

## ABSTRACT

### ***Designing Application for Calculating the Design of Steel Tension Member Based on Android Operating Systems***

Christine D.M.D. Kowaas<sup>1)</sup>, Agustinus Agus Setiawan<sup>2)</sup>, Hendi Hermawan<sup>3)</sup>

<sup>1)</sup> Student of Civil Engineering Department, Pembangunan Jaya University

<sup>2)</sup> Lecturer of Civil Engineering Department, Pembangunan Jaya University

<sup>3)</sup> Lecturer of Informatics Engineering Department, Pembangunan Jaya University

*Steel is a material used in construction. In its use, a steel cross section design is required. Time efficiency in this 4.0 Industrial period is needed to support our daily activities. Therefore, the STeM application is created. The STeM application is an application for calculating the design of steel tension member in accordance with SNI 03-1729-2015. The making of the STeM application aims to support the needs of Civil Engineering practitioners in the 4.0 Industrial era, which requires workers to streamline working time. The application consists of calculation of tensile yield and tensile rupture strength using the DFBK and DKI methods, has a value of 100% accuracy, equipped with ease of use because it is accompanied by various menus for application usage instructions provided by the author. STeM applications are worthy of being used to help Civil Engineering practitioners.*

**Keywords** : Steel, Tension member, SNI 03-1729-2015, Application.

**Libraries** : 23

**Publication Years** : 2011-2018