

## **ELECTRIC MOTORS**

An electric motor is a machine which converts electrical energy into mechanical energy. Electric motors consist of two basic mechanical parts - a stator that is a stationary part and a rotor that is a revolving part. Electric motors have a lot of advantages. They are highly efficient and easy to operate. They have a longer lifespan and require no fossil fuels so they contribute to the safety of the work environment. Today electric motors are conceived in different sizes, shapes and types for every job imaginable. Once installed, electric motors must be properly maintained to prevent problems.

## **CAD, CAM AND CIM IN INDUSTRY**

**CAD** (COMPUTER AIDED DESIGN) is a system which uses computers to help design a product.

**CAM** (COMPUTER AIDED MANUFACTURE) refers to any part of the manufacturing process that is controlled by a computer system.

**CAD/CAM** (COMPUTER-AIDED DESIGN AND MANUFACTURE) is the process of joining CAD and CAM systems together. This involves the use of specialized computer software that converts data from drawings into machine instructions.

**CIM** (COMPUTER – INTEGRATED MANUFACTURING) is the system by which different stages of the design and manufacturing process are linked together by a central computer system. This system is fundamental to save a lot of time and eliminate expensive mistakes.