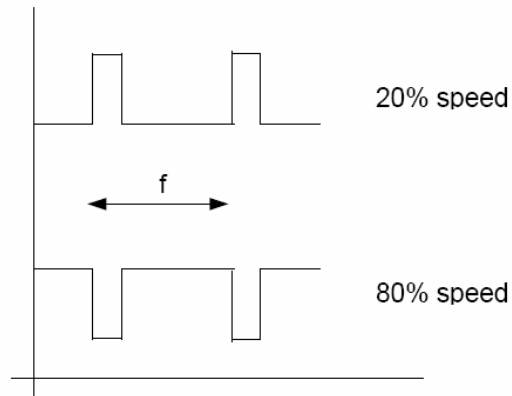


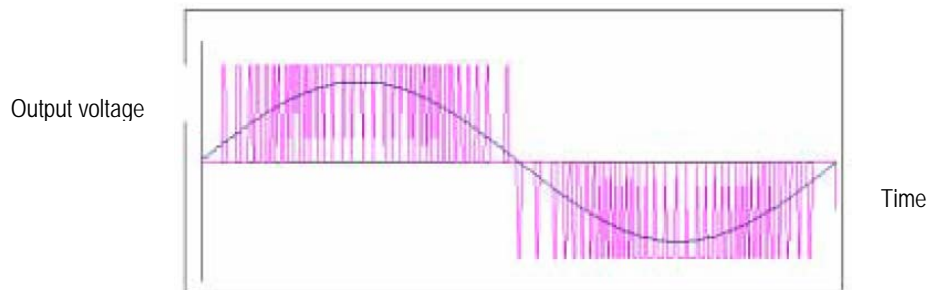
PWM

Pulse Width Modulation is a term to describe a fixed frequency modulation that has a varying width of modulation. The technique is used in a number of areas with motor control.

The technique can be used to provide a signal in control systems. A variation in the pulse width of a low voltage fixed frequency provides a signal. For example a 20% width of pulse is a signal to operate at 20% speed and a 80% width pulse is a signal to operate at 80% speed.



The technique is also used in high power drives such as variable frequency and EC motor drives. The width of the pulse is continually varied with time to mimic a sinusoidal voltage waveform to the motor as demonstrated in the graph below.



PWM output and fundamental