THE EFFECT OF MIX IM THE ADDICTIVE AGENT PLASTOCRETE RT6 PLUS AND VISCOFLOW **3660** *LR ON CONCRETE F'C 25 MPA*

Student Name : ILFAN TRIPUTRA JAYA LASE

Student ID ; 4103221441

Advisor : Indriyani puluhulawa, M.Eng

ABSTRACT

Ready-mix concrete production faces quality degradation challenges due to transportation time and varying field conditions, especially in large-scale projects such as those at PT Dumai Jaya Beton. One solution to maintain concrete quality is the use of chemical admix tures. This study aims to evaluate the effect of adding Plastocrete Rt6 Plus and Viscoflow 3660 *LR on the quality of concrete with a target strength of fc' 25 MPa, assessed through Slump value, setting time, and compressive strength. The method involves preparing cylindrical specimens (15 cm in diameter and 30 cm in height) using normal concrete and concrete with either single or combined admix tures, at a dosage of 0.4% of cement weight. Tests were conducted for Slump at 0–120 minutes, initial and final setting times, and compressive strength at 28 days. Results show that Viscoflow* 3660 *LR provided higher and longer-lasting Slump values, making it suitable for high-flow requirements. On the other hand, Plastocrete Rt6 Plus offered better compressive strength up to a 90-minute delay. However, at 120 minutes, Viscoflow yielded higher compressive strength. The combination of both admix tures did not result in significant improvement and even reduced strength over longer delays. Therefore, the choice of admix ture should be based on specific field conditions and casting duration.*

Keywords*: Compressive Strength, Plastocrete Rt6 Plus, Slump , Setting Time, Viscoflow* 3660 *Lr*