

# FABRICATION OF 360° DRILLING MACHINE WITH SOLAR ENERGY

A project report submitted in partial fulfillment of the requirements  
For the award of the

DEGREE OF  
BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING

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**(An NBA Accredited Institution)**

**Tamaram, Narsipatnam, VISAKHAPATNAM – 531113**

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**CERTIFICATE**

This is certify that the project report entitled “**FABRICATION OF 360° DRILLING MACHINE WITH SOLAR ENERGY**” is a bonafide work submitted by **G.V.N CHAITANYA, MD.A. VAHEED , K.ANIL KUMAR , K.SANEEL KUMAR** in partial Fulfillment of the requirement for the award of degree of **BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING** by Jawaharlal Nehru technological university, Kakinada during the academic year 2014 -2018.

  
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## ABSTRACT

Now a day, machines are widely controlled by embedded system. To meet the need of exploding population economic and effective control of machines is necessary. Our project even is rotated to easily drill at any direction. So that job setting operation is not complicated as well as reduces the setting time for the operation. It also takes into consideration the most effective method of controlling the drilling machine by manually. Materials like wood, plastic and light metals can be drilled with this. The work piece is fixed on the work table, which is provided with a moving arrangement. The drilling machine is one of the most important machine tools in a workshop. In a drilling machine holes may be drilled quickly and at a low cost. The hole is generated by the rotating edge of a cutting tool known as the drill, which exerts large force on the work clamped on the table. As the machine tool exerts vertical pressure to original a hole it loosely called a "drill press". Drilling is the operation of producing circular hole in the work piece by using a rotating cutter called drill, the most common type of drill is the twist drill. The machine tool used for drilling is called drilling machine. The drilling operation can also be accomplished in a lathe, in which the drill is held in the tailstock and the work is held and rotated by a chuck. This angular drilling is performed for Different Angle Drilling in the working job. Indexing Plate and Up/down mechanism is available in this Angular Drilling Machine. Today most of the industries are trying to make improvement in their production processes as well as relevant machinery to improve the productivity along with the automation. Drilling, tapping, boring etc. are such operations which are most frequently used in small and large scale industries. Most of the industries uses the conventional method says hand tapping, drilling, boring. This conventional method is very time consuming process, less accurate and includes higher labor cost, and ultimately leads to less productivity. So there is a scope to develop the machine for various operation which would overcome all the problems faced by the conventional process. So we are going to develop the portable pneumatics machine which will make the use of compressed air for it operation less human involvement as which is used in hand tapping, drilling, boring.