Office of Human Resources

Millwright – CJ3036

**General Statement of Duties**

Performs journey level skilled millwright/mechanical trades work to install, maintain, repair, inspect, and troubleshoot mechanical equipment including passenger loading bridges at Denver International Airport.

**Distinguishing Characteristics**

This is a unique classification in the skilled trades and is distinguished from other trades classes due to the specialized training and experience required for each classification.

**Guidelines, Difficulty and Decision-Making Level**

Guidelines are generally but not always clearly applicable, requiring the employee to exercise judgment in selecting the most pertinent guideline, interpret precedents, adapt standard practices to differing situations, and recommend alternative actions in situations without precedent.

Duties assigned are generally complex and may be of substantial intricacy. Work assignment is performed within an established framework under general instructions but requires simultaneous coordination of assigned functions or projects in various stages of completion.

Employee is responsible for determining time, place, and sequence of actions to be taken. Unusual problems or proposed deviations from guidelines, practices, or precedents may be discussed with the supervisor before being initiated.

**Level of Supervision Received & Quality Review**

Under general supervision, the employee receives assignments and is expected to carry them through to completion with substantial independence. Work is reviewed for adherence to instructions, accuracy, completeness, and conformance to standard practice or precedent. Recurring work clearly covered by guidelines may or may not be reviewed.

**Interpersonal Communication & Purpose**

Contacts with the public or employees where explanatory or interpretive information is exchanged, defended, and gathered and discretion and judgment are required within the parameters of the job function.

**Level of Supervision Exercised**

None

**Essential Duties**

Assemble, install, and repair mechanical machinery and equipment using schematics drawings including work on passenger loading bridges.

Fabricate, adjust and align machine parts to dimensional specifications.

Repair or replace defective machinery parts.

Troubleshoots and performs preventative maintenance and emergency repairs to airport machinery, which includes responding to emergency calls for service or repairs.
Move machinery and equipment including disassembling existing machinery in anticipation of installing new machinery.

Prepares working sketches and works from blueprints, schematics, and written or verbal instructions.

Prioritizes daily work orders and repairs.

Estimates materials, labor, and equipment costs.

Maintains records and prepares daily activity reports and follow applicable building codes.

Assists in the maintenance and repair work in a variety of skilled trades areas.

By position, perform snow removal duties.

Performs other related duties as assigned.

Any one position may not include all of the duties listed. However, the allocation of positions will be determined by the amount of time spent in performing the essential duties listed above.

**Competencies**

- **Arithmetic** – Performs computations such as addition, subtraction, multiplication, and division correctly using whole numbers, fractions, decimals, and percentages.

- **Oral Communication** - Expresses information to individuals or groups effectively; taking into account the audience and nature of the information; makes clear and convincing oral presentations; listens to others, attends to nonverbal cues and responds appropriately.

- **Problem Solving** – Identifies problems, determines accuracy and relevance of information, uses sound judgment to generate and evaluate alternatives, and makes recommendations.

- **Reading** - Understands and interprets written material, including technical material, rules, regulations, instructions, reports, charts, graphs or tables; applies what is learned from written material to specific situations.

- **Technical Competence** – Uses knowledge that is acquired through formal training and extensive on-the-job experience to perform one’s job, works with, understands, and evaluates technical information related to the job, and advises others on technical issues.

**Knowledge & Skills**

- Knowledge of machines and tools, including their designs, installation, uses, repair, and maintenance.

- Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings.

- Knowledge of materials, methods, and the appropriate tools to install, maintain, or repair pipelines, pipe systems, and fixtures, including water, air, steam, gas, chemical, or sewage.

- Knowledge of electrical equipment, components, instruments, and systems, including their design, installation, testing, uses, repair, or maintenance.

- Knowledge of materials, methods, and appropriate tools to make or repair metal parts, tools, gauges, models, patterns, and machines.
Knowledge of materials, methods, and appropriate tools to process, treat, form, or shape metal.

Knowledge of hazardous materials and waste and their uses, interactions, dangers, production, handling, storage, and disposal.

Knowledge of procedures for operating motor vehicles, including cars, trucks, or watercraft.

Knowledge of motor vehicle engines, parts, and systems, including their designs, uses, repair, and maintenance.

Ability to read and understand electrical blueprints and schematics.

**Education Requirement**

Graduation from high school or the possession of a GED, HiSET or TASC Certificate.

**Experience Requirement**

Completion of a Millwright trade apprenticeship program, or four years of experience as an apprentice.

**Education & Experience Equivalency**

No substitution of experience for education is permitted.

**Licensure & Certification**

By position, requires a valid Driver’s License at the time of application.

By position, requires a valid Commercial Driver’s License (CDL "B") with appropriate endorsements by the end of probation.

By position, possess a Welder certificate.

By position, possess a rigging certification.

Licenses and certifications must be kept current as a condition of employment.

