

## ABSTRACT

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### **CEMENT PRODUCTION PROCESS AS WELL AS WORKING ANALYSIS BELT CONVEYOR COAL MILL CAPACITY 120 TONS / HOUR in PLANT 3-4 PT. INDOCEMENT TUNGGAL PRAKARSA Tbk.**

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Keyword : *Belt Conveyor, Finish Mill, Packing Unit, Coal Mill, Head Pulley.*

( xi + 50 + Attacment )

The background of this research is to determine the product manufacturing process cement and coal distribution from coal mill to the kiln at PT. Indocement Tungal Prakarsa Tbk, by showing the manufacturing process that is continued from the kiln to the finish mill to the packing unit, where it is processed before entering the packing unit has a process of grinding clinker, gypsum, and trass passing separator, so that the result of this process is cement and then goes into the cement

silo the process occurs at the mill finish. The cement in the cement silo before entering the rotary packer with capacities of 40kg and 50kg, cement is transported by the air slide conveyor and bucket elevator this process occurs in the packing unit. Coal distribution starts from coal storage, crushed in the crusher into the hopper, through the tripple gate feeder, cyclone, header, vertical roller mill, separator, bag filter, coal bin, coal contained in the coal bin flowed to the kiln, suspension preheater lines 1 and 2. In the process the material is moved from place to place other places use a transportation device (conveyor) and one of the tools used is a conveyor belt. Belt conveyor with belt conveyor capacity amounting to 120 tons / hour, with a transport volume of 92.30 tons / hour, the conveyor belt must has a head pulley rotation speed of 61 rpm to get results maximum in operation.