

COMPRESSIVE STRENGTH COMPARISION OF OPC AND PPC ARGHAKHANCHI CEMENT

Abstract— This paper reports the compressive strength of OPC (Ordinary Portland Cement) and PPC (Portland Pozzolana Cement) manufacture by the Arghakhanchi Cement Pvt Ltd. OPC is produced with 95 % clinker and 5 % gypsum. PPC is produced by 70 % clinker, 20 % fly ash, and 5 % gypsum. The quality of cement depends upon the quality of the clinker. Physical properties are compared concerning NS (Nepal Standard). Compressive strength in 3 Days, 7 Days, and 28 Days is compared. In 28 days, the compressive strength of OPC is more than that of PPC. OPC is highly used in reinforced concrete (RCC) work, whereas PPC is widely used in plaster and finishing works. These results were compared with NS. PPC is an environmentally friendly cement because it uses a lesser amount of clinker and byproduct –fly ash.

Keywords— *Cement, OPC, PPC, Clinker*