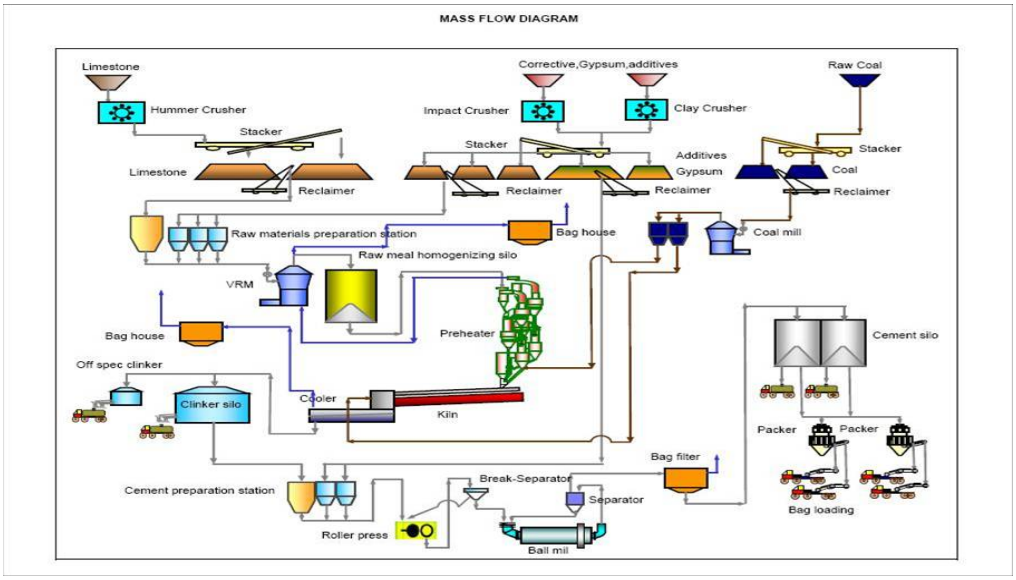
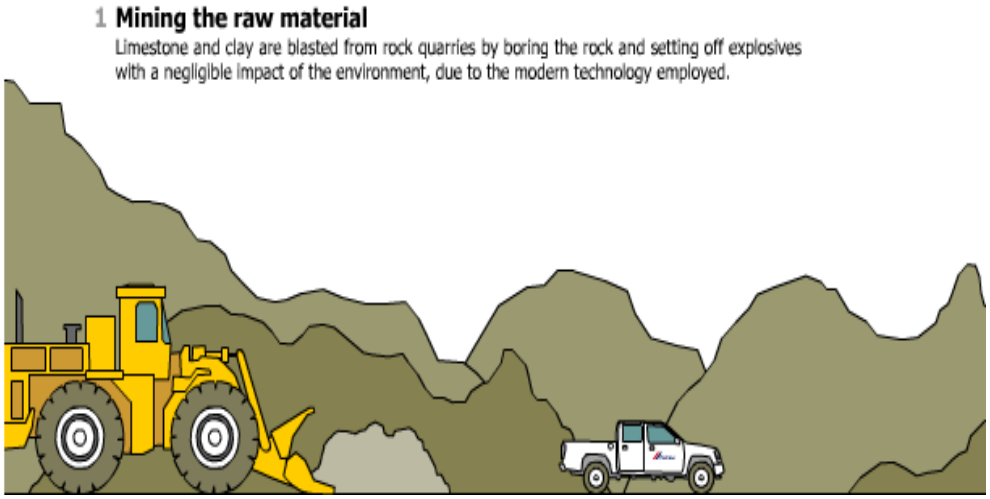
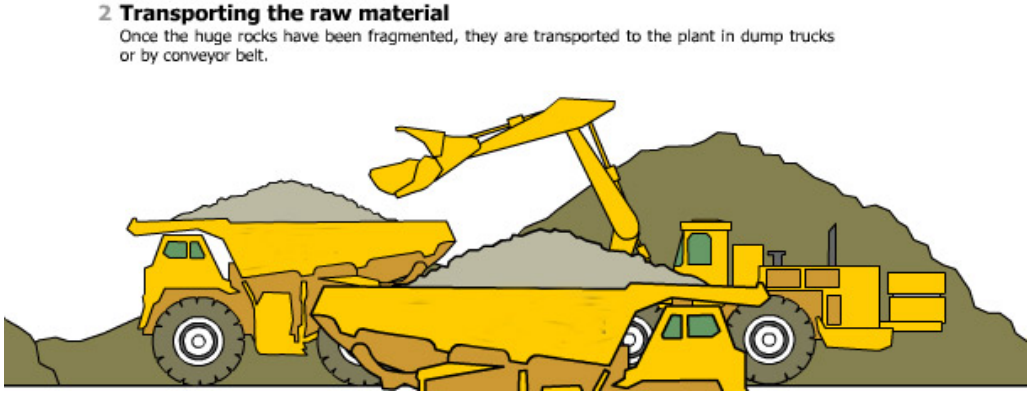
Part III Technological process for building cement plant



