**ABSTRACT**

Motion control plays a vital role in industrial atomization. Application wise variety type of motors like DC, AC, stepper or servo are used. Because of easier control DC motors are very popular to the users, its application is oriented very useful for rotation and speed.

DC motor control means direction and speed control of a DC motor. Dc motors are widely used in speed and direction control because control of these motors are easier than other motors.

We have used ATMEGA328 microcontroller, DC motor, LED’s, voltage sources, Relays etc to form Direction control for Dc Motors (clockwise and Anticlockwise).

With this very basic concept of direction and speed control we can move the motor clockwise and anticlockwise as a result lift can move in forward and backward direction and we can vary the speed of a dc motor.

Application of DC Motor rotation for direction control and speed conrol is used widely in industrialization, automotives ,and domestic purposes as well.

Industrial applications use dc motors because the speed-torque relationship can be varied to almost any useful form for both dc motor and regeneration applications in either direction of rotation. DC motors feature a speed, which can be controlled smoothly down to zero, immediately followed by acceleration in the opposite direction without power circuit switching.

Some major applications are elevators, steel mills, rolling mills, locomotives, and excavators.