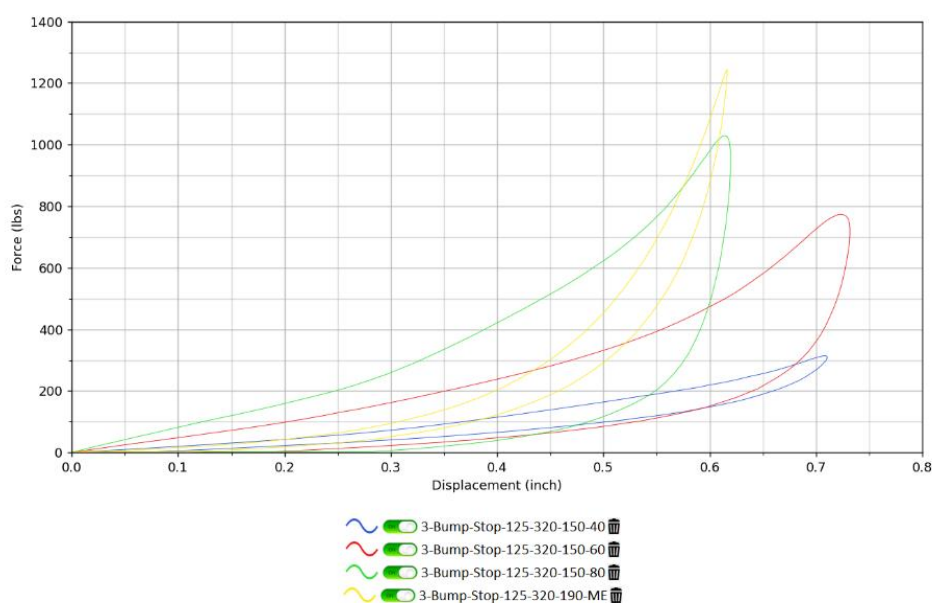


PKM Bump Stop

Software

Instruction manual



[IM]-PKM-SOFT-BUMP-SOFT
08/06/2022

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Chapt I: Install

Open the USB key that we provide you. On it, you will find this instruction manual, To install the software correctly execute the installer. You will find it on the USB key that we will provide you. On this USB key, you will also find this instruction manual.

Click on the installer and allow the application to make changes on your computer.

