

Table of Contents:

SECTION I: INDUSTRIAL CONTROL OVERVIEW.

1. Introduction to Industrial Control Systems Introduction.

SECTION II: INTERFACING DEVICES.

2. Interface Devices Introduction.

3. Thyristors Introduction.

SECTION III: THE CONTROLLER.

4. Introduction. Control Modes. On-Off Control. Proportional Control. Proportional- SECTION IV:

ELECTRIC MOTORS.

5. DC Motors.

6. AC Motors.

7. Servo Motors.

SECTION V: VARIABLE SPEED DRIVES.

8. DC Drives.

9. AC Variable Speed Drive.

SECTION VI: PROCESS ONCTROL AND INSTRUMENTATION.

10. Pressure Systems.

11. Temperature Control.

12. Flow Control.

13. Level Control Systems.

14. Analytical Instrumentation.

15. Industrial Process Techniques and Instrumentation.

16. Instrumentation Symbology.

17. Process Control Methods.

18. Instrument Calibration and Controller Tuning.

SECTION VII: DETECTION SENSORS.

19. Industrial Detection Sensors and Interfacing Introduction.

20. Industrial Wireless Technologies.

SECTION VIII: PROGRAMMABLE CONTROLLERS.

21. Introduction to Programmable Controllers.

22. Fundamental PLC Programming.

23. Advanced Programming, PLC Interfacing, and Troubleshooting.

SECTION IX: MOTION CONTROL.

24. Elements of Motion Control.

25. Motion Control Feedback Devices.

26. Fundamentals of Servomechanisms.

SECTION X: INDUSTRIAL NETWORKS.

27. Industrial Networking.

28. (On book CD) Industrial Applications.