

## *Computer Software Specifications of Digital Impact Testing Machine*

1) USING RS232 PORT FOLLOWING DATA WILL BE TRANSFERRED TO PC FROM ELECTRONIC PANEL OF DIGITAL IMPACT TESTING MACHINE. THE SOFTWARE ON PC IS .NET(DOT NET) BASED.

- A) Sr. No.
- B) Test Type
- C) Stricking Energy
- D) Specimen Size
- E) Absorbed Energy
- F) Impact Strength
- G) Remark (High / Ok /Low)
- H) Higher Limit
- I) Lower Limit

2) USER CAN ADD FOLLOWING

- A) Customer Name
- B) User for Login
- C) Material Type

3) ADVANCED SEARCH OPTION FOR OLD DATA USING

- A) File name
- B) Customer Name
- C) Test from Date to To Date.
- D) Heat No.
- E) Type of Material

4) ALL THE TESTS ARE STORED IN THE DATA BASE OF THE SOFTWARE. USER CAN VIEW THE OLD FILES AT ANY TIME USING

Open Test option

A) User can select the Statistical Analysis for the current tests or view the Statistical Analysis of the Old Files with following parameters

- a) Minimum Value
- b) Maximum Value
- c) Mean Value
- d) Median Value
- e) Variance Value
- f) Standard Deviation
- g) Mean Deviation
- h) Skewness Value
- i) Karl Pearson Skewness
  - i) Pearson Mode Value
  - ii) Pearson's Median Values
  - iii) Mode value

B) Also User can view Following graphs for the Statistical Analysis

- a) Frequency Distribution Chart
  - 1) Line Chart
  - 2) Bar Chart
  - 3) Pie Chart
  - 4) Histogram

5) USER CAN GENERATE THE TEST REPORT & TAKE PRINTS OF THE SAME.

We are attaching the screen shots of the Statistical Analysis Charts and the Test Reports generated after testing .

## 6) SCREEN SHOTS OF SOFTWARE

The screenshots illustrate the software's capabilities in statistical analysis and test data management. The reports include:

- Statistical Analysis Report:** Displays key metrics such as Mean Value, Standard Deviation, and Skewness. For example, one report shows a Mean Value of 150.00 and a Standard Deviation of 30.00.
- Frequency Distribution Chart:** Visualizes data distribution using bar charts and pie charts. The bar charts show frequency on the y-axis and data values on the x-axis.
- Test Data Tables:** Provide detailed information about individual test runs, including Test No., Test Type, Specimen Size, Absorbed Energy, Impact Strength, and Result.

Key data points from the screenshots include:

Statistical Metric	Value
Mean Value	150.00
Standard Deviation	30.00
Skewness	1.21
Kurtosis	1.21

  

Test No.	Test Type	Specimen Size	Absorbed Energy	Impact Strength	Result	Higher Load
1	Charpy Test	100 x 10 x 10 mm	150.00	150.00	OK	150.00
2	Charpy Test	100 x 10 x 10 mm	150.00	150.00	OK	150.00
3	Charpy Test	100 x 10 x 10 mm	150.00	150.00	OK	150.00
4	Charpy Test	100 x 10 x 10 mm	150.00	150.00	OK	150.00
5	Charpy Test	100 x 10 x 10 mm	150.00	150.00	OK	150.00
6	Charpy Test	100 x 10 x 10 mm	150.00	150.00	OK	150.00
7	Charpy Test	100 x 10 x 10 mm	150.00	150.00	OK	150.00
8	Charpy Test	100 x 10 x 10 mm	150.00	150.00	OK	150.00