

**APPLICATION OF PREDICTIVE MAINTENANCE ON
CATERPIAR ENGINE TYPE 3512B IN PT. PLN (PERSERO)
DIESEL POWER CENTER SERVICE UNIT BIG CHART PLTD
BENGKALIS**

Name : Heri Hermanto
NIM : 2204161099
Counsellor Lecturer : Alfansuri, ST., M.Sc

Abstract

PT. PLN (Persero) Unit Service Center Big Electrics Energy Diesel Schema of PLTD Bengkalis is one of the Body of is Effort Publik Ownwrship (peripatetic BUMN) is area of electricity. where diesel engine as especial activator. Therefore treatment of machine very needed to to support electrics distribution process so that to be walking at ease. Intention of research is to apply treatment of prediktif by using method of vibration analyse to know vibration characteristic at machine head cyinder of caterpillar unit 12 and unit 13, at dot of X, Y and Z during one minute during ten attempt day, at low burden (at 06.00-08.00), normal burden (at 10.00-14.00) and peak load burden (at 18.00-20.00). After got result of measurement during ten day, hence searched by average value from each every dot of cylinder measured head. Result of from this research is got by characteristic speed of vibration of cylinder machine head of caterpillar unit 12 at axis of the abscis assess is lowered. 68 m/s. Highest value 111,4 m/s. Axis Of The Ordinate assess is lowered 64,9 m/s. Highest value 118,7 m/s. Tinder Z assess is lowered 31 m/s. Highest value 50,4 m/s. machine of Caterpillar unit 13 at axis of the abscis assess is lowered 71,2 m/s. Highest value 113,3 m/s. Axis Of The Ordinate assess is lowered 64,4 m/s. Highest value 139,8 m/s. Tinder Z assess is lowered 32 m/s. Highest value 53,2 m/s.

Keywords : *Predictive, vibration analysis, cylinder head*