

INTEGRASI METODE TAGUCHI DAN *FAILURE MODE AND EFFECT ANALYSIS* UNTUK MENGURANGI *DEFECT* PRODUK *PLYWOOD PHENOL 12 910 1820 STRUCTURAL PANEL* (STUDI KASUS : PT. KUTAI TIMBER INDONESIA)

Nama Mahasiswa : Mashnu'atul Khoiriyah
NIM : 205410003
Pembimbing I : Yustina Suhandini Tj., S.T., M.T.
Pembimbing II : Dr. Trismawati, S.Si., M.T.

ABSTRAK

Penelitian ini bertujuan untuk mengurangi kerusakan produk *plywood* dengan mengetahui faktor signifikan yang berpengaruh pada kecacatan tersebut. Untuk memenuhi tujuan tersebut, digunakan metode Taguchi dan *Failure Mode and Effect Analysis*. Berdasarkan hasil penelitian, ditemukan beberapa faktor signifikan terhadap *defect* produk yaitu faktor temperatur dan faktor *sand paper* dengan besar kontribusi sebesar 16% dan 2,4%. Nilai *Risk Priority Number* terbesar ialah 336 berada pada faktor *sand paper*. Dengan demikian, ditemukan usulan perbaikan seperti pemberian edukasi pada operator serta perbaikan mesin secara berkala.

Kata Kunci :Desain Eksperimen, FMEA, Taguchi

**INTEGRATION OF THE TAGUCHI METHOD AND FAILURE
MODE AND EFFECT ANALYSIS TO REDUCE DEFECTS IN
STRUCTURAL PLYWOOD PANEL PHENOL 12 910 1820
PRODUCTS (CASE STUDY: PT. KUTAI TIMBER INDONESIA)**

By : Mashnu'atul Khoiriyah
Student Identity Number : 205410003
Advisor I : Yustina Suhandini Tj., S.T., M.T.
Advisor II : Dr. Trismawati, S.Si., M.T.

ABSTRACT

This research aims to reduce damage to plywood products by knowing the important factors that influence these defects. To achieve this goal, the Taguchi method and Failure Mode and Effect Analysis are used. Based on the research results, it was found that several factors were significant in product defects, namely the temperature factor and the sanding factor with a large contribution of 16% and 2.4%. The largest Risk Priority Number value is 336 on the sand paper factor. So suggestions for improvement were found, such as providing education to operators and regular machine repairs.

Keywords : *Design of Experiments, FMEA, Taguchi*