

Workers

There are many different jobs in a steel mill. As with most industries, the main jobs fall into a list of categories, such as:

Laborer Foreman Supervisor

- * Choose one of the job titles. Identify the responsibility of the job and how it impacts the work in a steel mill. Explain the importance of the job in the completion of the production of steel. Describe the duties and illustrate that job in a steel mill.
- * Choose two of the job titles. Identify the responsibilities of the jobs and how they impact the work in a steel mill. Explain the importance of each job in the completion of the production of steel, and how both jobs must be completed together in order for the steel to be produced.
- * Identify the responsibilities of the three types of jobs. Explain how they must each be fulfilled in order for steel to be produced. Explain their differences and similarities, and how they impact each other in the production of steel.

There are many types of laborers in a steel mill. Some of the more common basic laborers include:

Pipe Fitter	Welder	Bricklayer
Machinist	Blacksmith	Motor Inspector
Boilermaker	Millwright	Conductor

- * Choose one of the types of laborer jobs. Identify and define the duties of the job in a steel mill. Explain what the laborer must do in a mill in order to help with the production of steel. Illustrate the job.
- * Choose two of the types of laborer jobs. Define the duties of each, and compare and contrast the duties. Explain which type of laborer job you would prefer to do, and tell why.
- * Research each of the main types of laborer jobs and identify the main duties of each. Describe which job you would prefer to do if you worked in a steel mill. Explain, in detail, why you would choose that particular job over the others.



Main Job Titles

<u>Laborer:</u> a worker, especially one who does manual work;

Foreman: a workman who supervises a group of workers, especially in a factory;

<u>Supervisor</u>: a person who supervises, watches over, directs, guides, and oversees others in a factory.

Types of Laborers

<u>Pipe fitter:</u> lays out, installs, maintains, and repairs all types of pipelines, fittings, and fixtures in plant maintenance and construction;

<u>Machinist:</u> sets up and operates all types of machine tools and performs all types of layout, fitting, and assembly work;

<u>Boilermaker:</u> lays out, fabricates, assembles, erects, and makes repairs for all types of structural, boiler, and plate work;

Welder: performs welding, brazing, and cutting on any type of metal;

<u>Blacksmith:</u> forges, hammer-welds, and heat treats iron and steel materials in the construction, maintenance, and repeal of plant equipment;

<u>Millwright:</u> inspects, repairs, replaces, installs, adjusts, and maintains all mechanical equipment in a major unit or assigned area;

<u>Bricklayer:</u> lays brick and performs masonry work in plant maintenance and construction;

<u>Motor inspector:</u> inspects, repairs, replaces, installs, adjusts, and maintains all electrical equipment in a major unit or assigned area (ie: mechanical repairs to cranes and other electrical service);

<u>Conductor:</u> directs the movement of cars on general plant switching and assures that all freight is dispatched to its proper destination.



Specific Job Titles

Each worker in a steel mill has a specific job. Each job has a title and a list of specific duties that must be completed. There are hundreds of different job titles in each of the different types of steel mills, and each has responsibilities that are important. Some of the more interesting job titles include:

Bloor, Slab, Billet Mills

Cinderman

Blooming Mill Roller

Hooker Scarfer

Plate Mill

Salt Thrower

Bar Mills

Rougher Bar Catcher

Hot Strip Mills

Coil Slitter Coiler

Transportation

Switchman

Coke Plant

Car Dumper Operator

Screenman Nozzleman Larryman Blast Furnace

Stove Tender Keeper Clayman

Pig Machine Operator

Topman

Skull Cracker Craneman

Open Hearth

Charging Machine Operator

First Helper

Stripper Craneman

Cold Strip and Sheet Mill

Batch Pickler Flying Shearman Shot Blaster

<u>Maintenance</u>

Babbittman

- * Choose one of the job titles listed. Make up a definition for the job title and write a list of the specific duties of that job. Try to write your definition with regard to the job in a steel mill. Illustrate your job description.
- * Research the actual job title. Define the job and research the specific duties of the job. Find out the details of the job with respect to the duties in a steel mill. Illustrate the actual job in a steel mill.
- * Compare your job description and list of duties to the actual description and duties. Explain the importance of the actual job and how it impacts the production of steel in a mill.



Specific Job Titles

Bloom, Slab, Billet Mills

<u>Cinderman:</u> removes cinder from under the soaking pits;

<u>Blooming mill roller:</u> directs and controls the operation of a blooming mill to process ingots into slabs and blooms;

Hooker: does all the necessary hooking in the billet mill billet yard;

<u>Scarfer:</u> burns out defects on billets, slabs, and blooms with a hand scarfing torch, and checks and marks the surface defects;

Plate Mill

<u>Salt thrower:</u> throws salt on slabs to remove scale as they enter the plate mill rolls;

Bar Mills

<u>Rougher:</u> sets up, adjusts, and regulates the rolls and guides on a continuous roughing train of a bar mill;

<u>Bar catcher:</u> catches the bar from one roll stand, loops and feeds it into the next stand;

Hot Strip Mills

Coil slitter: sets up and operates a slitter line, slitting the coiled strip;

Coiler: operates the equipment to coil or stack products being rolled on a mill;

Transportation

<u>Switchman:</u> assist in the movement of freight cars in general plant switching, throwing switches, disengaging couplings, and signaling the engineer;

Coke Plant

Car dumper operator: operates the car dumper in dumping the coal cars;

Screenman: operates the coke screening station;

Nozzleman: cleans the air ports and cleans or replaces nozzles on the batteries;



<u>Larryman:</u> operates the larry cars in charging coal into the coke ovens;

Blast Furnace

Stove tender: operates the hot blast stoves for two blast furnaces;

<u>Keeper:</u> directs and performs work to prepare for casting and flushing a blast furnace:

Clayman: fills mud guns, assists in preparing the iron trough;

Pig machine operator: operates the jib crane, pouring the hot metal;

Topman: cleans blast furnace tops, water scale, and stove top platforms;

Skull cracker craneman: operates the blast furnace skull cracker crane;

Open Hearth

<u>Charging machine operator:</u> operates the charging machine to place scrap and other materials into open hearth furnaces;

First helper: operates an open hearth furnace;

Stripper craneman: operates an overhead electric traveling crane;

Cold Strip and Sheet Mill

Batch pickler: operates a plunger type pickling unit in pickling the sheet product;

<u>Flying shearman:</u> sets up and operates a flying shear in slitting and end shearing the coiled strip steel to sheets;

<u>Shot blaster:</u> sets up and operates shot blaster in removing scale and preparing the sheet product surfaces for coating;

Maintenance

<u>Babbittman:</u> melts and pours Babbitt for bearings and other parts requiring babbitting.