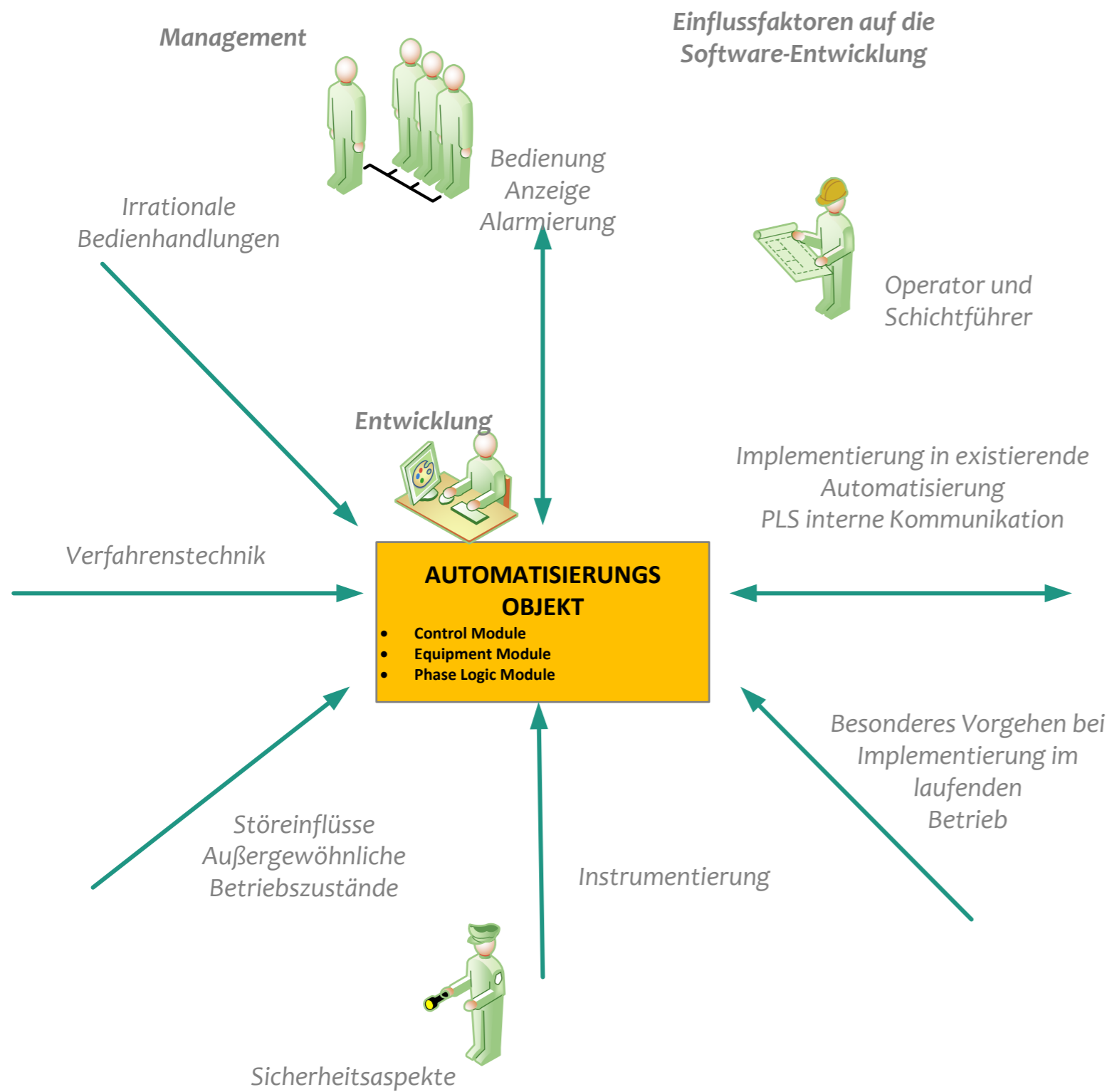