**Design and fabrication of a 1 axis drilling machine for quality drilling of PMMA**

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| No | ITEM | DETAILS | UNITS | COST | TOTAL COST |
| 1. | WIT MOTION VIBRATION SENSOR | WT 90ICL AHRS IMU  CONNECTIVITY: TYPE C, BLUETOOTH 2.0  INPUT VOLTAGE: 5V  CURRENT: <40 mA | 1 | 12,000 | 12,000 |
| 2. | GEARED 12V DC MOTOR WITH ENCODER | UXCELL GEAR MOTOR  GEAR RATIO: 9:28:1  463 RPM | 1 | 2500 | 2.,500 |
| 3. | LOAD CELL WEIGHT SENSOR | HX711  5KG WEIGHT LIMIT | 1 | 4500 | 4500 |
| 4. | RASPBERRY PI B4 MICROCONTROLLER | MODEL SC15184 PI4 MODEL B  5V, 3A | 1 | 17,000 | 17,000 |
| 5. | PMMA |  |  |  | 8,000 |
| 6. | DISPLACEMENT ULTRASONIC SENSOR | HC SR04  5V,15Ma  Measuring distance: 2cm-450 cm | 2 | 500 | 1000 |
|  | **TOTAL** |  |  |  | **45,000** |