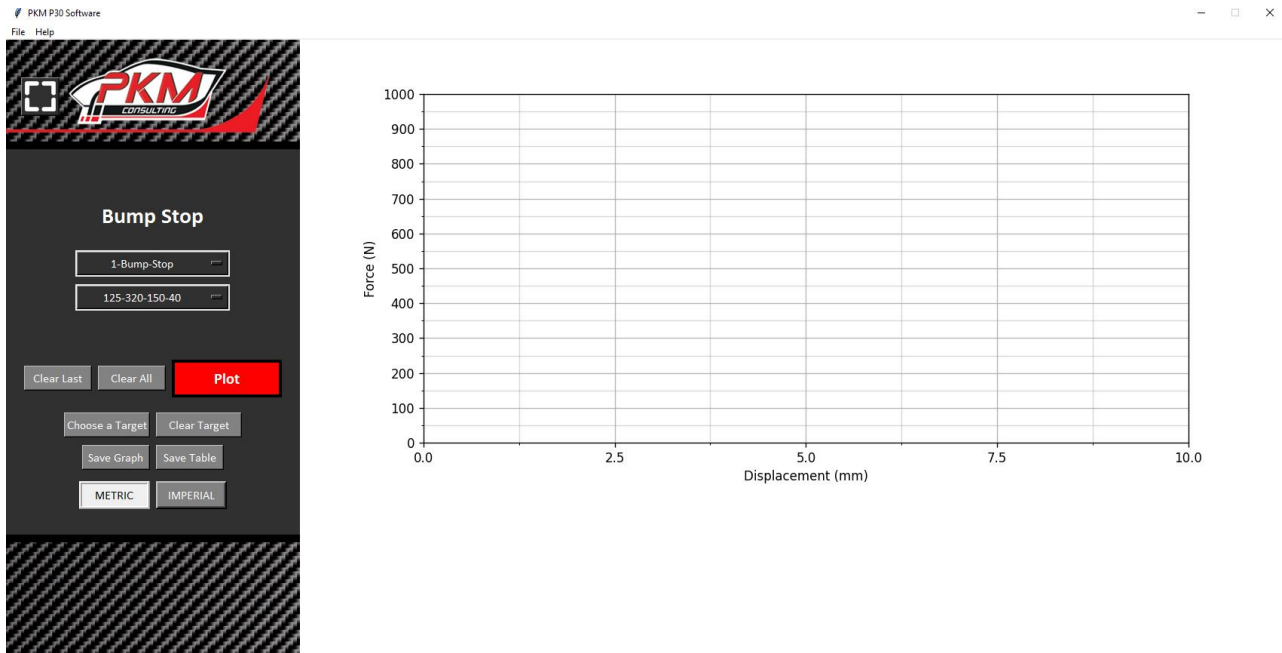
PKM Bump Stop Installer

A window will appear to set the Software. Choose your language. On the next page, you can decide to create a shortcut on your desktop. Then choose the place you want to install the Software and lunch the installation.

Use the browse button to decide where you want to install the software and let the installer working. **You must not move the application from this folder**, but you can of course move the shortcut everywhere you need.

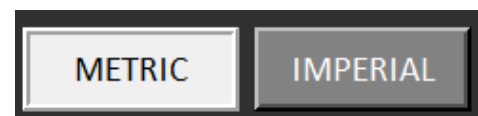
Chapt II : Menu

When you will open the software, this is the first parge you will see. Nothing is plotted. Metric is chosen by default. If you want to work in full screen, click on the button on the upper left corner.



1. Presetting

You must choose units you want to work with, metric or imperial. Metric is selected by default. With metric, speed will be in mm/s and force in Newton, in imperial speed will be in inch and force in lbs. This preset can be move at any moment.



2. Setting

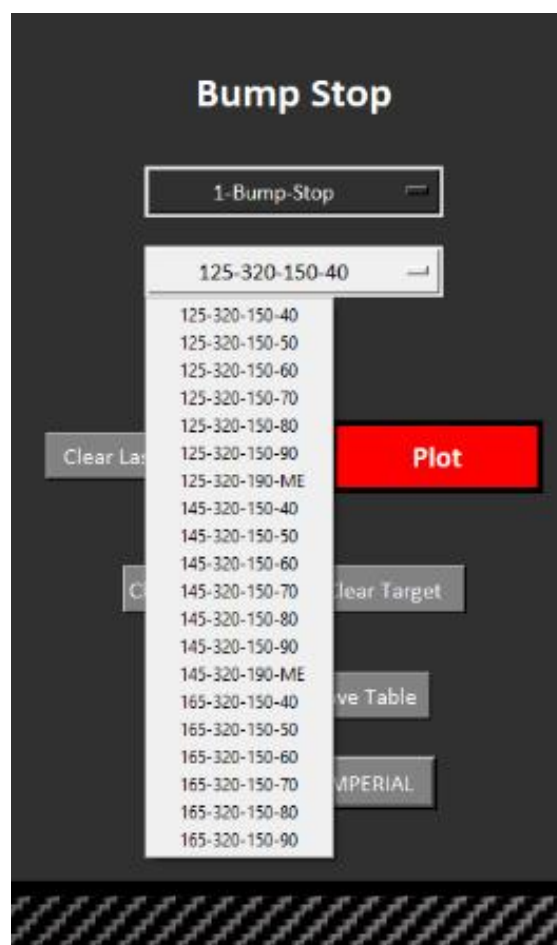
Now, you can create your setup.

First, set the number of Bump-Stop you want on your rod with the first folder. You can have 1,2 or 3 Bump-Stop at the same time on your damper.



Then, on the second folder, chose the Bump-Stop reference you would like to simulate.

