



Careers in manufacturing: chemical, hydrocarbons and refining

Technicians

Chemical, hydrocarbons and refining technicians control the operation of plant and equipment to produce chemical products, and to extract, refine and distribute hydrocarbon and oil products.

They generally work at a more senior and more technical level to operators and will often be responsible for the supervision of staff.

Chemical, hydrocarbons and refining technicians include:

- Plant technicians
- Senior plant technicians
- Quality control technicians
- Product development technician
- Senior production technician.

Chemical, hydrocarbons and refining technicians may specialise in:

- chemicals
- hydrocarbons extraction
- hydrocarbons transmission
- oil refining.

Chemical, hydrocarbons and refining technicians may:

- ascertain what needs to be done and allocate duties to operators
- consult with management to coordinate activities
- prepare and measure raw materials

- feed raw material and processing agents into plant machinery
- set controls and operate machinery
- check instruments and equipment to make sure of correct operation, and be aware of any abnormal operating conditions
- monitor maintenance requirements and arrange for equipment to be serviced
- take samples for testing, test products and record process data
- provide written reports on plant operation and product levels
- supervise production and process staff
- liaise with operators, other technicians, technologists and management.

Chemical plant technicians assist in the overall operation of chemical production processes and equipment used in manufacturing a range of products, such as paints, inks, soaps and cosmetics, fertilisers, drugs, textiles, ammunition, plastics, glues and resins. In some plants, operations are computer controlled.

Knowledge of batch processing and equipment performance is very important to ensure high production levels. Chemical plant technicians are trained to handle industrial quantities of chemicals safely, efficiently and with no environmental harm.

Petroleum and gas plant technicians assist in the overall operation of the plant and equipment used to pump oil and gas from wellheads, and to refine, process and store petroleum products. In most refineries and plants, the instruments are computer controlled. Knowledge of chemical and physical processes and equipment performance is very important to enable optimum production.

Relevant qualifications:

- Certificate IV in Process Plant Technology
- Diploma of Process Plant Technology
- Advanced Diploma of Process Plant Technology

This information sheet has been produced with assistance from the Australian Government.

