

**THE EFFECT OF VARIOUS ADDITIONS OF NEXPLAST HE  
ON THE COMPRESSIVE STRENGTH AND SPLIT TENSILE  
STRENGTH OF K-250 GRADE CONCRETE  
(DOSAGE 0.8% AND 0.9%)**

*Student Name* : Sri Rahmayuni  
*Nim* : 4103201342  
*Supervisor* : Zev Al Jauhari, MT

**ABSTRACT**

*Nexplast HE based on ASTM C 494 is included in the type F class. Nexplast HE is an additive that functions as a water reducer and to accelerate the hardening of concrete with a high strength range. Nextplast HE is recommended as a concrete mix where laying conditions require high quality concrete. The method used in this test is to make concrete mixes using SNI 03-2834-2000 with Nexplast HE as an additive to the concrete mix at 0.8% and 0.9%. Concrete treated for 3 days, 14 days, and 28 days was then tested to obtain the compressive strength, split tensile strength and content weight of the concrete. From the test results, the highest compressive strength value was 25.9 Mpa with the variation that added 0.9% Nexplast HE and the highest concrete split tensile strength test result was 2.3 Mpa with the variation that added 0.9% Nexplast HE. This test shows that the compressive strength of the variation added by Nexplast HE 0.9% has the perfect compressive strength and tensile strength of concrete, compared to the compressive strength and tensile strength of concrete with the variation of adding Nexplast HE 0.8%.*

**Keywords** : *Nexplast HE, Variation of Nexplast HE Dosage, Job Mix, Concrete compressive strength, concrete split tensile strength.*