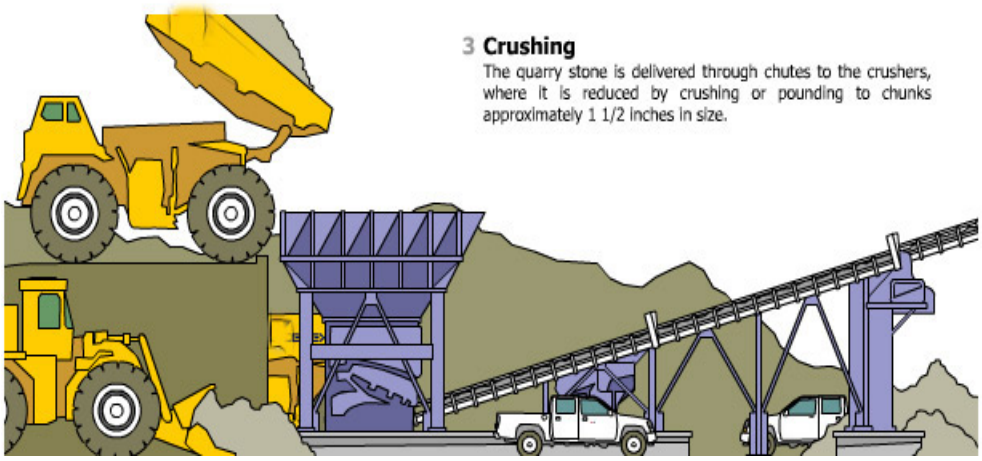
1. Mining the raw material



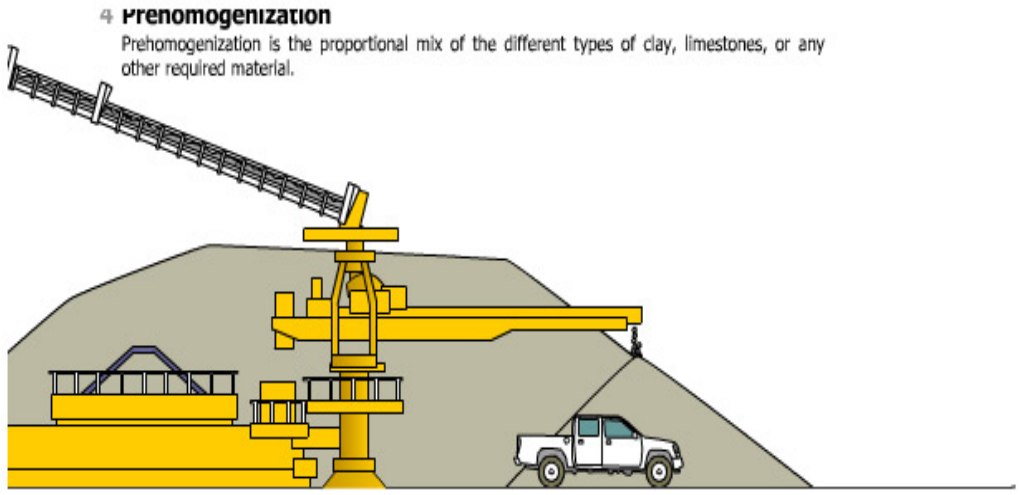
2, Transporting the raw material



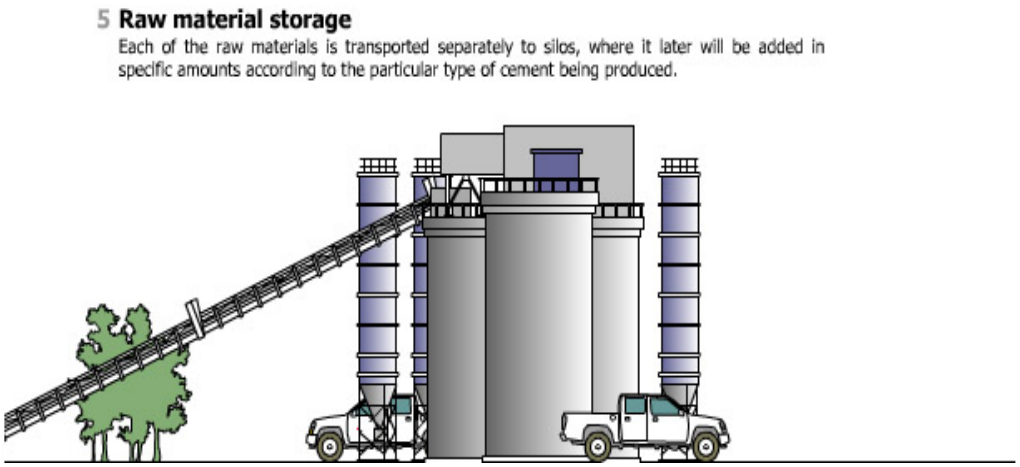
3. Crushing



4. Prehomogenization



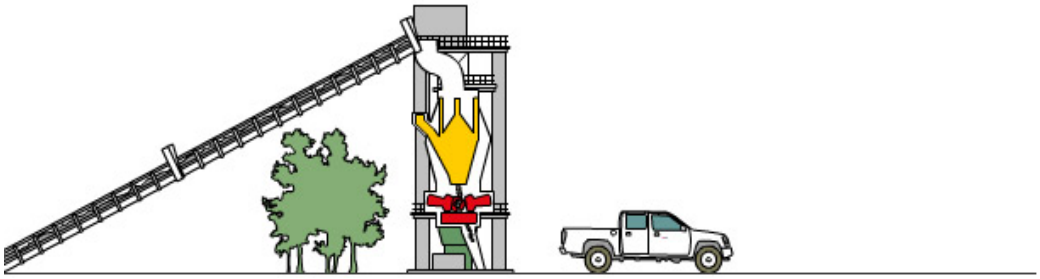
5.Raw material storage



6.Raw material mill

6 Raw material mill

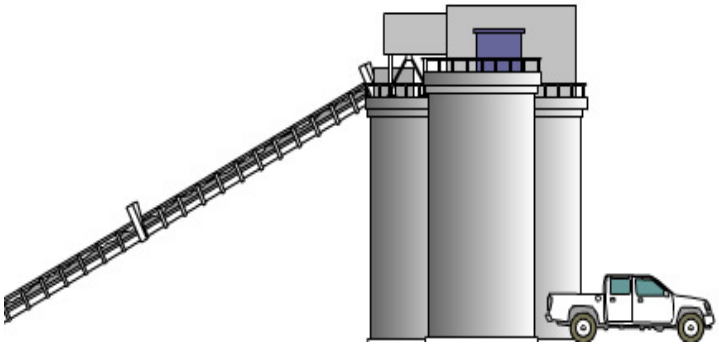
This takes places in vertical steel mill, which grinds the material through the pressure exerted by three conical rollers. Which roll over a turning milling table. Horizontal mills, inside which the material is pulverized by means of steel balls, are also used in this phase.



7. Raw meal homogenization

7 Raw meal homogenization

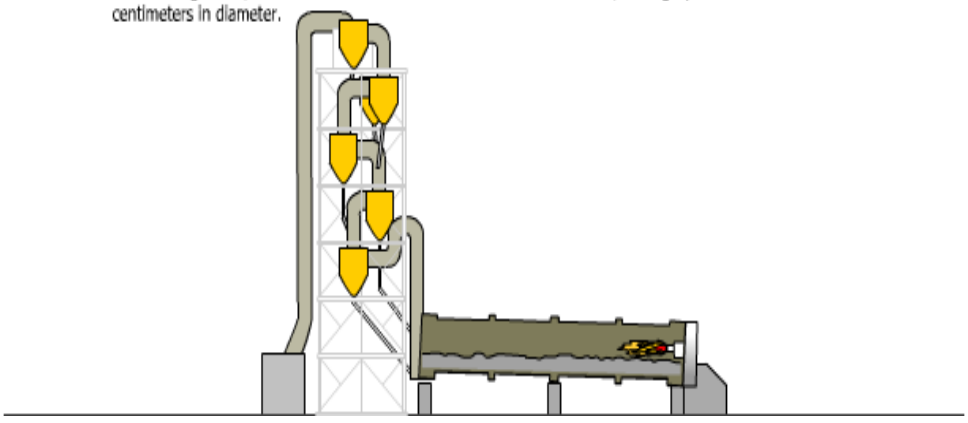
This process takes place in silos equipped for obtaining a homogenous mix of the material.



