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AN ART OF THE STATE OF LITERATURE ON HIGH PERFORMANCE CONCRETE

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ABSTRACT

In recent years, high performance concrete has been used to all types of structural buildings in construction activities. There has been increased use of high performance concrete in bridges, buildings where both strength and durability are important considerations. The primary reasons for selecting HPC are to produce a more economical product, provide a feasible technical solution, or a combination of both. HPC has received increased attention in the development of infrastructures leading to utilization of large quantity of concrete. High performance concrete can be defined as a low w/b ratio concrete with an optimized aggregate binder ratio to control its dimensional stability. Also it is so durable than usual concrete and its increased use will be more often linked to its durability than its high strength. This paper presents the state of the art in High performance concrete with regard to use in Civil Engineering infrastructure. Compiled from forty above papers of references provides a framework for profit a deeper understanding of HPC as well as platform from which to increase the use of this class of advanced cementitious composite materials and industrial by products materials. This paper presents an extensive coverage of High performance concrete developments in Civil Engineering field. It highlights the high performance concrete prominent part and requirements over conventional concrete. Moreover, some recent trends with respect to high performance concrete development in this area are examined. It was concluded from the investigation that what has been done and looks forward to what needs to be done to achieve appropriate applications of HPC in Civil Engineering field.

KEYWORDS: Literature on High Performance Concrete