**Working Environment**

Atmospheric Conditions: conditions that affect the skin, eyes or respiratory system.
Potential exposure to chemicals, gas
Potential exposure to cold temperature, cold enough to cause bodily discomfort
Potential exposure to cold weather conditions (indoor/outdoor)
Potential exposure to conditions that affect the skin or respiratory system.
Potential exposure to extreme temperature changes
Potential exposure to hazardous anesthetic agents, body fluids, and bio-wastes
Potential exposure to hazardous conditions where there is a danger to life, body, and/or health
Potential exposure to hazardous/toxic chemicals
Potential exposure to hazards from electro/mechanical/power equipment.
Potential exposure to hazards of steam and heat
Potential exposure to heat temperatures, hot enough to cause bodily discomfort
Potential exposure to hot and humid work environment
Potential exposure to humid conditions with high moisture content to cause bodily reactions
Potential exposure to infections and contagious diseases
Potential exposure to odorous chemicals
Potential exposure to the risk of blood borne diseases.
Potential exposure to temperature changes: variations in temperature from hot to cold.
Potential exposure to toxic chemicals
Handles emergency or crisis situations
Noise sufficient to cause distraction or possible hearing loss
Personal Safety: aware of surroundings, people, and events
Pressure due to multiple calls and inquiries
Subject to electrical and radiant energy hazards
Subject to hazards of flammable or explosive gases
Subject to injury from moving parts of equipment or vehicles
Subject to precarious or high locations
Subject to pressure for multiple calls, inquiries, and interruptions
Subject to varying and unpredictable situations
Subject to vibrations and strain on the body to cause bodily harm if endured daily
Temperature Changes: variations in temperature from hot to cold.
Temperature Changes: variations in temperatures from hot too cold when works in field
Wet: frequent contact with water, liquid, chemicals, or sanitary sewage
Works in confined, uncomfortable or awkward locations
Works in precarious or high locations.

### Level of Physical Demand

3-Medium (20-50 lbs.)

### Physical Demands

(Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs.):

- **Agility**: bends, stretches, twists, or reaches out with the body, arms or legs.
- **Balancing**: maintaining body equilibrium to prevent falling over.
- **Carrying**: transporting an object, usually by hand, arm, or shoulder.
- **Climbing**: ascending or descending objects usually with hands/feet.
- **Color vision**: ability to distinguish and identify different colors.
- **Crawling**: moving about on hands and knees or hands and feet.
- **Crouching**: bending body downward and forward by bending legs.
- **Depth Perception**: ability to judge distances and space relationships.
- **Eye/Hand/Foot Coordination**: performing work through the use of two or more.
- **Feeling**: perceiving attributes of objects by means of skin receptors.
- **Feeling**: perceiving attributes of objects by means of spoken word.
- **Field of Vision**: ability to adjust vision to bring objects into focus.
- **Field of Vision**: ability to see peripherally.
- **Fine Dexterity**: coordinate eye-hand to operate a vehicle, reach, hold, grasp and turn objects
- **Fingering**: picking, pinching, or otherwise working with fingers.
- **Handling**: seizing, holding, grasping, or otherwise working with hand(s).
- **Hazard**: conditions where there is danger to life, body and/or health.
- **Hearing/Talking**: hear and determine direction of sound.
- **Hearing**: perceiving the nature of sound by the ear.
- **Kneeling**: bending legs to come to rest on one or both knees.
- **Lifting**: raising or lowering objects weighing over 50 pounds, from one level to another.
- **Mathematical reasoning**:
- **Memorization**:
- **Mental Demands**: mathematical reasoning, memorization, oral comprehension, spatial orientation, and written comprehension.
Neck Flexion: moving neck upward/downward.
Oral comprehension:
Physical Strength: exerts maximum muscle force to lift, push, pull or carrying objects and performs laboring work.
Pulling: exerting force upon an object so that it is moving to the person.
Pushing: exerting force upon an object so that it is moving from the person.
Reaching: extending the hand(s) and arms(s) in any direction.
Repetitive motions: making frequent movements with a part of the body.
Sitting: remaining in the normal seated position.
Stamina: exerts oneself physically over long periods of time without tiring. (which may include performing repetitive tasks such as hammering or lifting objects).
Standing: remaining on one's feet in an upward position.
Stooping: bending the body by bending the spine at the waist.
Talking: expressing or exchanging ideas by means of spoken words.
Vision Far Acuity: ability to see clearly at 20 feet or more.
Vision Near Acuity: ability to see clearly at 20 inches or less.
Walking: moving about on foot on uneven surfaces.
Walking: moving about on foot.
Written Comprehension.

**Background Check Requirement**

Criminal Check
Employment Verification

**Assessment Requirement**

None

**Probation Period**

Six (6) months.

**Class Detail**

Pay Grade: J-621
FLSA Code: N
Management Level: 10
Established Date: 9/21/2018
Established By: Lori Schumann
Revised Date: 6/11/2019
Revised By: Ryland Feno
Class History:
6/11/19 - Updated working environment verbiage.