

## ABSTRAK

Judul : Analisis Waste Besi Beton Pada Proyek High Rise Building (Studi kasus proyek Apartemen Breeze Tower Bintaro), Nama : Gilang Ardyansyah, NIM : 41116120115, Dosen Pembimbing : Ir. Mawardi Amin, MT, tahun kelulusan: 2018.

Material besi tulangan merupakan komponen yang penting dalam sebuah proyek konstruksi gedung bertingkat. Penggunaan material besi beton dilapangan tidak luput dari kurangnya pengawasan penggunaan material besi beton, dan metode yang di keluarkan oleh Rebar engineer untuk Shop Drawing / Cutting List besi beton belum efektif dan terkadang menyulitkan pemasangan besi dilapangan.

Penelitian ini bertujuan untuk mengetahui Waste besi beton dengan Waste Level, Waste Index, serta Waste Cost dan mengidentifikasi penyebab Waste besi beton menggunakan Fishbone Diagram sehingga dapat disusun strategi meminimalisir Waste besi beton. Selain itu, penelitian ini juga bertujuan untuk mengetahui bagaimana cara penanganan Waste yang tepat dengan menggunakan metode Waste Hierarchy. Data proyek yang digunakan berupa data volume material besi yang terpakai dan terpasang yang dihitung berdasarkan As Built Drawing Bar Bending Schedule.

Berdasarkan hasil analisis perhitungan Waste material besi dan observasi lapangan dapat diketahui bahwa presentasi Waste terbesar selama pelaksanaan proyek Apartemen Breeze Tower Bintaro berasal dari besi diameter D13 dengan presentasi waste sebesar 1,64% dan material besi D25 dengan presentasi waste sebesar 1,27% dari total waste aktual 2,15%. Faktor penyebabnya adalah manusia, manajemen, pengukuran material. Dengan presentasi selisih biaya waste terhadap nilai total proyek yang berpotensi sebesar 0,00357% atau senilai Rp.938,218,990.00.

Kata kunci : Waste Besi Beton, Waste Level, Waste Index, Waste Cost, Fishbone Diagram, Waste Hierarchy.

## ABSTRAK

*Title: Analysis of Concrete Iron Waste on High Rise Building Project (Case Study of Breeze Tower Bintaro Apartment Project), Name: Gilang Ardyansyah, NIM: 41116120115, Supervisor: Ir. Mawardi Amin, MT, year of graduation: 2018.*

*The reinforcement material is an important component in a multi-storey building project. But the use of concrete iron material in the field did not escape from the lack of supervision of the use of concrete iron material, and the method that was issued by Rebar engineer for Shop Drawing / Cutting List of concrete iron has not been effective and sometimes difficult to mount iron on the field.*

*This study aims to find out Waste iron concrete with Waste Level, Waste Index, and Waste Cost and identify the cause of Waste iron concrete using fishbone diagram so that can be prepared to minimize Waste iron concrete strategy. In addition, this study also aims to find out how to handle the right Waste using Waste Hierarchy method. The project data used is the volume data of used and installed iron material which is calculated based on As Built Drawing Bar Bending Schedule.*

*Based on the calculation result of Waste iron material and field observation it can be seen that the biggest Waste presentation during the implementation of Apartment Breeze Tower Bintaro project comes from iron D13 diameter with waste presentation of 1.64% and D25 iron material with waste presentation of 1.27% of total actual waste 2.15%. The cause factors are human, management, material measurement. With the presentation of the difference between the waste cost of the total project value have potention of 0.00357% or worth Rp.938,218,990.00.*

*Keywords: Waste Iron Concrete, Waste Level, Waste Index, Waste Cost, Fishbone Diagram, Waste Hierarchy.*