NOTICE OF PROPOSED CLASSIFICATION ACTIONS BY
THE HUMAN RESOURCES DIRECTOR

The following actions are being posted in accordance with Civil Service Rule 109. In the absence of a protest addressed to the Human Resources Director, the proposed changes will become final seven (7) calendar days from the posting date.

**Posting No:** 01  
**Fiscal Year:** 2016/2017  
**Posted Date:** 07/01/2016  
**Reposted Date:** 08/26/2016

**AMEND THE FOLLOWING JOB SPECIFICATION(S):**  
(Job specification(s) attached.)

<table>
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<th>Item #</th>
<th>Job Code</th>
<th>Title</th>
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<tr>
<td>1</td>
<td>9354</td>
<td>Elevator and Crane Technician</td>
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Protests on an item should be addressed to the Human Resources Director and can be submitted by mail to the City and County of San Francisco, Department of Human Resources, 1 South Van Ness Ave, 4th Floor, San Francisco, CA 94103 or by email to **DHR.ClassificationActionPostings@sfgov.org**. All protests must be received in writing no later than close of business seven (7) calendar days from the posting date, and must include the posting and item number(s), the basis on which the protest is submitted and identify the affected parties.

For additional information regarding this proposed classification action, please contact Victor H Vallejo, Clerk, at (415) 557-4894 or by email at **Victor.h.Vallejo@sfgov.org**.


cc:  
All Employee Organizations  
All Departmental Personnel Officers  
DHR – Class and Comp Unit  
DHR – Client Services Unit  
DHR – Employee Relations Unit  
DHR – Recruitment and Assessment Unit  
DHR – Client Services Operations  
Micki Callahan, DHR  
Michael Brown, CSC  
Sandra Eng, CSC  
Christopher Colandene, SFERS  
Devin Macaulay, Controller/ Budget Division  
Theresa Kao, Controller/ Budget Division  
Drew Murrell, Controller/ Budget Division  
Alex Koskinen, Controller/ Budget Division  
E-File
INTRODUCTION

Under general supervision, performs skilled electrical, mechanical, electronic, welding and rigging work in connection with the maintenance, repair and trouble shooting of cranes, elevators and related equipment. May perform inspections of cranes, elevators and related equipment for compliance with vendor service contracts.

Requires responsibility for inspecting, maintaining, installing, modifying/enhancing, repairing, troubleshooting, testing and operating crane and elevator electrical, electronic, mechanical, rigging and hydraulic components, power distribution systems, crane diesel engine components, and crane pneumatic components. Maintains documentation for cargo operations, damages, preventive maintenance, work orders, elevator and crane logs, inventory records, etc. and perform other duties as required.

DISTINGUISHING FEATURES

An Elevator & Crane Technician is a journey-level employee whose work is not limited to a particular skilled field. Positions in this class perform all necessary maintenance and repairs involving skilled electrical, mechanical, electronic, welding, and rigging work on container cranes operated by the Port of San Francisco elevators, and related work as assigned. Incumbents in this class must be capable of working alone and unsupervised in repairing and troubleshooting any type of equipment failure during a shift. Must be capable of working from written and/or verbal instructions or from plans and diagrams to accomplish work assignments outdoors, at heights of up to 250 feet above the ground, often in hazardous situations. Employees in this class may work in close proximity to energized high voltage electrical circuits and equipment.

SUPERVISION EXERCISED

None

MAJOR, IMPORTANT, AND ESSENTIAL DUTIES

According to Civil Service Commission Rule 109, the duties specified below are representative of the range of duties assigned to this job code/class and are not intended to be an inclusive list.

1. Maintains, installs, modifies/enhances, repairs, troubleshoots, tests and operates crane and elevator electrical components including AC & DC generators and motors up to 300 HP; brakes, transformers, motor starters, circuit breakers, relays, limit switches, load cells, slack rope devices, proximity sensors, space heaters, floodlights systems, load indicators, boom angle indicators, controllers, alarms, overtemp devices, contactors, wiring and other components.
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Job Code: 9354

2. Maintains, installs, modifies, repairs, programs, troubleshoots, tests and operates crane and elevator electronic components including programmable logic controllers, printed circuit boards, capacitors, resistors, diodes, transistors, SCR, rectifiers, RC networks, transistors, metal oxide varistors, micro chips, zener diodes, digital equipment, input/output modules, control cards, emergency shutdown systems, wind warning systems, intercom systems, regulators, micro switches, and other electronic components.

3. Maintains, installs, modifies/enhances, repairs, programs, troubleshoots, tests and operates power distribution systems including High Voltage (up to 4160 volts) gear, sub-station, circuit breakers, switchgears, transformers, power trench rail feeds, power take-up reel and cable, protective devices, and other control components.

