

**ABSTRAK**  
**PEMBUATAN *TRAILER LOCK* PADA SEPEDA MOTOR UNTUK**  
**MENARIK TANGKI AIR PEMADAM DAERAH PADAT**  
**PENDUDUK**

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Pembuatan ini bertujuan untuk membuat sambungan tangki air yang berfungsi menyambungkan tangki air ke sepeda motor pemadam. Untuk dapat disambungkan ke sepeda motor maka antara tangki dan sepeda motor dipasang *trailer lock* (gandeng) yang mampu menahan beban tangki dan tidak terlalu mempengaruhi performan pergerakan sepeda motor. Perhitungan kekuatan sambungan *trailer Lock* dilakukan dengan menggunakan perangkat lunak Autodesk Fusion 360. Dari hasil perhitungan diperoleh spesifikasi sambungan *trailer lock* menggunakan baja tulang beton sirip berukuran diameter 19 mm, dengan tegangan tarik  $6 \text{ mm}^2$  diperoleh faktor keselamatan 3,01.

**Kata Kunci :** *Autodesk Fusion 360, Trailer lock.*

**ABSTRAK**  
**MAKING A MOTORCYCLE TRAILER LOCK FOR DRAWING**  
**WATER TANK IN THE POPULATION SOLID AREA**

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*This manufacture aims to make a connection between a water tank that serves to connect the water tank to a fire engine. To be able to be connected to a motorbike, a trailer lock (trailer) is installed between the tank and motorcycle that is able to hold the tank load and does not significantly affect the performance of motorbike movements. Calculation of the strength of a trailer lock connection is done using Autodesk Fusion 360 software. From the calculation results obtained the trailer lock connection specifications using fin steel concrete measuring 19 mm in diameter, with a 6 mm<sup>2</sup> tensile stress obtained a safety factor of 3.01.*

***Keywords: Autodesk Fusion 360, Trailer lock.***