

**Industrial Maintenance Millwright**

FLSA Status: Covered  
Bargaining Unit: Portland City Laborers 483 (PCL)

**General Summary**

Positions in this broad class repair, install, operate and maintain wastewater treatment facilities, equipment and structures.

**Industrial Maintenance Millwright, Apprentice - 30000155**

**Distinguishing Characteristics**

The apprentice level of this class typically assists with and learns to perform the full range of industrial maintenance millwrighting, including cross-training in both plants and pump stations, in a learning and developing capacity and under the instruction of a journey Millwright and as an active participant in an Apprenticeship Program. Upon successful completion of the prescribed training program and acquiring the required licenses and certifications, apprentices will be eligible for appointment as an Industrial Maintenance Millwright.

**Typical Duties/Examples of Work**

1. Assists in and learns the installation, maintenance, operation and repair of all types of industrial machinery including pumps, piping, boilers, compressors, conveyors, tanks, sweeps, blowers, mixers, gear boxes, fans, blowers, de-watering equipment, hydraulic systems, treatment plant facilities and related equipment.
2. Assists in and learns to operate, repair and maintain sewage collection pump stations.
3. Assists in and learns the installation, maintenance and repair of wastewater process equipment and systems, including sluice gates, bar screens, grit separators, clarifiers, aeration systems, solids and sludge handling equipment; assists in and learns the connection and maintenance of liquid chlorine tank cars and delivery system.
4. Assists in and learns machinery diagnostics and troubleshooting, including evaluation of condition and performance of equipment and systems, and modifications and improvements.

5. Assists in and learns to write, store and process work orders, equipment history, specifications and maintenance tracking using computerized system.
6. Assists in and learns to plan and estimate jobs, establish work priorities and purchase equipment and supplies as necessary.
7. Responds to calls to work during emergencies.
8. Performs related duties as assigned.

**Required Knowledge, Skills and Abilities**

Knowledge of: basic mechanical operations

Ability to: communicate effectively; read and follow instructions

**Special Requirements**

Valid state driver's license

**Classification History:**

Adopted: 2-03-99:

Class created as a result of DCTU Classification and Compensation Study  
1998-99.  
1800

Revised: 05-24-06 Added language about eligibility for appointment.

June 2009 - Change Job Class number from 1800 to 30000155, due to system change.

7-1-17 - Union changed from DCTU to PCL

**Industrial Maintenance Millwright, Trainee - 30000156**

**Distinguishing Characteristics**

The trainee level of this class typically assists with and learns to perform the full range of industrial maintenance millwright tasks under the instruction of a journey Industrial Maintenance Millwright and as an active participant in a training program. Upon successful completion of the prescribed training program and acquiring the required licenses and certifications, trainees will be eligible for appointment as an Industrial Maintenance Millwright.

**Typical Duties/Examples of Work**

Same as Industrial Maintenance Millwright Apprentice.

**Required Knowledge, Skills and Abilities**

Same as Industrial Maintenance Millwright Apprentice.

**Special Requirements**

Same as Industrial Maintenance Millwright Apprentice.

**Classification History:**

Adopted: 2-03-99:

Class created as a result of DCTU Classification and Compensation Study 1998-99. This class is composed of the following classes:

1809 Waste Water Mech Trainee Adopted 05-25-90

1802

Revised: 05-24-06 Added language about eligibility for appointment.

June 2009 - Change Job Class number from 1802 to 30000156, due to system change.

7-1-17 - Union changed from DCTU to PCL

**Industrial Maintenance Millwright - 30000157**

**Distinguishing Characteristics**

The journey level of this class typically performs at full performance level in the repair, installation and maintenance of wastewater treatment facilities, equipment and structures. It is distinguished from the Apprentice by achievement of journey status and certification. It is distinguished from Water Operations Mechanic by procedures and exposures unique to wastewater.

**Typical Duties/Examples of Work**

1. Installs, maintains, operates and repairs all types of industrial machinery including pumps, piping, boilers, compressors, conveyors, tanks, sweeps, blowers, mixers, gear boxes, fans, blowers, de-watering equipment, hydraulic systems, treatment plant facilities, heating, ventilating and air-conditioning systems, and related equipment.
2. Operates, repairs and maintains sewage collection pump stations.
3. Plans, coordinates and executes maintenance activities.
4. Installs, maintains and repairs wastewater process equipment and systems, including sluice gates, bar screens, grit separators, clarifiers, aeration systems, solids and sludge handling equipment; connects and maintains liquid chlorine tank cars and delivery system.

