



Careers in manufacturing: engineering fabrication

Engineering production

Engineering production fabrication workers perform a range of production process tasks to refine and treat metals and mineral ore, fire ceramics, and operate plant machinery to produce and finish metal products, such as rods, tubing and structural shapes, and moulds for casting.

Tasks include:

- interpreting engineering production drawings
- setting up, operating and adjusting production plant to shape metal stock and castings and cut sheet metal
- operating welding and electroplating plant
- operating furnaces and quenching plant to smelt and change the structure of metals
- using kilns and ovens to fire ceramics
- processing mineral ore and operating metal rolling plant
- casting molten metal and operating plant to draw metal wire through dies
- operating computer-controlled production plant.

Occupations in the production fabrication sector include:

- Foundry worker
- Tool and die setter
- Furnace operator
- Kiln operator.

Foundry worker

Fabrication foundry workers assist tradespeople and semi-skilled workers to cast metal into shapes used as parts for machinery, motor vehicles, railway engines, stove parts and wheels.

Relevant qualifications:

- Certificate II in Engineering
- Certificate III in Engineering (Fabrication Trade)

Tool and die setter

Tool and die setters set up and adjust machine tools and other production machines, such as automatic lathes or multiple operation machines. These machines are then operated by other workers, usually in situations where large-scale production techniques are used.

Relevant qualification:

- Certificate III in Engineering (Fabrication Trade)

Furnace operator

Furnace operators operate or tend furnaces, such as gas, oil, coal, electric-arc or electric induction, open-hearth or oxygen furnaces, to melt and refine metal before casting or to produce specified types of steel.

Relevant qualification:

- Certificate II in Engineering

Kiln operator

Kiln operators control the temperature, ventilation and maintenance of high-temperature, high-capacity ovens that bake, harden and dry a variety of mediums, including metal, clay and glass. They work to maximise efficiency while ensuring their safety across a range of industries, including lumber, glass, clay and smelting.

Relevant qualification:

- Certificate II in Engineering

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