

**TECHICAL ANALYSIS OF THE STRENGTH OF PLANK JOINTS IN
TRADITIONAL WOODEN SHIP HULL CONTRUCTION IN THE NENANG
AREA OF PENAJAM PASER UTARA DISTRICT**

By : Evan Myistro
Student Identity Number : 09211012
Supervisor : Ir.Alamsyah, S.T., M.T.
Co-Supervisor : Hariyono, S.T., M.T.

ABSTRACT

Wooden ships are a traditional means of transportation that are still widely used by Indonesian people in their daily lives, both for transportation, commerce and recreation. In this study, the manufacture of wooden ships laminated with bamboo is expected to increase the strength and durability of ships made from meranti wood. The purpose of this study was to determine the strength and durability values and safety factor values of meranti wooden ships laminated with bamboo. This study used 4 test specimens, namely 100% meranti wood, 70% meranti wood and 30% bamboo, 60% meranti wood and 40% bamboo, and 50% meranti wood and 50% bamboo. To determine the level of strength and durability of meranti wooden ships laminated with bamboo, a bending test was carried out. Based on the test results that have been carried out, it can be seen that the use of Meranti wood material with the type of model 100% meranti wood 19.963 MPa, 70% meranti wood and 30% bamboo 18.529 MPa, 60% meranti wood and 40% bamboo 4.933 MPa, and 50% meranti wood and 50% bamboo 4.721 MPa. With the results obtained, this material is suitable for use as a wooden ship skin material.

Keywords : Meranti Wood, Bamboo Laminate, Bending Test.

www.itk.ac.id



Halaman ini sengaja dikosongkan

www.itk.ac.id