

Wall Formwork System Tie Rod Remover

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ABSTRACT

This report is to introduce a new concept of removing tie rod from a setting concrete wall which using hydraulic principle rather than the conventional method which used human power.

The design of my project is for construction worker or site worker to work efficiently and comfortably to remove the tie rod. Furthermore, it can be function manually by using hand pump and automatic by using air motor connected to air compressor. Therefore, it can increase the efficiency and decrease the time taken of completing a project.

This report also involve some formulation and equation to calculate the speed of stroke per second, force of hollow hydraulic cylinder and time taken to remove tie rod. The formula and equation are some basic Pascal's principle and speed equation.