

# ***FLEXURAL TESTING OF HYBRID BEAMS DUE TO CORROSION OF TENSILE REINFORCEMENT***

*Student Name* : *Bela Safira*  
*Nim* : *4204201365*  
*Responsibility* : *Alamsyah ,M.Eng*

## ***ABSTRACT***

Reinforced concrete requires high quality concrete in order to be able to withstand the tensile force of these two forces, namely compressive force and tensile force, acting on different areas simultaneously, Corrosion of steel reinforcement is a world problem that affects the durability and integrity of reinforced concrete structures. Corrosion occurs when steel reinforcement is placed too close to the concrete surface in a concrete cover situation in an inadequate concrete cover situation or due to its poor quality. The purpose of this study is to analyze the capacity of corrosion influence on the bending capacity of the beam and compare the pattern of collapse or crack of paphrem due to corrosion. From the results of the corrosion beam test analysis, there was an increase in the bending load capacity of 22.84% when compared to the control beam, the control beam as a reference obtained a maximum load value of 27.67 Kn. While the corrosion beam obtained the load value from the test results which was 33.99 kn. deflection on the beam.

Keywords : bending test, corrosion beam ,mild steel ,tensile reinforcement