ISO 22183:2023-05 (E)

Plastics - Validation of force-time curves obtained from high-speed tensile tests

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Principle 4

5 Measurement of the natural oscillation spectrum of the grip and force transducer configuration 5
5.1 Measurement of natural oscillation frequencies 5
5.1.1 Set-up of the high-speed tensile equipment 5
5.1.2 Set-up of the striker 5
5.1.3 Measurement procedure 5
5.2 Determination of the natural oscillation spectrum 6

6 Validation 7
6.1 Minimum event time 7
6.2 Maximum allowed intensity 8

7 Test report 9

Annex A (informative)Configurationofthehigh-speedtestingmachine 11

Annex B (informative) Example for the measurement of natural oscillation frequencies 15

Annex C (informative)Influenceofasetpositionnonthenaturaloscillationspectrum 18

Annex D (informative) Relation between the nominal test speed and the nominal strain 21

Bibliography 23