8.Calcination

8 Calcination

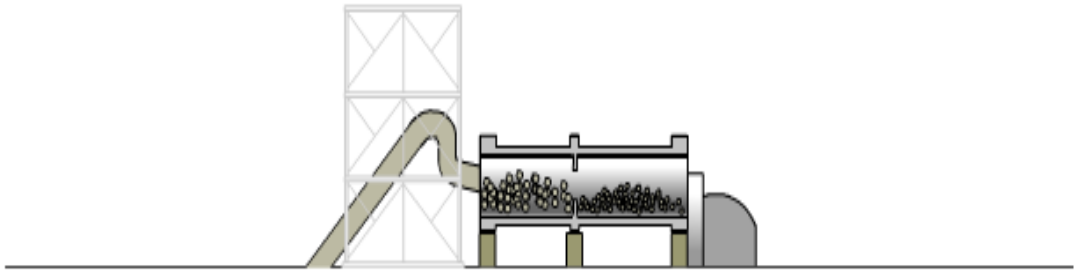
Calcination is the core portion of the process, in which huge rotary kilns come into play. Inside, at 1400 degrees C, the raw material is transformed into clinker: small, dark gray nodules 3-4 centimeters in diameter.



9. Cement milling

9 Cement milling

The clinker is ground by differet-size steel balls while it works its way through the mill's two chambers, with gypsum being added to extend cement setting times



10. Cement packaging and shipping

10 Cement packaging and shipping

The cement is then housed in storage silos, from where it is hydraulically or mechanically extracted and transported to facilities where it will be packaged in sacks or supplied in bulk. In either case, it can be shipped by rail car, freighter truck or ship.