5. Performs machinery diagnostics and troubleshooting; evaluates condition and performance of equipment and systems; makes modifications and improvements.
6. Write stores and processes work orders, equipment history, specifications and maintenance tracking using computerized system.
7. Plans and estimates jobs, establishes work priorities and purchases equipment and supplies as necessary.
8. Provides construction support for Capital Improvement Projects, including reviewing design, furnishing site-specific information, and aligning and installing new pumps and other equipment.
9. May serve as lead over other journey trades and lower-level classifications; provides training and instruction.
10. Performs related duties as assigned.

### **Required Knowledge, Skills and Abilities**

Knowledge of: fluid dynamics, hydraulic and pneumatic systems; high-pressure steam systems; effective customer service techniques

Ability to: perform precision alignment of equipment; operate precision hand tools, power tools, precision measurement tools, and basic machine tools; lead, coach, monitor, motivate and instruct staff

Skill in: welding, cutting and brazing structural steel; basic metal fabrication; pipefitting/welding and layout; machine layout, blueprint reading, machinery erection, mechanics and mechanisms, and power transmission; mechanical piping systems, tubing and plumbing

### **Special Requirements**

Completion of 4-year apprenticeship program as Industrial Maintenance Millwright or demonstrated equivalent skills and experience; Valid state driver's license; license in back flow prevention and cross connection control desirable; license in welding desirable; license in forklift operation required post-hire; license in crane operation, rigging and signaling required post-hire; certificate in self-contained Breathing Apparatus required post-hire; certificate as competent person, Confined Space Entry required post-hire; certificate in manlift/scissorlift required post-hire; desirable for some positions to have limited maintenance electrician license and refrigerant recovery certificate; some positions may require additional endorsements, certifications or licenses

**Classification History:**

Adopted: 2-03-99:

Class created as a result of DCTU Classification and Compensation Study 1998-99. This class is composed of the following classes:

1812 Waste Water Mech Adopted 08-19-75

Revised 05-25-90

Revised 08-29-95 (Wastewater Mechanic I and II were combined into one class)

June 2009 - Change Job Class number from 1803 to 30000157, due to system change.

7-1-17 - Union changed from DCTU to PCL

**Industrial Maintenance Millwright, Lead - 30000158**

**Distinguishing Characteristics**

The lead level of this class typically serves as crew lead over Industrial Maintenance Millwrights. It is distinguished from the journey level by scheduling and inspecting work of Industrial Maintenance Millwrights. Note: This is a premium pay class for assignment of lead duties. Employees do not accrue seniority or obtain status in this class. Employee is assigned from a base class.

**Typical Duties/Examples of Work**

1. Provides lead direction to Industrial Maintenance Millwrights and Apprentices; trains, coaches, motivates and provides input to performance evaluation of staff.
2. Inspects work to assure adherence to codes rules, regulations, procedures and safety requirements.
3. Coordinates jobs with other agencies, bureaus and the public.
4. Provides required documentation and reports.
5. Receives and responds to requests and complaints.
6. Coordinates emergency responses and situations.
7. Performs related duties as assigned.

**Required Knowledge, Skills and Abilities**

Knowledge of: effective principles and practices of leadership

Ability to: schedule and assign the work of others

Skill in: demonstrating techniques to others; providing training to others; providing lead direction to staff; including assigning and reviewing work

**Special Requirements**

Same as Industrial Maintenance Millwright

**Classification History:**

Adopted: 2-03-99:

Class created as a result of DCTU Classification and Compensation Study 1998-99. This class is composed of the following classes:

1819 Waste Water Mechanic II Lead (No Class Spec Available)

June 2009 - Change Job Class number from 1804 to 30000158, due to system change.

7-1-17 - Union changed from DCTU to PCL

**Working Conditions**

Work in this class is typically performed in a wastewater treatment plant environment. Incumbent is typically required to lift up to 50 pounds; to work outdoors in all weather conditions; to be exposed to hazardous chemicals, fumes and materials; to work in confined spaces and at heights; to be exposed to high noise levels from industrial machinery; to be called back to work during emergencies.