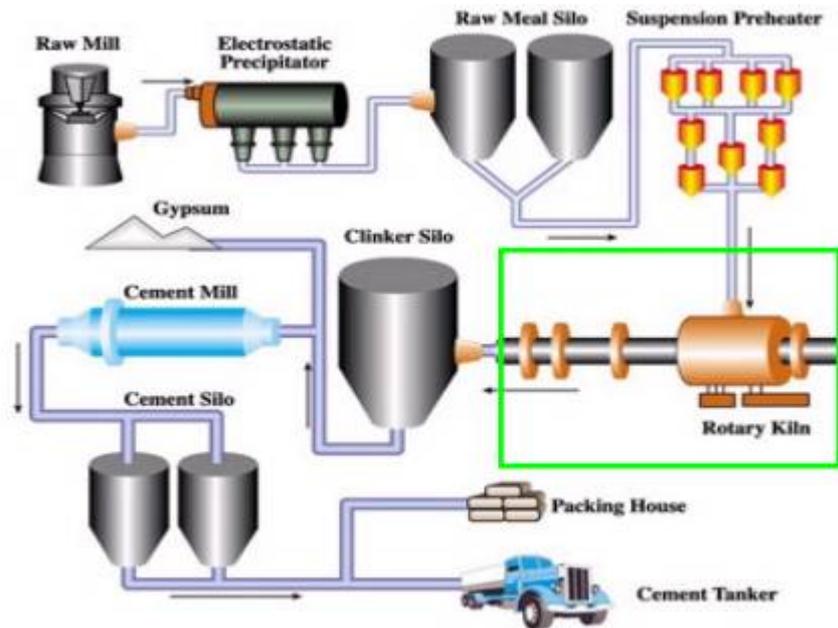


A rotary kiln in the production of cement



In the making of cement, the [rotary kiln](#) is usually the heart of clinker production. Depending on the site and product range, marl lime, chalk or lime sand is placed in the rotary kiln. The raw material is melted down at temperatures of more than 1400°C in order to produce the 'cement clinker'. Rotary kilns can be up to 100 m long with diameters of up to 5 m. normally they have an incline of 3 - 4° along the whole length.

The [rotary kilns](#) are frequently fired with hard coal. But in recent years there has been an increasing trend to use alternative fuels. These include not only animal charcoal and shredded tyres but also used reclaimed oil and solvents (RLF). By making use of these substances, the cement industry is making an active contribution to environment protection.

The technology of rotary kiln

A different design from traditional incineration systems, the hazardous and the clinical waste treatment plants are consisting of a rotary tubular adiabatic kiln, a post combustion chamber, a boiler for the energy recovery (when required or the flue gas cooling otherwise) and a specific flue gas treatment. The general principal consists of the combustion of waste at high temperatures, between 900 and 1,200°C in the rotary furnace and of a post-combustion chamber for complete combustion of the flue gas. Waste are fed into the kiln in a different way according to the type of waste: the solid waste is fed with an hydraulic feeder and moved through the tubular body by the rotating movement of the furnace; the gaseous waste and liquid can be fed either into the tubular body of the kiln or directly into the post-combustion chamber by means of the burners or the special injection spray systems. That tested process is guarantying the complete suppression of all type of hazardous waste thereby protecting the environment.

Main advantages of our rotary kiln

- Technology capable to treat simultaneously a wide range of liquid, solid, or past-like hazardous waste
- Complete suppression of hazardous waste by a thermal treatment at a high temperature
- Operation with flexibility comparable to the household solid waste thermal treatment
- Reliability and life duration of the facilities
- Option for heat /electrical production to be used at industrial cement plants.