

# JOB DESCRIPTION – MILLWRIGHT

## JOB DUTIES AND RESPONSIBILITIES

Installs machinery and equipment according to layout plans, blueprints, and other drawings in industrial establishment, using hoists, lift trucks, hand tools, and power tools. Read blueprints and schematic drawings to determine work procedures. Dismantles machines, using hammers, wrenches, crowbars, and other hand tools. Moves machinery and equipment, using hoists, dollies, rollers, and trucks. Assembles and installs equipment, such as shafting, conveyors, and tram rails, using hand tools and power tools. Constructs foundation for machines, using hand tools and building materials, such as wood, cement, and steel. Aligns machines and equipment, using hoists, jacks, hand tools, squares, rules, micrometers, and plumb bobs. Assembles machines, and bolts, welds, or rivets, or otherwise fastens them to foundation or other structures, using hand tools and power tools. Operates engine lathe to grind, file, and turn machine parts to dimensional specifications. Repairs and lubricates machines and equipment. Inspects and measures parts to detect wear, misalignment, or other problems. Realigns and adjusts components, such as spindles, and clutches using hand tools and following diagrams. Starts machine to test operation following installation, repair, or modification. Utilizes computer, robotic, or automated equipment. May be required to work while wearing respiratory protection, either air supplied or air purifying, depending upon atmospheric conditions and work location. May be required to work in confined spaces, above ground in excess of fifty feet, outdoors in direct sunlight and in seasonal temperature extremes. Some of these job duties are not full time; project size and organization of work determine whether workers spend their time on one duty or transfer from duty to duty as project progresses to completion.

## TOOLS, EQUIPMENT AND DEVICES REQUIRED ON THE JOB

Channel Lock Pliers 9"	8" Pinch Bar	1/2" X 6" Flat Chisel	6" Stainless Steel Scale Side
Cutting Pliers 9"	Combination Wrench Set	3/4" X 8" Flat Chisel	Dial Indicator
Needle Nose Pliers	Set Standard Screwdrivers	3/8" X 6" Diamond Point Chisel	Set of Feeler Gauges
Combination Wrench 1-1/16"	Set Phillips Screwdrivers	3/8" X 6" Round Nose Chisel	8" Outside Calipers
10" Pipe Wrench	Hex (Allen) Wrenches-Small	3/8" X 6" Center Punch	8" Inside Calipers
14" Pipe Wrench	Hex (Allen) Wrenches-Large	3/8" Dr. Ratchet/Socket set	0" to 1" Micrometer
Ball Pein Hammer 16 oz.	8" Adjustable Wrench	1/2" Dr. Ratchet/Socket set	Hardhat
25' Tape Rule	Stiff Putty Knife	Combination Wrenches (3/8">1-1/4")	Gloves
Hacksaw	Packing Knife	12" Metal Rule	Tool Box w/Lock
Sleever Bar	Flashlight	Tin Snips	Safety Glasses

## NON-PHYSICAL JOB REQUIREMENTS

The Dictionary of Occupational Titles, Fourth Edition, Revised 1991, United States of America, Department of Labor Specific Vocational Rating for Millwright is: Over 2 years up to and including 4 years.

## PERSONAL TRAITS

The ability to get along well with co-workers and management and the ability to work together with other employees as part of a group, the ability to accurately communicate ideas, instructions, questions, problems, solutions. The ability to accurately receive and understand ideas, instructions, questions, problems, solutions or feelings understanding of the nature and causes of accidents, appreciative of the effects and seriousness of accidents, alert and attentive for possible hazards, takes necessary actions to prevent accidents - is not accident prone and does not have a history of chronic unsafe behavior.

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## **PHYSICAL JOB REQUIREMENTS**

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The ability to verbally communicate alarms or warnings clearly, concisely, loudly and quickly, to clearly and quickly hear or otherwise sense alarms or warnings and take appropriate action, maintain equilibrium to prevent falling when moving, walking, standing, kneeling or crouching - particularly on narrow, uneven, irregular, slippery surfaces, going up or down ladders, stairs, scaffolding, ramps, poles or other objects using hands, arms, feet or legs. Moves about on hands and feet, bending the body downward and forward bending leg and spine - working in a bent over position. Sensing physical attributes such as size, shape, temperature, texture or sharpness of an object by touching. Foot agility and dexterity - operating pedals, foot controls, kick bars and other similar tasks that require foot or toe motion. Grasping, gripping or applying pressure to an object with the fingers and palm, holding an object in the hand. The ability to clearly and concisely perceive sounds, the ability to hear and understand detailed oral communications, the ability to hear warning signals and alarms given verbally and mechanically. Lifting, raising or lowering objects in a vertical direction, particularly heavy or bulky objects. Moving objects backward, forward, in or out in a horizontal direction, particularly heavy or bulky objects. Pulling, exerting a steady backward, downward, upward or outward force against an object - jerking, plucking, wrenching, stretching, towing, drawing, dragging or tugging objects in a sustained motion. Pushing, pressing against something with steady forward, downward, upward or outward force - shoving, pushing, compressing, squeezing, mashing, packing, pressing, jamming, compacting, or squashing objects in a sustained motion. Reaching, extending the hand(s) and/or arm(s) in any direction. The ability to see, read and understand written communications: including directions, instructions and warning signs, to see and distinguish colors, to visually distinguish shapes and patterns, to accurately sense distances (depth perception), to accurately see objects and detect motion at wide angles (peripheral vision). Bending the body downward and forward by bending the spine at the waist, using the lower extremities and back muscles and moving on foot, particularly for long distances.

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## **PHYSICAL MODIFIERS/DEMANDS**

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The Dictionary of Occupational Titles, Fourth Edition, Revised 1991, United States of America, Department of Labor Physical Demands Strength Rating for Millwright is: H - Heavy Work - Exerting 50 to 100 pounds of force occasionally, and/or 25 to 50 pounds of force frequently, and/or 10 to 20 pounds of force constantly to move objects. Physical demand requirements are in excess of those for Medium Work.

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## **VISUAL MODIFIERS/DEMANDS**

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The job requires considerable, sustained use of eyesight for functions such as visual inspection, reading, measuring, assembling, transcription, data analysis and operating machines or vehicles and the ability to clearly see at night or in dim light, in daylight or bright light, under glare or poor contrast.

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## **ENVIRONMENTAL MODIFIERS/DEMANDS**

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The job involves: Exposure to cold working conditions during winter months and to hot working conditions during summer months, exposure to noise - workers must wear protective hearing equipment or frequently shout in order to be heard above the ambient noise level. Exposure to pollutants or allergens which can adversely affect the skin and/or the respiratory system such as gases, smoke, odors, mists, fumes, dust, chemicals, oils or solvents, exposure to hazardous working conditions including moving machinery, electricity and/or working in high places. The job requires the use of protective equipment such as hard hats, respirators, aprons, gloves, special clothing, safety shoes and safety glasses. The job involves continuous work that cannot be easily or economically interrupted for breaks except at regularly scheduled intervals or at the completion of an assignment.

I understand and can perform this job with or without reasonable accommodation.