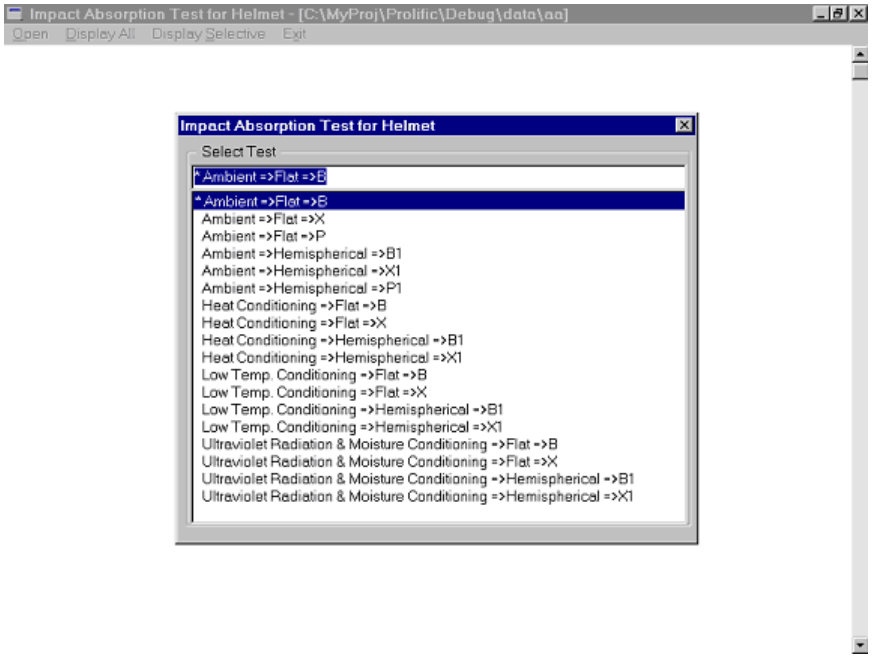
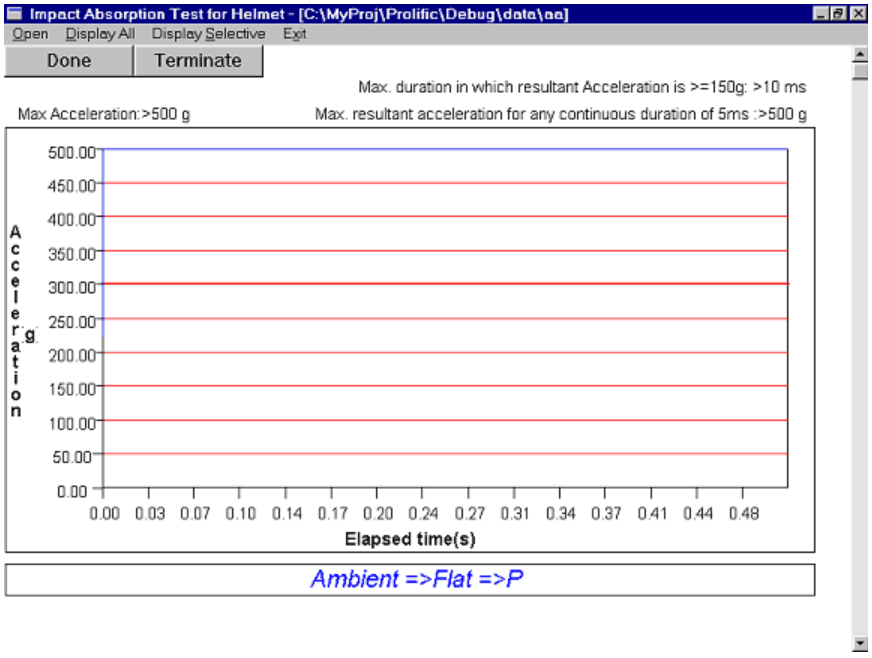
Location: **Prolific Engineers, Noida**

Year of Implementation: **2004**

Product Summary:

Project	**Impact Absorption Test for Helmet**
Installation and Development	Company is involved in the manufacturing of Machines for their customers who are engaged in manufacturing of ISI Marked products. The job was to measure the displacement in helmet in different conditions/ in critical conditions, analyze the data, visualize the data and log the data. Using the PCL series Card of Advantech's, we did the interfacing of their instruments with the computer. Developed the software, which does the measurement of signals, scaling, analyzing, visualizing in GUI form, logging the data and generation of reports. Provision for setting the limits for alarming and setting parameters for scaling is also provided in the application. When the test is complete, user can visualize the reports of different types, in different forms ie. Graphical/Tabular etc.
Software & Language Used:	Operating System **WinXP** and Language **Visual C**


Impact Absorption Test for Helmet - [C:\MyProj\Prolific\Debug\data\aa]
Open Display All Display Selective Exit
Impact Absorption Test for Helmet
Select Test
* Ambient =>Flat =>B
* Ambient =>Flat =>B
Ambient =>Flat =>X
Ambient =>Flat =>P
Ambient =>Hemispherical =>B1
Ambient =>Hemispherical =>X1
Ambient =>Hemispherical =>P1
Heat Conditioning =>Flat =>B
Heat Conditioning =>Flat =>X
Heat Conditioning =>Hemispherical =>B1
Heat Conditioning =>Hemispherical =>X1
Low Temp. Conditioning =>Flat =>B
Low Temp. Conditioning =>Flat =>X
Low Temp. Conditioning =>Hemispherical =>B1
Low Temp. Conditioning =>Hemispherical =>X1
Ultraviolet Radiation & Moisture Conditioning =>Flat =>B
Ultraviolet Radiation & Moisture Conditioning =>Flat =>X
Ultraviolet Radiation & Moisture Conditioning =>Hemispherical =>B1
Ultraviolet Radiation & Moisture Conditioning =>Hemispherical =>X1


Impact Absorption Test for Helmet - [C:\MyProj\Prolific\Debug\data\aa]
Open Display All Display Selective Exit
Done
Terminate
Max. duration in which resultant Acceleration is >=150g: >10 ms
Max Acceleration:>500 g
Max. resultant acceleration for any continuous duration of 5ms :>500 g
Acceleration g
500.00
450.00
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
0.00 0.03 0.07 0.10 0.14 0.17 0.20 0.24 0.27 0.31 0.34 0.37 0.41 0.44 0.48
Elapsed time(s)
Ambient =>Flat =>P