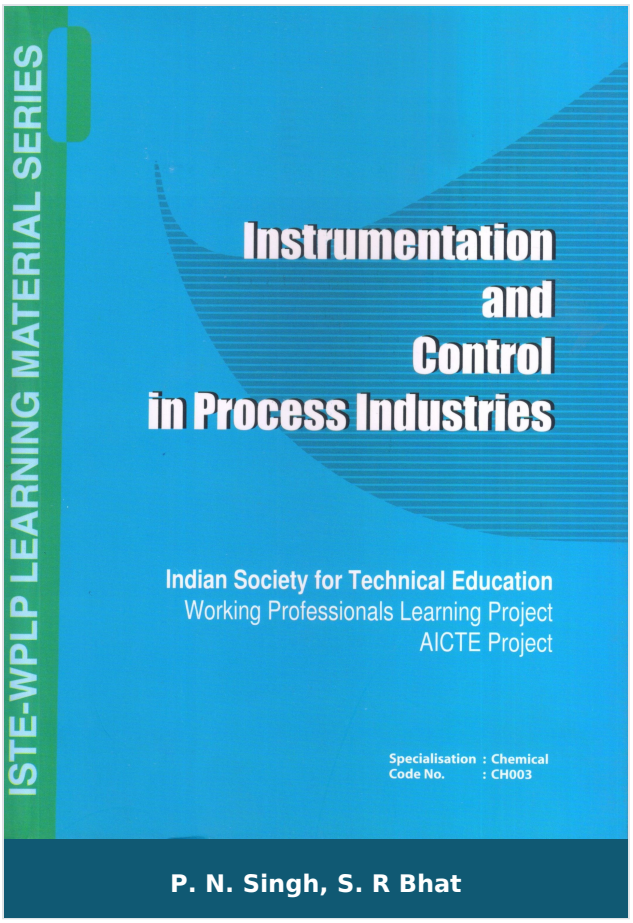

Instrumentation And Control in Process Industries

Author :	P. N. Singh, S. R Bhat
ISBN 13 :	978-93-55384-77-5
ISBN 10 :	9355384777
E-ISBN 13 :	978-93-55384-77-5
Edition :	1
Pages :	184
Type of book :	Physical
Year :	2009
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 274.00
Categories :	ISTE Series, Book Store, Chemical Engineering
Condition Type :	New
Country Origin :	India

Product Description

Many case studies related to instruments and controllers in operating plants are covered. Chapter-1 covers the basic principle of control, various technical terms used in control, classification of control system, rudimentary knowledge on pneumatic, hydraulic and electronic controllers.

It is expected that by the end of covering these topics, people will be well familiar with technical jargons used by control engineers, why should there be automation, why process industries keep on investing very substantial amount to the extent of 20 to 30% of their plant outlay on instrumentation and control. Chapter 2- present a brief description of various types of instruments used in various industries.

Chapter-3 lays emphasis on dynamic behavior of process measuring instruments and other peripherals, response of open loop and closed loop systems, stability, controller tuning, estimation of transfer functions and system parameters in operational plants, determining optimum controller setting for best operation of plants and few case studies. Chapter 4- covers the scheme of operations and strategies to be followed while introducing controllers in plants.

It is expected that by the end of covering these topics, operating personnel will know theoretical basis of many operations on controllers that are being carried in plants, how some emergency measures are to be taken when the behavior of plant operations are not satisfactory.

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Table Of Contents

- FOREWORD
- PREFACE
- Introduction to Control Systems
- Measurement and Final Control Element
- Process Dynamics and Controllers Design
- Applications of Control Schemes
- Appendix
- A Simple Glossary
- References

Author

P. N. Singh

Dr. P. N. Singh is the Director (Retired), National Institute of Technology Karnataka, Surathkal. He is basically a Chemical Engineer and has over decades of experience in teaching and research related to processes industries. The coauthor, Mr. S. R. Bhat, is presently working as Group General Manager (Instrumentation) at Mangalore Refinery and Petrochemicals Limited, Mangalore. He graduate in Chemical Engineering from Indian Institute of Technology, Chennai. Atomic Research centre, for seven years. Later he worked for Humphreys and Glasgow Consultants, for three years. He ha also worked for Uhde India Limited, for seven years. For the last sixteen years, he has been working for Mangalore Refinery and Petrochemicals in various capacities. He has introduced many innovative ideas in running the process plants, particularly in the areas of instrumentation and control.

S. R Bhat

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

The first author of this learning material, Dr. P. N. Singh is the Director (Retired), National Institute of Technology Karnataka, Surathkal. He is basically a Chemical Engineer and has over decades of experience in teaching and research related to processes industries. The coauthor, Mr. S. R. Bhat, is presently working as Group General Manager (Instrumentation) at Mangalore Refinery and Petrochemicals Limited, Mangalore. He graduate in Chemical Engineering from Indian Institute of Technology, Chennai. Atomic Research centre, for seven years. Later he worked for Humphreys and Glasgow Consultants, for three years. He ha also worked for Uhde India Limited, for seven years. For the last sixteen years, he has been working for Mangalore Refinery and Petrochemicals in various capacities. He has introduced many innovative ideas in running the process plants, particularly in the areas of instrumentation and control.

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320