## ANALISIS PENGARUH POSISI BEBAN DAN MOMEN INERSIA POROS TERHADAP PUTARAN KRITIS POROS

By: Didik Nurhadiyanto, MT <sup>(1)</sup> Mujiyono, MT <sup>(2)</sup> <sup>(1)</sup> dan <sup>(2)</sup> Dosen FT UNY

## Abstract

Target to reach in this research is to analyze critical rotation of shaft, knowing influence of burden position and shaft moment of inertia to critical rotation of shaft and know relation graph of burden position and shaft moment of inertia to critical rotation of shaft.

Method which used in this research is true experimental research method with factorial device model 3  $\times$  3 that is, 3 moment of inertia level and 3 burden position level with replication 3 times. While parameter perceived is critical rotation of shaft

Result of research can be concluded that burden position goodness and also shaft moment of inertia and its interaction influence critical rotation of shaft. Seen from main effect hence burden position relation with critical rotation of shaft in the form of equation of exponential at this area. While shaft moment of inertia relation with critical rotation of shaft represent equation of polynomial mount two which mounting at this area.

Keyword: Moment of inertia, burden position, critical rotation of shaft