

Mechanisms

Throughout industry and history, there are numerous devices and concepts that have been conceived. When engineers design, knowledge of previous concepts can offer insights into the solution or at least provide a starting point. This presentation describes many different mechanisms that may help the engineer when designing. The presentation is based on *Mechanisms and Mechanical Devices Sourcebook* by N. Chironis and N. Sclater, McGraw-Hill Inc., New York 1996.

Several different types of mechanisms are presented in this presentation. These have been classified into the following categories:

1. Parts handling mechanisms
2. Reciprocating and general-purpose mechanisms
3. Special purpose mechanisms
4. Spring, bellow, flexure, screw, and ball devices
5. Cam toggle, chain, and belt mechanisms
6. Geared systems and variable-speed mechanisms
7. Coupling, clutching and braking devices
8. Torque-limiting, tensioning, and governing devices
9. Pneumatic machine and mechanism control
10. Fastening, latching, clamping, and chucking devices