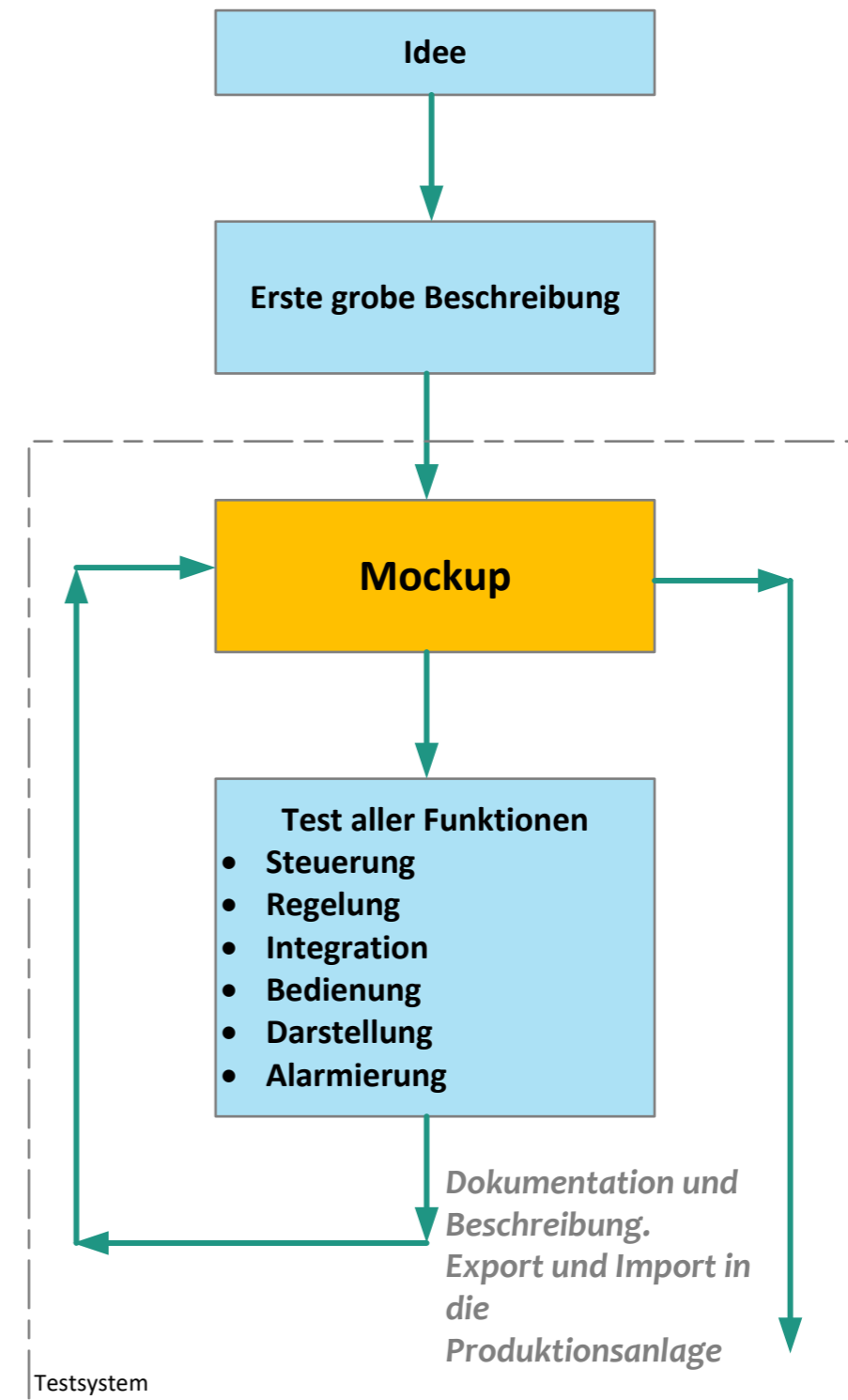
DeltaV- Engineering

