

***ANALYSIS OF POLE POSITION CALIBRATION ON SERVO  
MOTOR ENCODER OF CROSS CUTTER USING VZ7000  
MODULE ON FIVE VICTOR MACHINE AT PT. INDAH KIAT  
PULP & PAPER***

*Student Name* : M. Alia Bayu Pratama

*Student ID Number* : 3204211438

*Advisor* : Zulkifli, S.Si., M.Sc.

***ABSTRACT***

*Calibration of the pole position on the servo motor encoder of the cross cutter is an essential stage to maintain cutting precision on the Five Victor machine at PT. Indah Kiat Pulp & Paper Perawang. The process was carried out by collecting motor nameplate data, reading parameters through VZ7000 Terminal software, and manually measuring paper length before and after calibration. The analysis results show that pole offset errors caused significant cutting deviations, with an error of up to 0.22% or a difference of 2 mm from the standard size of 876 mm. After calibration using the VZ7000 module, the error decreased to 0.08%, resulting in a substantial improvement in cutting accuracy. These findings confirm that pole position calibration is not merely a technical procedure but a critical step in machine maintenance, as it directly affects product quality, operational efficiency, and the prevention of thermal stress on components. Therefore, routine calibration after every encoder or servo motor replacement is necessary to maintain the machine's optimal performance.*

*Keywords: Encoder, Servo Motor, Cross Cutter, Calibration, VZ7000, Pole Position*