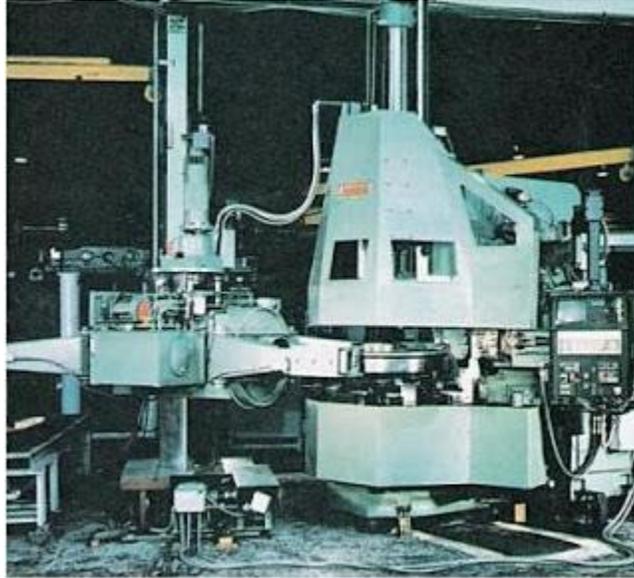


# WHAT ARE MOTOR CONTROLS AND HOW THEY WORK

## Motor controls a quick summary

Motor controls are those devices that operate electric motor particularly, those high powered electric motors used to operate machines like electric drilling machines, wood lathe machine, electric bending machine and those other machine used in the industry plant.



Motor controls can be divided into three major types;

1. Manual- The construction of the controllers here constitutes only simple devices requiring the operator to go into the controller location to initiate the change in the state of the control system. the installation of the controller to the motor is simply done by connection of the switch in series with the motor.

2. Semi-automatic-This type of controller is characterized by the use of push button, pressure switches , limit switches and other sensing devices to control the operation of magnetic contactor or starter. The operator must still initiate some actions such as starting and stopping but he does not have to go the location of the motor or the starter to perform the operation.



3. Automatic- Similar to semiautomatic, an automatic controller is characterized by the use of sensing devices. With an automatic control, the operator does not have to initiate certain actions. After that the operation is set, the system will continue to operate in its own.

Semi-automatic and automatic controllers are generally employed with an overload or low voltage release protection to shut down the system automatically for protection of the device and the operator.

Motor Controls involves the use of the following devices like magnetic starters and push button station and the use of cables to connect these devices. These cables may be any of the following, BX cable, loomex cable, steel conduit wiring. For push button stations it can be a start-stop, forward-reverse-stop push button and the start-jog-stop push button. For Push button types it can be a normally open or closed push button, stacked push button, push pull buttons and lighted push buttons. Push buttons can make or break the connection in a control system.

Motor Controls are divided into the following

1. Motor controls for alternating current (AC) machines or motors
2. Motor controls for Direct current (DC) machines or motors

Source : <http://www.engineermaths.com/2010/11/what-are-motor-controls-and-how-they.html>