

Conveying machine is mechanical equipment in production process especially in cement industry. Although it is not main equipment in cement making process, conveying machine plays an important part in cement industry.

The belt conveyor and bucket elevator are designed to convey clinker with 250 ton/hr in capacity.

Belt conveyor is an equipment to transfer loads from a place to another place in certain distance. In this design, belt conveyor is simple construction by using general equipments. Bucket elevator is an equipment to transport material with vertical or inclined direction. Design of bucket elevator depend on material characteristic and transport direction.

The belt conveyor type is horizontal with length 40 m. The belt speed is 120 m/min. The driving power equipment use a 3-phase 4 kW cyclo motor with output speed 83,5 rpm.

The bucket elevator lift is 35 m with bucket type is deep bucket. The speed is 1,8 m/s. The driving power equipment use a 3-phase 37 kW cyclo motor with output speed 70 rpm.

Key word: belt, conveyor, bucket, elevator, clinker.