

Advance Buffalo – Electro Mechanical Skills Levels

Level – I – Entry Level,

Under 100% supervision. Can perform basic electro - mechanical , maintenance of equipment.

Level – II -Performs all functions as required with regard to the set up, installation, maintenance, safety and repair of plant machinery, systems and structures. Performs electronic and/or mechanical diagnostic trouble- shooting and repair of plant equipment machinery

Level – III – Advanced level, Senior Technician

<p>Process</p> <p>Electrical Skills</p> <ul style="list-style-type: none"> • Basic knowledge of AC/DC motor circuits (low voltage) • Understanding of panel building, motor controls, power distribution, conduits <p>Instrumentation/Mechanical Skills</p> <ul style="list-style-type: none"> • Knowledge of automated valves, hydraulics, pneumatics, basic welding, • Flow, pressure/temperature measurement 	<p>Process</p> <p>Electrical/Mechanical</p> <ul style="list-style-type: none"> • Troubleshooting skills • PLC/loop drawing/DCS • Variable speed drives • Basic machining • Process control • Pump rebuilding • Analytical predictive and preventive maintenance assistance • Spindle rebuilding • Rebuild instrumentation 	<p>Process</p> <p>Electrical/Mechanical</p> <ul style="list-style-type: none"> • Knowledge of Digital logic, Microprocessor based technology • 3D mechanical schematic experience • AC/DC Electric power (low voltage below 600v) and high voltage (above 600v) • Motor control (Servo) • Variable speed drive • Advance machining • Bearings, power transmission • Drive systems, slide ways, Advance welding(stick); rebuild a pump, automatic valves
<p>Tools/Equipment</p> <ul style="list-style-type: none"> • Knowledgeable to basic hand tools, calibers, micrometers 	<p>Tools/Equipment</p> <ul style="list-style-type: none"> • Electronic diagnostic meters, scopes, calibrating and test equipment, etc. Able to operate power tools including; drills, saws, grinder, jack/nail hammers, threading equipment, etc. Weld and burning equipment, lathes, mills, or other machinery as required 	<p>Tools/Equipment</p> <ul style="list-style-type: none"> • Advanced level
<p>Key success factors</p> <ul style="list-style-type: none"> • Schematic Reading • Knowledgeable of OSHA rules • Basic computer skills • Math skills (up to calculus) • Knowledge of Chemistry/Physics • Oral & written communication skills • Team Player • Attendance, willingness to work overtime • Ability to work outside 	<p>Key success factors</p> <ul style="list-style-type: none"> • Enhanced Level I • Able to mentor Level I • Analysis all types of circuits, or wiring systems using wiring diagrams, drawings, specifications, etc., as required to install, troubleshoot, maintain, calibrate, modify or otherwise service all types of electronic devices, production machinery, plant wiring, or other systems as directed. 	<p>Key success factors</p> <ul style="list-style-type: none"> • Enhanced Level I & II • Supervision of associates • Repair, rework, or calibrate hydraulic or pneumatic assemblies or systems to meet operational specifications or tolerances. • Train others to install, use, or maintain robotic systems
<p>Education/Experience</p> <ul style="list-style-type: none"> • H.S./GED, Preferred Vocational Ed + 	<p>Education/Experience</p> <ul style="list-style-type: none"> • Associates and/or 3 -5 years exp 	<p>Education/Experience</p> <ul style="list-style-type: none"> • Bachelors degree and/or 7 years exp



Source: Manufacturers Mechatronics Summit 10.31.2013



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- Mechanically inclined
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Electro Mechanical Job Titles

Utilities

Line Mechanic
Service Technician
Cable Splicer
Substation

Manufacturing

Instrument and Control Technician
Oiler Mechanic
Maintenance Mechanic
CNC Specialist
Electrical Technician
Electro-Mechanical Technician (E/M Technician),
Electronic Technician,
Test Technician, Tester,
Mechanical Technician,
Product Test Specialist,
Electro-Mechanic,
Electronic Instrument Technician,
Laboratory Technician,
Maintenance Technician



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