

THREE EQUIPMENT SERIES FEATURING SIMPLE CONTROL SYSTEMS

Much emphasis was placed on the use of industrial components in the development of these control systems. This enhances the practical relevance and industrial applicability of these systems. These are simple control loops. The components can be easily identified visually and assigned to their respective functions.

It is revealed that the actual response from the controlled system in many cases differs from that of the theoretical, elementary transfer elements. Training in the operation and parameterisation of industrial controllers and interconnection of the controllers with bus systems is included. These exercises prepare students for the tasks they will typically encounter in their future career.

In this chapter you can choose between three equipment series, each of varying complexity. For each series, software tailored to the relevant experimental units is available. The software handles routine tasks for the students and supports interaction when experimenting with new and differing approaches.

RT 614 - RT 674 INTRODUCTION TO INDUSTRIAL CONTROL ENGINEERING

Industrial controller

Software controller

- Operation and parameterisation
 - ▶ of an industrial controller
 - ▶ of a software controller
- Trainer and PC connected via USB box

RT 512 - RT 552 CONTROL ENGINEERING TRAINERS WITH PROCESS CONTROL SYSTEM

RT 512

RT 522

RT 532

RT 542

RT 552

RT 650.12 Profibus card

PC

RT 650.50 Process control software

- Construction of a process control system from multiple trainers via Profibus
- Operation and parameterisation of an industrial controller
 - ▶ directly on the controller
 - ▶ with the process control software

RT 450 MODULAR PROCESS AUTOMATION TRAINING SYSTEM

RT 450.10
Continuous Controller Module

or

RT 450.42
PLC Module with Software

or

RT 450.21
Control Valve, Pneumatic

or

RT 450.24
Control Valve, Electric

RT 450.02
Controlled System Module: Flow

+

RT 450.34
Flow Rate Sensor: Electromagnetic

or

RT 450.01
Controlled System Module: Level

+

RT 450.35
Level Sensor: Capacitive

- Wide-ranging options for combination of various controlled systems, controllers, actuators and sensors
- Use of a PLC
- Interconnection of multiple control engineering components via Profibus
- Operation, parameterisation and configuration of an industrial controller
 - ▶ directly on the controller
 - ▶ by software