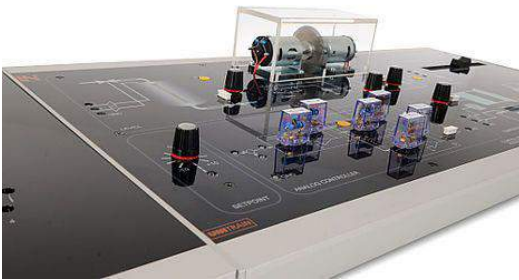


Control & Instrumentation



Description

Training Solutions for below Subjects :

- ✓ Instrumentation technology
- ✓ PLC Training system
- ✓ Closed-loop control technology
- ✓ Servo technology
- ✓ Applied Automatic Control Technology
- ✓ Designing closed loop controllers

SERVO TECHNOLOGY

Modern servo technology has become the centerpiece of many production facilities incorporating short cycles. For instance, servo drives ensure the rapid yet precise movements of industrial robots. Progressive automation has turned servo technology into an important topic. In the course on positioning and speed control, the trainees experiment with different applications and perform initial parameterizations as part of their own projects. With the self-learning program, the trainees create a broad basis for subsequently dealing with quasi-industrial and original industrial applications.

INSTRUMENTATION TECHNOLOGY

The measurement of analog, non-electrical variables is of critical importance and is basic to all areas of automation engineering. After all, it is the detection of the physical variable and its conversion into electrical signals which makes the automatic control of a system possible in the first place.

The multimedia courses in instrumentation technology employ numerous experiments and animations to convey comprehensive knowledge of the measurement of electrical and non-electrical variables. Students taking the course will be familiarized with various methods and sensors used to measure the relevant physical effects and the typical analogue and digital electronic circuits used to process the signals recorded. The experiments introduce many applications in detail and study the properties thereof. Characteristics are recorded and the limitations of individual measuring processes are demonstrated.

APPLIED AUTOMATIC CONTROL TECHNOLOGY

In the age of automation, closed-loop control technology is of supreme importance for modern, technical systems. Optimised control loops help engineers in the area of production and process control technology to efficiently manage such resources as energy and raw materials and ensure product quality. Furthermore, by integrating automatic technology, innovative, intelligent products can be made which are a prerequisite for being competitive on world markets. The spectrum of applications range from anti-locking systems in motor vehicles to auto-pilots in jumbo jets and position controls for satellites or space vehicles – from automatic range finding in pocket cameras to air-conditioning control in office buildings all the way to the automatic process control of chemical processing plants in the chemical industry.

Using the training system for closed-loop control technology the student can obtain graphic and authentic training in the fundamentals and advanced topics of control engineering. This system utilizes state-of-the-art training equipment like digital controllers and multimedia systems to provide all the technical know-how and hands-on skill the student requires.