

FABRICATION OF SAND FILTER AND SEPARATOR

A this submitted in the partial fulfillment requirement for the award for the degree of

BACHELOR OF TECHNOLOGY

IN

MECHANICAL ENGINEERING

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AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(NBA accredited)

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DEPARTMENT OF

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CERTIFICATE

This is to certify that the project entitled “**SAND FILTER AND SEPARATOR**” in partial fulfilment for the of degree of Bachelor of Technology in **MECHANICAL ENGINEERING**, at **AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, MAKAVARAPALEM, VISAKHAPATNAM** is an Bonafied work carried out by **E.GANESH (16811A0319), P.GANESH (16811A0359), N.SAI KUMAR (16811A0349), G. SAI GANGADHAR (16811A0326)** under the guidance and supervision during 2016-2020.



PROJECT GUIDE

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ABSTRACT

In daily life sand is used for the construction, and manufacturing for building's constructions. For this construction we needed more sand filtered and different sizes for different construction process like Column/Beam construction, Plaster, Flooring etc. The conventional sand separation methods required more time and labor, it increase the separation time and labor cost. It is very slow process hence decrease production rate hence conventional method are not suitable for large production. That's why we decide to design and fabricate the sand separator and filter for a future used. Our designed machine is used for the three different sizes of sand. We used two different sizes of filter and two different compartments to get sand separately. This machine works on single slider crank mechanism. The AC motor coupled with pulley and chain drive mounted on it. The motor started then chain drive through power and motion transmitted to the next pulley this is attached to the separator and this separator will vibrate and sand will goes down and separator.