DESIGN OF JACKET OFFSHORE STRUCTURE
TRIANGLE TYPE, UNDER INPLACE ANALYSIS
(STORM CONDITION)

Name of Student : Deddy Kusuma Hadiputra
NRP : 3106 100 135
Department : Civil Engineering, FTSP-ITS
Counsellor : 1. Ir. Mudji Irmawan, MS
2. Bambang Piscesa, ST, MT

Abstract

Oil and gas price increasing in the year 1973, caused the industrial growth of offshore, inclusive of the effort to searching oil fields and new gas in deeper water territorial with the sea condition which progressively raise hell. Thereby, the increasing price of world oil from one facet have pushed to increase activity in offshore, and perhaps also increase the new sea buildings requirement. To face this problems, sea building to be operated by type that assumed is effective the than expense facet, like bridge type float the, limber bridge or under sea installation.

Kind of offshore structure that used this time is very plenty, but the most existing offshore structure in this time used for the exploration and exploitation of petroleum and natural gas. One of offshore building structure type which often used is jacket. Jacket developed to operate in shallow sea and medium sea that the base is thick, soften and muddy. After jacket placed in wanted position, the pile entered by through of building foot and stake by hammer until penetrate the hard soil layer, then the deck structure has attached and welded.

In this Final Project will be designed of jacket structure triangle type by considering storm load that analysed by inplace. The inplace analyse represent one of important aspect to be paid attention to planning a jacket structure. The analyse of jacket structure based on a regulation going into effect, that is API RP 2A-WSD 2000 and AISC. The structure analyse conducted by using software SACS 5.2 (Stucture Analysis Computer System 5.2).
Keywords: Offshore structure, jacket, inplace analysis, API RP2A-WSD 2000, AISC, SACS 5.2.