A typical method of dealing with input and output constraints, especially for PID control, has been the empirical design and implementation of an intuitive solution to an individual plant and its constraints. Such ad hoc solutions perform surprisingly well but often remain in the form of isolated practical know-how without a more general scientific basis. Control Systems with Input and Output Constraints develops this empirical approach by demonstrating how particular answers to particular industrial design problems can be systematized to cope with a wide variety of simple and more complex situations.


The study and design of automatic Control Systems, a field known as control engineering, has become important in modern technical society. From devices as simple as a toaster or a toilet, to complex machines like space shuttles and power steering, control engineering is a part of our everyday life. This book introduces the field of control engineering and explores some of the more advanced topics in the field. A Compensator is a control system that regulates another system, usually by conditioning the input or the output to that system. Compensators are typically employed to correct a single design flaw, with the intention of affecting other aspects of the design in a minimal manner. T. Hagglund, "Book review: Control systems with input and output constraints," Control Eng. Pract., vol. 13, no. 1, p. 131, 2005. Teel received his A.B. degree in engineering sciences from Dartmouth College in 1987 and his M.A. R. Teel and N. Kapoor, "The L2 antiwindup problem: Its definition and solution," in Proc. 4th ECC, Brussels, Belgium, July 1997. Control systems with input and output constraints: A.H. Glattfelder and W. Schaufelberger (Eds.); Springer, Berlin, 2003. Article. Control Systems - Quick Guide - A control system is a system, which provides the desired response by controlling the output. The following figure shows the simple block diagram of a control system. Since, the output is controlled by varying input, the control system got this name. We will vary this input in order to get the desired response. Examples: Traffic lights control system, washing machine. Traffic lights control system is an example of a control system.