

## Blacksmith

---

### **DEFINITION**

This is journeyman level work in the blacksmith trade.

An employee of this class performs forging, shaping and welding duties in the fabrication and repair of metal parts for heavy equipment, machinery and tools, at the bench, forge and anvil. Assignments are in the form of oral or written instructions and may be accompanied by sketches, plans, blueprints and worn, broken or sample parts. There is latitude for determining specific work methods and the work is subject to inspection in progress and upon completion. A Blacksmith may be assigned helpers or apprentices as required.

### **TYPICAL DUTIES\***

Heats, shapes, welds and tempers metals in the manufacture of a variety of tools, clamps, brackets and equipment, using a forge, gas furnace, trip hammers and hand tools.

Forge welds chains, rods and related items.

Fabricates hammers, chisels, tongs, shovels, wrenches and other hand tools by heating metal stock and forge welding or shaping stock as required.

Fabricates playground equipment such as bicycle stands, swing brackets, etc.

Develops jigs and dies for the manufacture of clamps and brackets.

Heat treats bolts, tools and other items fabricated.

Sharpens and tamps tools such as picks, jackhammer points, chisels, punches, etc.

Straightens railings, pipes and beams.

Performs other related duties as required.

### **KNOWLEDGE, ABILITIES AND SKILLS**

Considerable knowledge of the standard methods, materials, tools and equipment utilized in the blacksmithing trade.

Considerable knowledge of metal properties.

Knowledge of the occupational hazards and safety precautions of the blacksmith trade.

Ability to understand formulas and specifications and to follow and carry out oral and written instructions.

Spatial perception to visualize finished produce from drawings or sketches and to verify dimensions of workpieces.

Colour acuity to determine when metals are properly heated.

Sufficient strength to perform moderate to heavy work requiring the frequent lifting, carrying and positioning of workpieces or tools weighing up to 50 pounds.

Capacity to work while exposed to heat from furnaces, forges, hot metal and atmospheric conditions such as fumes, noise and dust.

**TRAINING AND EXPERIENCE REQUIREMENTS****Job Level**

Successful completion of a Blacksmith apprenticeship training program recognized by the City of Edmonton. Possession of a valid Alberta Class 5 motor vehicle operator's Licence.

*\* This is a class specification and not an individualized job description. A class specification represents and defines the general character, scope of duties and responsibilities of all positions within a specific job classification. It is not intended to describe nor does it necessarily list the essential job functions for a specific position in a classification. Positions may perform some of the duties listed above but this does not necessarily qualify for placement into this classification.*

---

Salary Plan	<u>10M</u>	<u>10A</u>	<u>10B</u>	<u>10C</u>
Job Code	0153			
Last Updated:	1979/01			
Previous Updates:				
Originated:	1974/11			