ISO 5700:2025-01 (E)

Tractors for agriculture and forestry - Roll-over protective structures - Static test method and acceptance conditions

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Symbols 6

5 Apparatus 7
5.1 Tolerances 7
5.2 Horizontal loading tests 7
5.3 Crushing tests 9

6 Preparation of tractor and ROPS for testing 10

7 Test procedures 11
7.1 Sequence of tests 11
7.1.1 General 11
7.1.2 First longitudinal loading 11
7.1.3 First crushing test 12
7.1.4 Loading from the side 12
7.1.5 Second crushing test 12
7.1.6 Second longitudinal loading 12
7.2 Horizontal loading from rear, front and side 12
7.2.1 General requirements for horizontal loading tests 12
7.2.2 First longitudinal loading 12
7.2.3 Loading from side 14
7.3 Crushing tests 15
7.3.1 Crushing at rear 15
7.3.2 Crushing at front 18
7.4 Second longitudinal loading 18

8 Determination of seat index point (SIP), seat location and adjustment for test 18
8.1 Seat index point 18
8.2 Seat location and adjustment for tests 18

9 Clearance zone 19
9.1 Determination of the clearance zone 19
9.2 Determination of the clearance zone for tractors with a non-reversible seat 20
9.3 Determination of the clearance zone for tractors with a reversible driver's position 21
9.4 Optional seats 22

10 Acceptance conditions 22
10.1 General 22
10.2 Clearance zone 22
10.3 Recording permanent deflection 23
10.4 Required force 23

10.5 Overload test 23
10.6 Additional conditions 25
10.7 Cold weather embrittlement 26

11 Seatbelt anchorage performance 26

12 Labelling 26

13 Applicabilitytoothertractormodelsandfutureprotectivestructuremodifications 26
13.1 Applicability of the structural test results to other models of tractors 26
13.2 Applicability of the structural test results to modified models of the protective structure 27

14 Test report 27

Annex A (informative) Clearance zone measuring rig 28

Annex B (normative) Optional requirements for providing resistance to brittle fracture of roll- over protective structure at reduced operating temperature 30

Annex C (normative) Test report for roll-over protective structure 32

Bibliography 38