4. Maintains, installs, modifies/enhances, repairs, troubleshoots, tests and operates crane and elevator mechanical and rigging components including open gears, speed reducers, wire ropes, sheaves, latches, twistlocks, rope drums, spreader mechanism, jactuators, thrustors, forestays, chain drives, wheels, bearings, seals, stabilizers, equalizers, rail brakes, buffers, service hoists, press, ratchets, pulleys, festoon trucks, and other components.

5. Maintains, installs, modifies/enhances, repairs, troubleshoots, tests and operates crane and elevator hydraulic components including pumps, cylinders, actuators, control valves, relief valves, filters, check valves, bleeder valves, lines, fittings, hoses, adapter, quick disconnects, crimpers, compensators, flow controls, solenoids, tanks/reservoirs, accumulators, oil samplers, cushion valves, pilot valves, pumps, seal kits and other components.

6. Maintains, installs, modifies/enhances, repairs, troubleshoots, tests and operates crane diesel engine components including minor tune-up and adjustments, starters, governor, turbo charger, linkages, air filters, air box, water pump, fuel filter and strainer, shutdown solenoid, tachometer, radiator, speed switch, oil and water heaters, injectors, fuel and oil lines, alternators, gauges, sensors and other components.

7. Maintains, installs, modifies/enhances, repairs, troubleshoots, tests and operates crane pneumatic components including air compressors, band brakes, wind warning test lines, regulators, gauges, lines, fittings, belts, pressure switches, filters, pumps, valves, water separators and other components.

8. Completes and maintains routine documentation for cargo operations, damages, preventive maintenance, work orders, elevator and crane logs, inventory records, and other reports and records as requested.

9. Examines, plans and inspects repairs for service contract compliance in accordance with industry codes and standards; investigates complaints related to elevators, escalators and related equipment.
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IMPORTANT AND ESSENTIAL KNOWLEDGES, SKILLS, AND ABILITIES

Knowledge of: various types of electrical equipment and installations; tools, materials and equipment necessary for the maintenance and repair of such installations; industrial controls; electrical, mechanical, electronic, rigging, hydraulic, diesel and pneumatic components and systems; major and minor malfunctions for container cranes and the methods of repairing them; preventive maintenance measures for container cranes; the uses of and working of test instruments; existing safety codes, ordinances and regulations; various elevator related software; and have a basic knowledge of work orders, logging inventory and other related record keeping systems.

Ability and Skill to: use a computer; read, interpret and work from electronic, hydraulic & mechanical drawings, schematics and blueprints and related manuals; maintain routine records and report on work accomplished; deal tactfully and effectively with tenants in handling their problems and complaints; work at heights of up to 250 feet; use and handling of electrical equipment and tools used in the electrical trade, electronic test equipment, industrial tools and equipment, rigging equipment and computers.

MINIMUM QUALIFICATIONS

These minimum qualifications establish the education, training, experience, special skills and/or license(s) which are required for employment in the classification. Please note, additional qualifications (i.e., special conditions) may apply to a particular position and will be stated on the exam/job announcement.

Education:
Completion of an electrical apprenticeship.

Experience:
Any combination equivalent to experience and training that would provide the required knowledge, skills and abilities would be qualifying. A typical way to obtain the knowledge, skills, and abilities would be: Three (3) years of journey level experience in industrial electrical maintenance, with emphasis on motor/generator maintenance. Experience maintaining and repairing cranes and/or elevators preferred.

License and Certification:
Some positions may require a Class C California driver’s license.

Some positions may require certification as a Certified Competent Conveyance (Elevator) Mechanic (CCCM).

Substitution:
Additional two (2) years of qualifying experience can be substituted for the required completion of electrical apprenticeship program.
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Three (3) years of experience maintaining and repairing cranes and/or elevators preferred may be substituted for the required experience.

SUPPLEMENTAL INFORMATION

Special Requirements: Essential duties require the following physical skills and work environment: Ability to work outdoors in all weather conditions and at heights of up to 250 feet, often in hazardous situations. May work in close proximity to high voltage electrical circuits and equipment. May be required to drive.

Incumbents in this class must be capable of working alone and unsupervised in repairing and troubleshooting any type of equipment failure during a shift. Must be capable of working from written and/or verbal instructions or from plans and diagrams to accomplish work assignments outdoors, at heights of up to 250 feet above the ground, often in hazardous situations; may work in inclement weather. Employees in this class may work in close proximity to energized high-voltage electrical circuits and equipment.

PROMOTIVE LINES

ORIGINATION DATE: 10/6/1998
AMENDED DATE: 08/XX/16
REASON FOR AMENDMENT To accurately reflect the current tasks, knowledge, skills & abilities, and minimum qualifications.
BUSINESS UNIT(S): COMMN