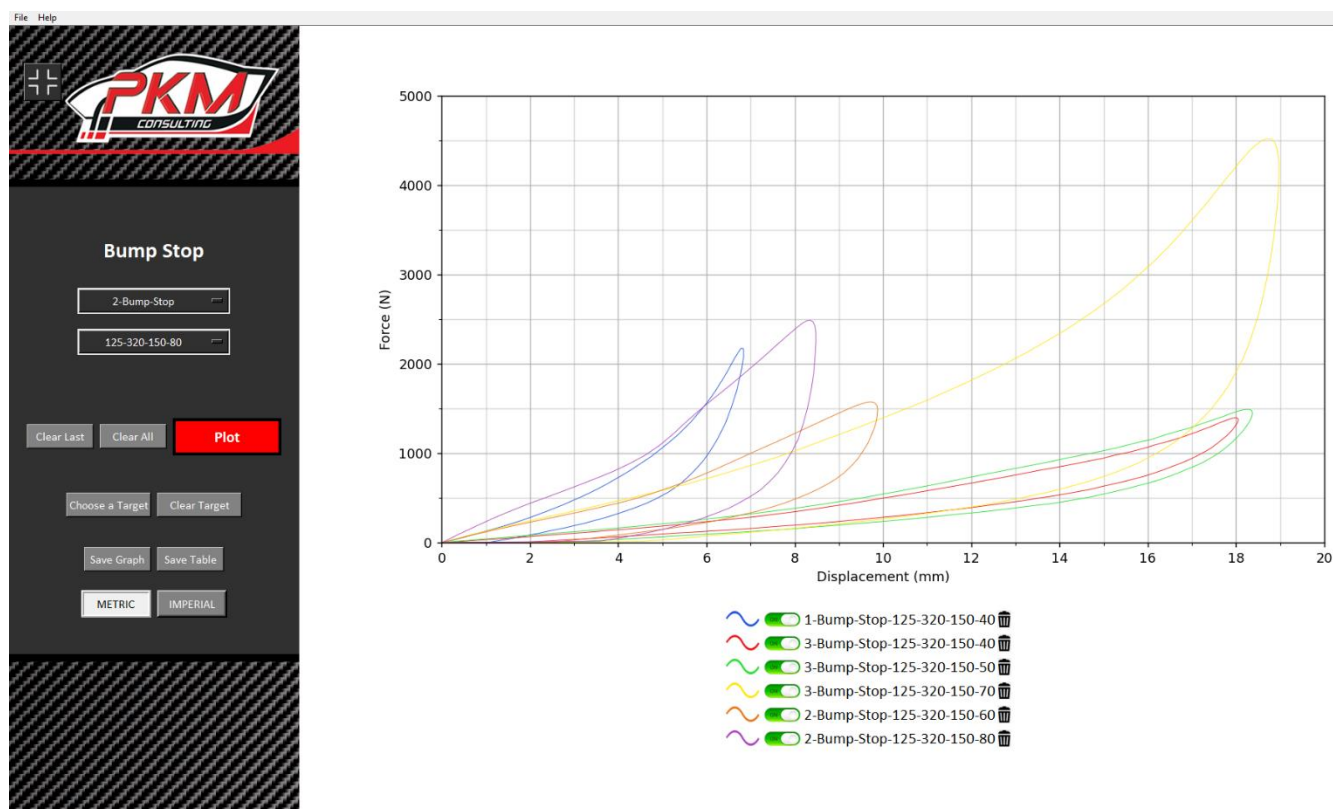
Plot your result.



Chapt III : Data exploitation

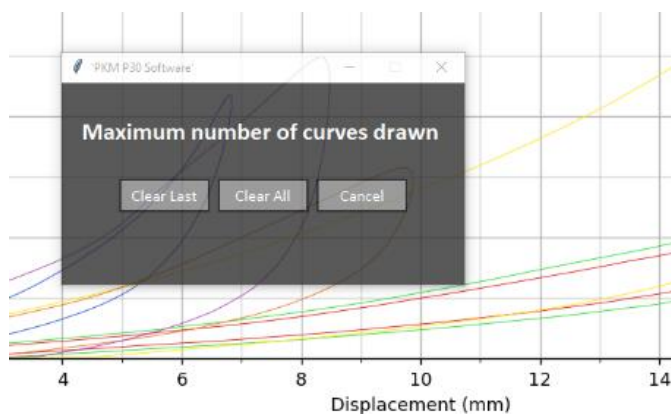
1. Curves

You can plot a maximum of 6 curves, all of them have different color. The legend is behind the graph.



In the legend you can decide to hide a curve by clicking on the on/off button. Also, you can delete one by clicking on the trash bin. You can delete the last curve plotted by clicking on the button "Clear Last", or "Clear All" if you want to delete everything.

