ABSTRAK

Judul : Analisa Penggunaan Welded Angle&Drop Hollow Sebagai Reusable Temporary Supporting Pada Slab Metaldec Ditinjau dari Kinerja Biaya dan Waktu (Studi Kasus : Proyek Indonesia 1) ,Nama : Sani Sona Swasti , NIM : 41115320070. Dosen Pembimbing : Novika Chandra Fertilia,ST.,MT.

Seperti proyek pada umumnya dalam pengerjaan slab Proyek Indonesia 1 menggunakan salah satu material yaitu metaldeck. Upper structure slab terdiri dari 64 lantai dengan mayoritas 90% menggunakan sistem metaldeck. Dimana komponen tersebut memerlukan supporting yang mampu memikul beban kerja, rebar dan beton segar. Berawal dari design Metaldeck non-reusable /fixed suppoting (angle & anchor) yang cukup sulit diaplikasi di lapangan memberikan dampak peningkatan waktu dan pembengkakan biaya pekerjaan. Sehingga tim engineering mempunyai inovasi mengganti material non-reusable /fixed suppoting (angle & anchor) dengan material reusable (angle & drop hollow).. Analisa biaya dicari dengan menghitung RAB (Rencana Anggaran Biaya) menggunakan analisa harga satuan yang digunakan Pemerintah DKI Jakarta dan seberapa efisien waktu yang didapatkan

*Berdasarkan hasil perhitungan dan wawancara dengan para ahli terkait pada proyek didapatkan pelaksanan biaya pekerjaan temporary supporting menggunakan metode non-reusable sebesar **Rp.3.211.000.000,00.** Sedangkan untuk pelaksanaan metode reusable sebesar **Rp.649.916.800** . Terdapat selisih biaya antara metode non-reusable dan reusable sebesar **Rp.2.561.083.200,00**. Dimana untuk pelaksanaan pemasangan temporary supporting metode reusable lebih murah dibandingkan menggunakan metode awal non-reusable. Kemudian dari segi waktu pemasangan temporary supporting menggunakan metode non-reusable didapat **520 hari** sedangkan untuk metode reusable didapat **260 hari**. Terdapat selisih antara metode non-reusable dan reusable **260 hari** . Hasil penelitian didapat bahwa penggunaan Welded Angle & Drop Hollow sebagai Temporary Supporting lebih efektif dan efisien dibanding menggunakan metode awal Non.reusable.*

***Kata kunci** : Metaldeck, Temporary Supporting,Deviasi Waktu, Deviasi Biaya*

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ABSTRACT

Tittle:Analysis of the Use of Welded Angle & Drop Hollow as Reusable Temporary Supporting in Metaldec Slabs in terms of Cost and Time Performance (Case Study: Indonesia Project 1). Name : Sani Sona Swasti , NIM : 41115320070. Mentor Lecture : Novika Chandra Fertilia,ST.,MT.

Like most projects in the slab Project Indonesia 1 uses one material, namely metaldeck. The upper structure slab consists of 64 floors with the majority of 90% using a metaldeck system. Where these components require a support that is able to carry the workload, rebar and fresh concrete. Starting with Metaldeck's non-reusable / fixed suppoting (angle & anchor) design which is quite difficult to apply in the field, it has an impact on increasing time and increasing the cost of work. So the engineering team has the innovation of replacing non-reusable / fixed suppoting material (angle & anchor) with reusable material (angle & drop hollow). It is hoped that this research will take time and cost without reducing the quality of temporary supporting. Here will be discussed about Analysis of the Use of Welded Angle & Drop Hollow as Reusable Temporary Supporting in Metaldeck Slab in Indonesia Project 1. Cost analysis is sought by calculating the RAB (Cost Budget Plan) using unit price analysis used by the DKI Jakarta Government and how efficient the time obtained.Based on the results of calculations and interviews with relevant experts on the project, the implementation of temporary supporting work costs was carried out using a non-reusable method of Rp.3,211,000,000.00. As for the implementation of the reusable method of Rp.649,916,800. There is a difference in cost between the non-reusable and reusable methods of Rp. 2,561,083,200.00. Where to implement the temporary supporting reusable method is cheaper than using the non-reusable initial method. Then in terms of the time of installing temporary supporting using the non-reusable method it gets 520 days while for the reusable method it gets 260 days. There is a difference between the non-reusable and 260-day reusable methods. The results obtained that the use of Welded Angle & Drop Hollow as Temporary Supporting is more effective and efficient than using the initial Non.reusable method.

Keywords: Metaldeck, Temporary Supporting, Time Deviation, Cost Deviatio

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