Engineering Tools provides an opportunity to make the application more efficient

Simulierte Mockup´s unterstützen die Entwicklung und Tests

Management

Einflussfaktoren auf die Software-Entwicklung

Bedienung Anzeige Alarmierung

Irrationale Bedienhandlungen

Operator und Schichtführer

Entwicklung

Implementierung in existierende Automatisierung PLS interne Kommunikation

Verfahrenstechnik

AUTOMATISIERUNGS OBJEKT
- **Control Module**
- **Equipment Module**
- **Phase Logic Module**

Besonderes Vorgehen bei Implementierung im laufenden Betrieb

Störeinflüsse Außergewöhnliche Betriebszustände

Instrumentierung

Sicherheitsaspekte

Idee

Erste grobe Beschreibung

Mockup

Test aller Funktionen
- **Steuerung**
- **Regelung**
- **Integration**
- **Bedienung**
- **Darstellung**
- **Alarmierung**

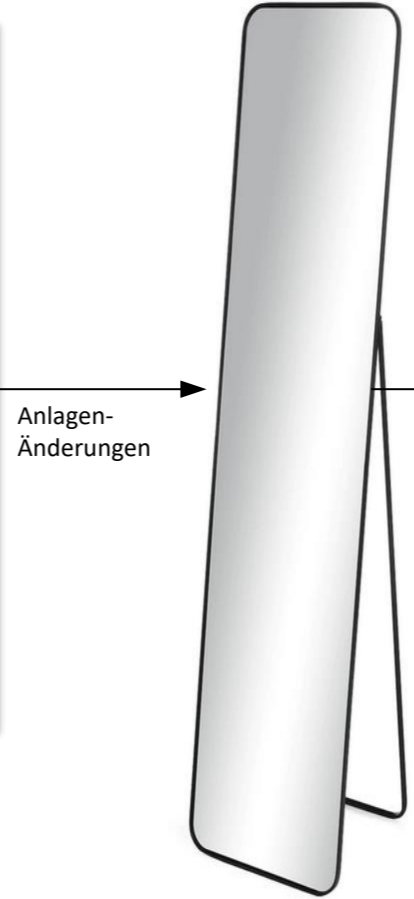*Dokumentation und Beschreibung. Export und Import in die Produktionsanlage*

Testsystem

Wie kommt man zu einer guten Lösung, die alle Aspekte beinhaltet, alle Beteiligten begeistert und dabei den Aufwand so gering wie möglich hält?