If you already plotted the maximum number of curves a message will appear. You can choose between "Clear Last" and "Clear all" to be able to draw again or cancel if you just want to come back.



2. Target

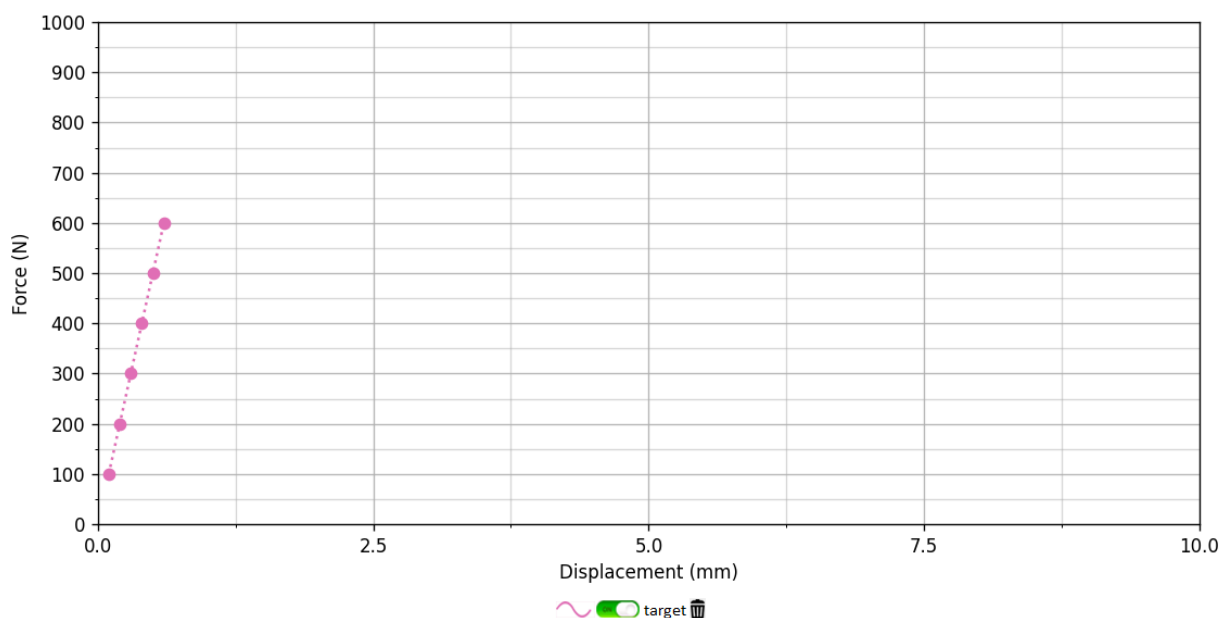
You can display the target you want to reach by clicking on the button choose a target. A window will open to find the file you want to display.

If you want to use this function, you must create a file dedicate to. This file is yours and must be fill by you. It needs to be a .csv file with “,” as separator. It can be generated by Excel of any word processor. Header must be displacement and Force.

On the right side, an example of a target file:

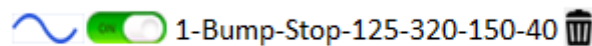
Select the target throughout the window you just opened, and the curve will be plot automatically in pink with the point you wrote. The “Choose a target” button will change and show the name of the file you choose. If you want to delete the target, use the button “Clear Target”.

```
displacement,Force
0.1,100
0.2,200
0.3,300
0.4,400
0.5,500
0.6,600
```



