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| **STANDARD OPERATING PROCEDURE**  UNIVERSAL TESTING MACHINE |

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## Purpose

This test method is designed to produce tensile property data for the control and specification of plastic materials. These data are also useful for qualitative characterization and for research and development.

## Scope

This test method covers the determination of the tensile properties of unreinforced and reinforced plastics in the form of standard dumbbell-shaped test specimens when tested under defined conditions of pretreatment, temperature, humidity, and testing machine speed.

## Responsibilities

Trainee Engineer- REC

## Procedure

1. Install all the clamps used in the test.
2. Connect all the cables in the test, turn on the computer.
3. Turn on the power of the machine and let the machine to pre heat for 10 min.
4. Start the program on the computer (stretching, compressing, and bending)
5. Set the speed to 100mm/min
6. When performing the test, press the configuration button to enter the configuration window and choose the sensor and the parameters.
7. Set the speed required for the test. Press the run key to perform the test.
8. If you set auto check break option, the test bed can detect when samples breaks; if not then stop it by pressing the stop key.
9. After the testing, press the process key to enter data process window.
10. Press the input key in the data process form, and input parameters of current group of samples; save and exit to the data process form.
11. Press the auto calculate key to calculate automatically in the data process form, and then return to the data process form.
12. Press the curve refresh key in the data process form to view curve, print, local zoom in, and analyze some parameters.
13. Press the report key to output the report in data process form.
14. Press the return key in the data process form to return to the main form; press the save key in the main form to save the test data.
15. The test ends.

## Associated Documents and Records

Manual and standards i.e. ISO 527-1 and D638-02a

**AMENDMENT HISTORY**

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| **REV. #** | **DCR#** | **SECTION** | **AMENDED TEXT** |
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\* All changes made in the document are notified in the Amendment History Table.