04.02.2022
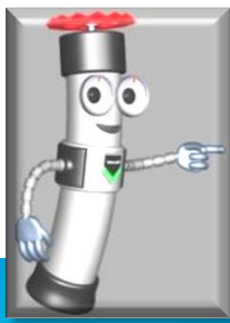
DeltaV- Simulation

Simulation Tools provides an opportunity to test the application with simulated measurements and devices
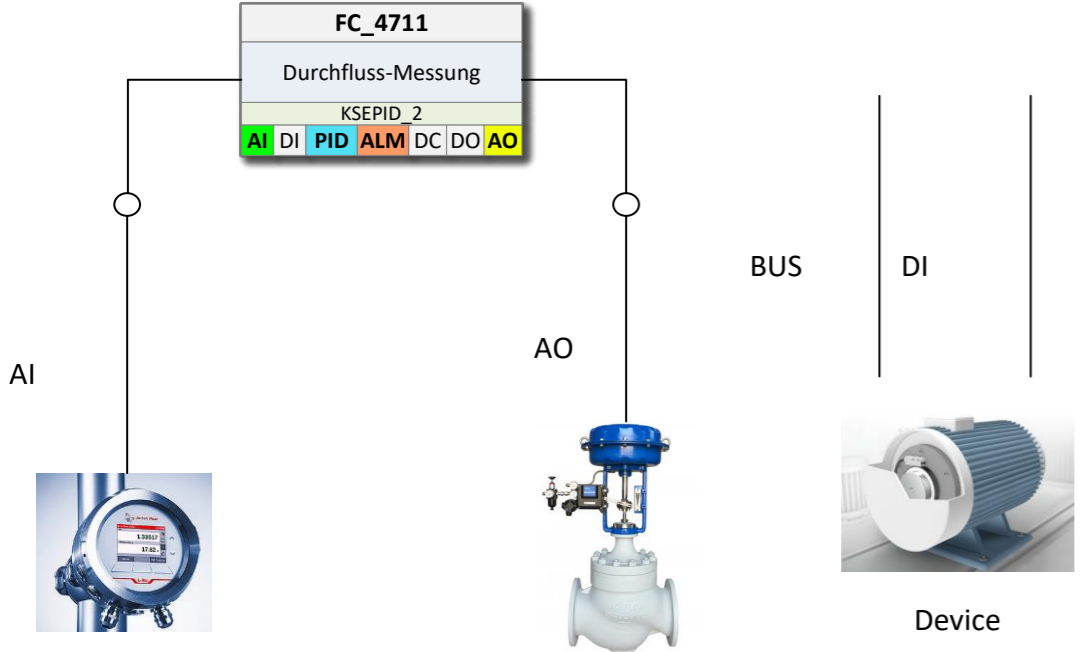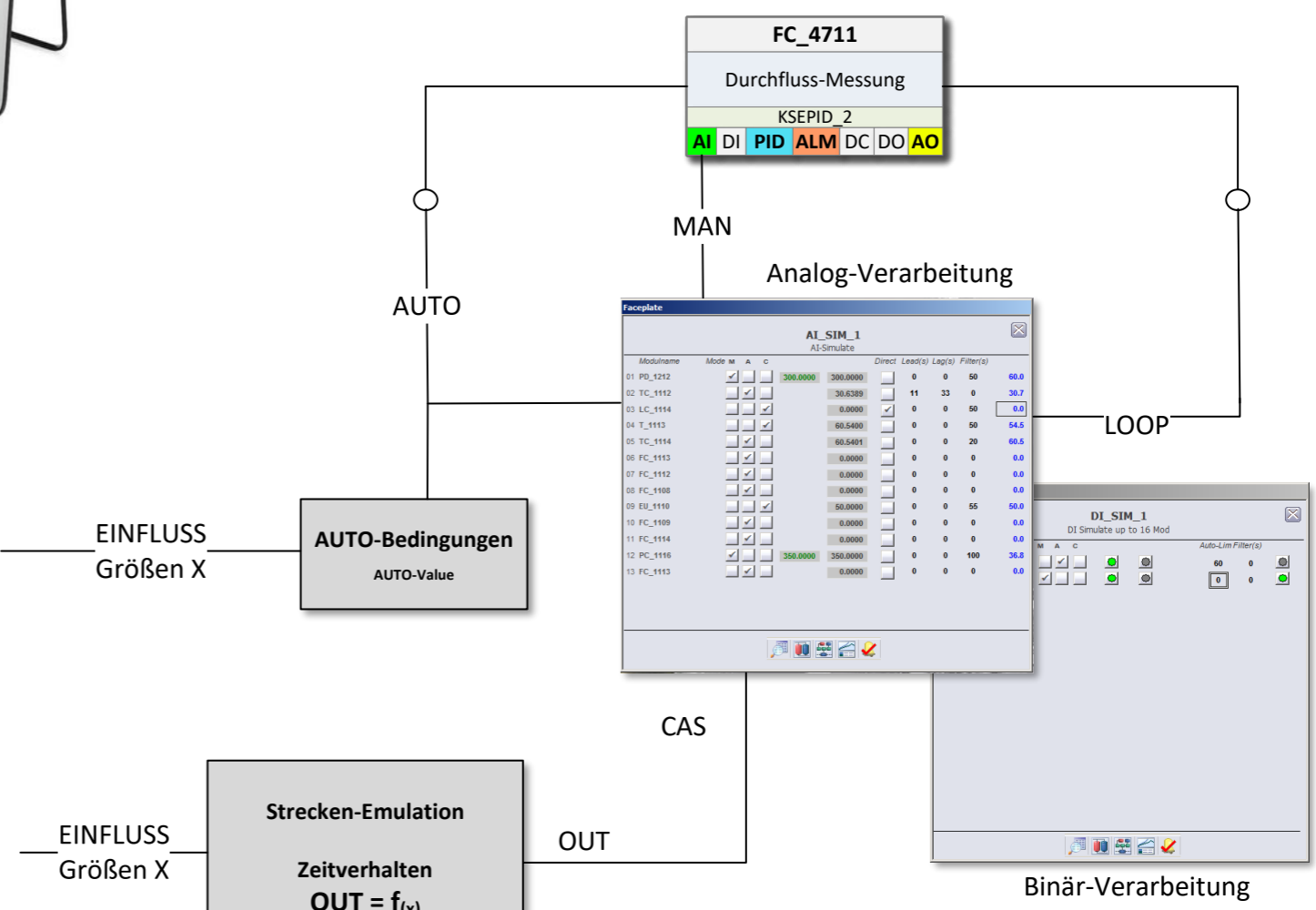
Reale Prozess-Anlage

Digitaler Zwilling

Anlagen-Änderungen

Simulator-Abgleich

FC_4711
Durchfluss-Messung
KSEPID_2
AI DI PID ALM DC DO AO

BUS   DI

AI

AO

Device

Prozess-Instrumentierung und -Ausrüstung

FC_4711
Durchfluss-Messung
KSEPID_2
AI DI PID ALM DC DO AO

MAN

Analog-Verarbeitung

AUTO

LOOP

EINFLUSS Größen X

AUTO-Bedingungen
AUTO-Value

CAS

EINFLUSS Größen X

Strecken-Emulation
Zeitverhalten
OUT = $f_{(x)}$

OUT

Binär-Verarbeitung

Simulation Modules for analog and binary process signals

- **3 Modes**
- **MAN (Process Value from faceplate)**
- **AUTO (Process Value by Loop)**
- **CAS (Process Value by Complex Calculation, Thermo-Dynamic Process behavior)**

Prozess-Simulation Level 1,2,3