

Badge Details

Name	3959-Mechatronics-Motor and Motor Controls
Description	This certificate exam evaluates the candidate's mastery of the principles, application, troubleshooting and maintenance of rotating electrical motors and electronic motor drives as used in packaging, processing and other manufacturing environments. Topics include motor and drive safety practices; characteristics of 3-phase power systems; speed, torque and efficiency characteristics of various types of single and three phase AC motors and various types of DC motors; AC and DC motor nameplate specifications; means of starting and braking motors; DC electronic drives and AC variable frequency and pulse width modulated electronic drives. This exam does not include stepping and servo motors and their controls which would be used in robotic and motion control systems.
Criteria	Candidates receiving this certification will take an exam with the following criteria: The exam is composed of 125 questions. Safety AC and DC Motor Speed and Torque Motor and Drive Nameplates (NEMA and IEC) DC Motors DC Motor Drives

- Single Phase AC Motors
- Three-Phase Power Systems
- Three-Phase (Poly-Phase) AC Motors
- AC Motor Drives