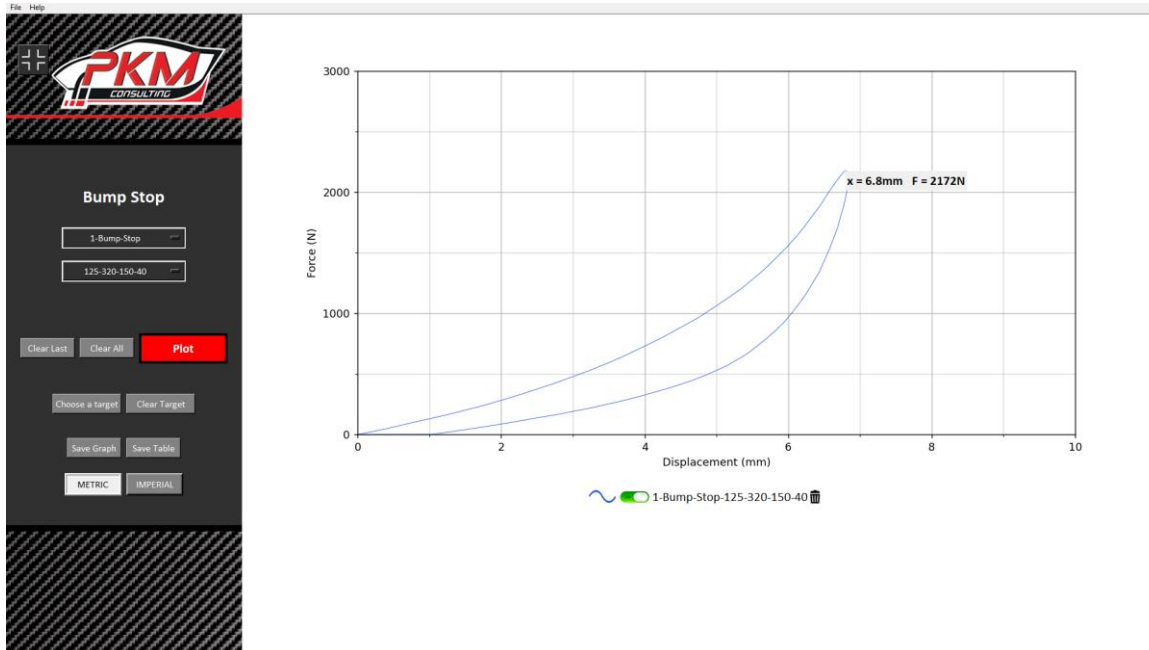
3. Legend

The legend behind the graph will show you all informations needed. In this order, number of Bump-Stop, inner diameter, outer diameter, thickness and stiffness in shore.



4. Pointer

If you want to know speed and force at any place in the graph, just click on it, a frame will be displayed with speed and force. If you stay clicked and move the mouse, the frame will follow the pointer.



5. Delete

If some curves don't fit with your exigence, you can of course clear them. Few methods can help you.

- You can delete precisely one curve by using the trash corresponding at his legend.
- You can clear the last curves drawn by using the button "clear last"
- You can also clean every curve of your graph by using the button "clear all"
- For the target, you must use the button "clear the target"

6. Save Table

The software allow you to save your data easily by generating a “.csv” file. Click on the button “Save Table” to open a window to decide which place and which name you want to give to your file.

7. Save Graph

If you want to save the graph, it is also possible. Just click on the button “Save Graph” to open a window to decide which place and which name you want to give to your file. You can also decide what kind of file you want to create as “.pdf” and “.jpeg”.

Chapt IV : Window

1. Keyboard shortcut

You can also use the software with keyboard shortcut as follow:

- **Enter** : Plot
- **F11** : Fullscreen/Minimised Screenshot
- **Ctrl + s** : Save Graph
- **Ctrl + t** : Save Table
- **Ctrl + z** : Clear Last
- **Ctrl + r** : Clear All
- **Escape** : Close

2. Screen Size

You can set the size of your screen by clicking on the button on the upper left side.

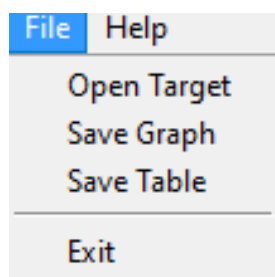
This button will allow you to Fullscreen the software.



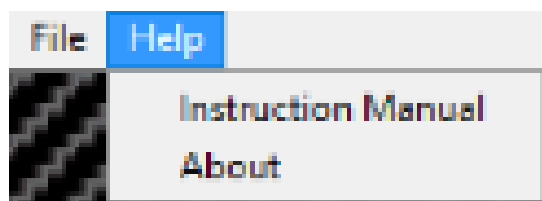
This one allows you to minimize the screen.

3. Scrolling menu

On the upper left side, you can find scrolling menu with command.



Help menu will give you the copyright and this instruction manual.



Chapt V : Assistance

For any problems, please contact us at contact@pkm-consulting.com.

Chapt VI : Versioning

REV	NAME	DATE	CHANGES
A	RICORD	24/05/2022	Creation

Chapt VII : Notes

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