

## How to use the application

This application requires the Windows OS and the DIY 1 DOF haptic device turned on and connected to your computer.

After downloading the application from the website, unpack the “tensile.zip” file and then open the file “tensile.exe”. By pressing the “Start Process” button the application is ready to run with the haptic device.

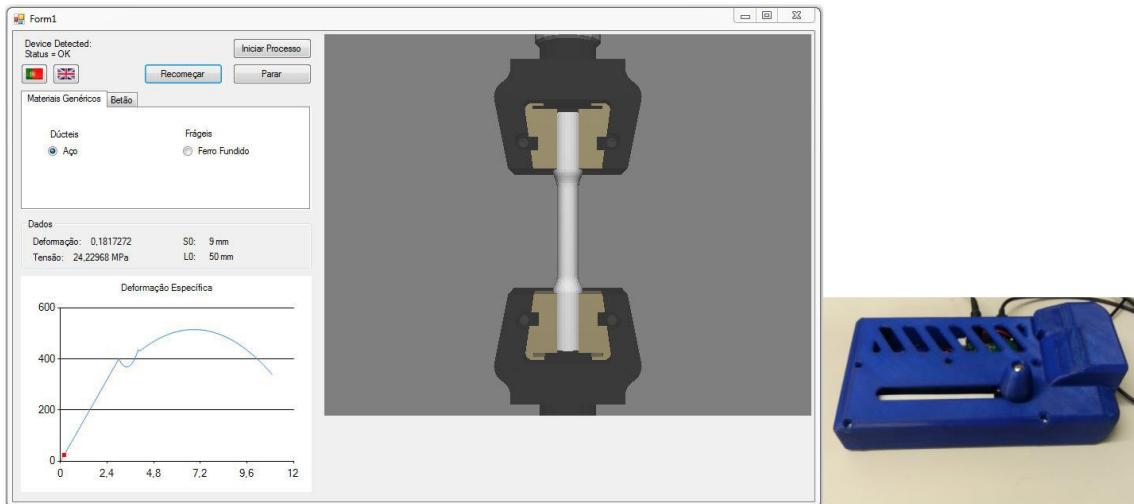


Figura 1 – First Options

It is possible to switch between two options “Materiais Genéricos (Generic Materials)” and “Betão (Concrete)”, as showed in Figure 1.

In the Materiais Genéricos (Generic Materials) option, it is possible to choose Aço(Steel) or Ferro Fundido (Cast Iron), as showed in Figure 2.

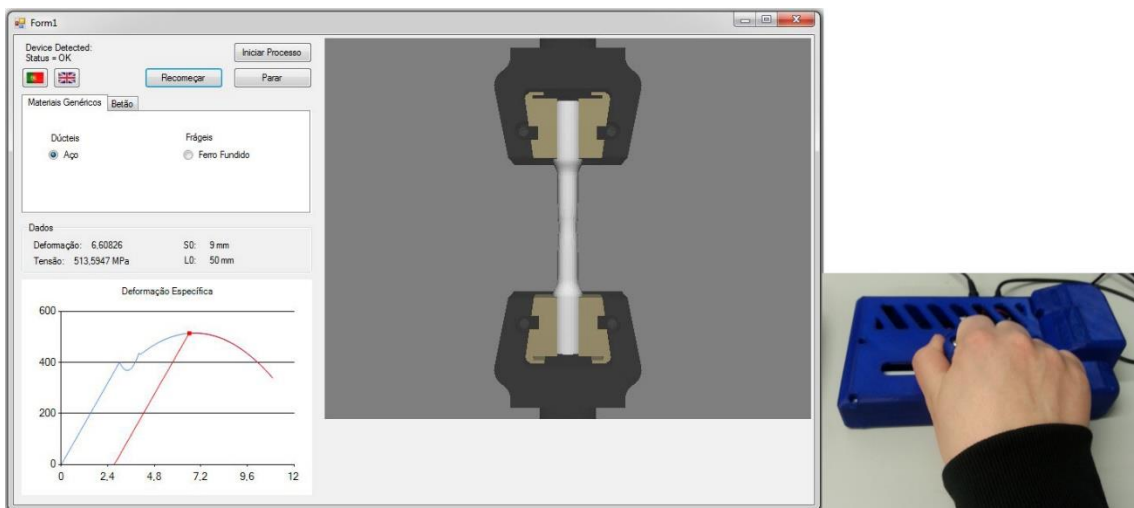


Figure 2 – Materiais Genéricos (Generic Materials)

In the Betão (Concrete) option, it is possible to choose three types of concrete, as showed in Figure 3.

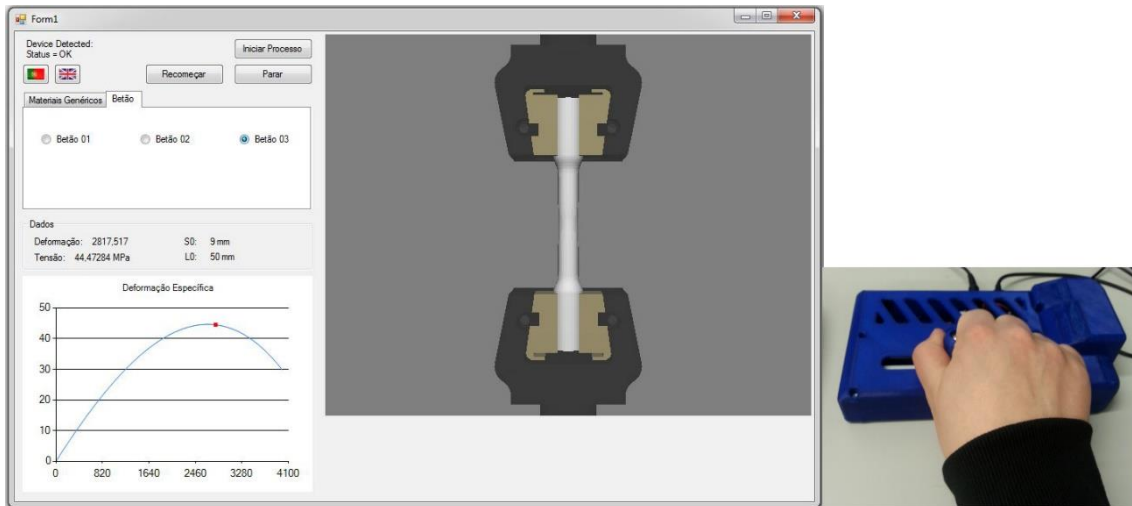


Figure 3 – Concrete Options

On the chart at the bottom left the blue line represents the stress-strain curve for the material that is currently selected. The red dot moves on the blue line in response to the haptic operation. The grey line represents the stress-strain curve for the previously selected material that.

To close the application the “STOP” button should be pressed before exiting.