

Abstract

The objective of this work is to characterize experimentally the mechanical behavior (compressive strength and tensile strength) of a high performance concrete based of high furnaces.

This work provides a comparison of compression tests and tensile strength through a press made on cylindrical specimens 16x32 whose extrémité have been previously corrected as the compression tests, under increasing load until the rupture of ordinary concrete and a high performance concrete.

Substitution of the adjuvant and the furnace slag is used to improve the mechanical strength at 28 days to compressive and tensile strength of the high-performance concrete.

Keywords: mechanical behavior, furnace slag, adjuvant high concretes performance.