



Process Overview

Civilisations have been refining oil in some way or another for more than 1500 years. The first large scale refineries were built in the 19th century – some of the same techniques from the early refineries are still used today.

The basic process is:

- To heat up crude oil to separate out different sizes of molecules (distillation)
- To break up long chain molecules to more valuable molecules (cracking)
- To sort and reshape molecules to make them more effective as fuels (reforming)
- To remove impurities (residfining)
- To clean up the fuels and remove sulphur (hydrofining)
- To blend fuels to meet demand

Refineries also manufacture lubricating oils and waxes from long chain molecules.

To produce chemical products, smaller molecules are processed with other chemicals and catalysts and separated out. Fawley is a fully integrated site and as a result, Fawley's chemical plant has access to low cost feed stock and utilities.