Energy – Pole / Break Fracture Energy

Overview: Computes Energy required to break a wooden pole (power pole, utility pole) based on its circumference.

Entry into Module:

This module of the program is normally entered by clicking on the **REC-TEC** block in the upper left of the **REC-TEC Window** causing the drop-down menu to appear. Place the cursor on the **Energy** block and click on **Pole / Break Fracture** on the sub-menu to initiate this module.

Under certain circumstances, the user may choose to use the **Files** block instead of the drop-down menu approach. Selecting any file with a **.BFE** extension in the **Dialog box** accessed from either the **Open Single File** or **Open Multiple Files** block opens this module.

Selecting **AutoLoad [ON]** from either the **Setup Menu** or the **AutoLoad Icon** on the upper right side (third line) of the **REC-TEC Window** automatically loads the scenario that was on the screen when the module was closed, either individually, or when the program was closed. With **AutoLoad [OFF]** on the main **REC-TEC Window,** modules will start without loading a file.

Data Entry:

This module contains two data entry blocks within the leftmost frame:

- **Weight (Veh)** – **Weight of Vehicle**
- **Circumference** – Circumference in selected Unit of Measure

Entry of specific (known) data in the data boxes sufficient to generate an answer causes output information to appear in the **Output** frame. As the input data is changed, the output data is automatically updated without the need to tell the program to update the output.

Output:

The output from this module consists of Fracture Energy required and the resultant Speeds expressed in both the primary and secondary output configurations as selected in the **Setup > REC-TEC** menu.

- **Weight (Vehicle)** – Weight of Vehicle
- **Circumference (P)** – Circumference of Pole

- **Fracture Energy** – Energy required to Fracture Pole

- **Speed** – Speed of Vehicle (Primary)

- **Speed** – Speed of Vehicle (Secondary)

Options:

Several **Command Buttons** appear in a frame located at the lower right corner of the module Window. The **Command Buttons** allow the user to engage options including the option to **Open** and **Save** the data required to generate the scenario shown on the screen at the time the file was saved.

- **Open .BFE File –** Calls up a **Dialog box**, which **Opens** any pre-existing **.BFE** file and displays the output results.

- **Save .BFE File –** Calls up a **Dialog box**, which **Saves** data on the screen to files with any user-selectable filenames. This is independent of the automatic saving as "**LastFile.BFE**" of the data at the close of this module or the close of the program.

- **Formulae –** Opens a word processor (set by the user in **Setup**) with a file showing the basic formulae used in this module of the program. While the user may add to or modify the information in this file, it does not change the formulae imbedded into the program.

- **Formulae*** - Toggles a frame displaying the formulae for computing the unknowns in this module. In addition to the basic formulae, the frame shows intermediate steps with the actual input data shown in the computation.

- **N** – This button toggles a graphical number pad on the screen that can be used to enter data into the input boxes without using your keyboard number pad. This may be useful for presentations as data entry can be accomplished using a wired/wireless mouse.