

## THERMAL CURE PREDICTION SOFTWARE

**PURPOSE:** Develop software to predict thermal cure times for elastomeric conveyor belts

HLA was responsible for developing the thermal cure prediction software for elastomeric conveyor belts. The program utilized a Graphical User Interface (GUI) with features for creating/editing/formatting and accessing the construction, thermal material properties, cure press parameters, etc. for predicting the cure time of belts. A database driven software application was developed using advanced encryption, archival and communication tools for data security and access. The software was intended for use by individual manufacturing plants. Sensitive material and construction data and features were stored in a central server from where information could be accessed and updated, in a client-server Windows based network application.

**Key features of the program include:**

- Data encryption and security
- Automatic data backup and archive
- Data compression
- Automatic usage logs
- Automatic prediction logs
- Automatic program and data updates
- Communication using TCP/IP and FTP
- Modem communication
- Remote access using SecureID
- User accounts and user management
- Data synchronization
- FEA based thermal cure prediction
- Mixed language programming
- Modular DLL construction
- ActiveX DLL and components
- Encryption algorithms
- IBM Global and SecureID access
- Y2K compliance conversion

