

Dynamos

A dynamo converts kinetic energy into electrical energy. Dynamos are commonly used to generate electricity to operate the lights on a bicycle.

A dynamo generates an electric current by rotating a magnet near a coil of wire. The coil of wire is wound around a soft iron core so that the magnetic field is stronger. The alternating magnetic field produced by the rotating magnet induces an alternating current on the coil.

The faster the magnet rotates, the greater the current induced in the coil and the greater the frequency of the alternating current.