

Course - Control technology: Servo motor technology

DC Servo Training Systems to perform Automatic Digital Position and Speed Control.

Includes:

- 1 Servo motor technology experiment board with:
- DC servo with transmission gear and incremental encoder
- Can be configured and parameterised freely as P-action, laction and D-action controller
- Setpoint setting: analog input, digital potentiometer by PC as a fixed value or dynamic characteristic
- Disturbance variable generator: servo load
- CD-ROM with Labsoft browser and course software

Course contents:

- Analysis of the open-loop and closed-loop response
- Relationships of a DC servo motor
- Automatic angular and speed control
- Detection of position and speed of the DC servo by means of incremental encoder
- Determination of control characteristic, dead time,
- Transient response, error signal and control oscillation
- Recording step response
- Determining time constants
- Operation using various controller types
- Exploring the servo drive's response to load variations
- Course duration: approx. 4 h



