DIN ISO 8082-1:2023-03 (E)

Self-propelled machinery for forestry - Laboratory tests and performance requirements for roll-over protective structures - Part 1: General machines (ISO 8082-1:2009 + Amd 1:2021)

Contents

Page

National foreword ... 4

National Annex NA (informative) Bibliography ... 5

〉A1〈 Foreword to Amendment A1 〉A1〈 ... 6

1 Scope ... 7

2 Normative references ... 7

3 Terms, definitions and symbols ... 7

4 Static laboratory tests ... 9
4.1 Facilities ... 9
4.2 Instruments ... 9
4.3 Apparatus ... 10
4.3.1 General ... 10
4.3.2 Vertical loading ... 10
4.4 Test procedures ... 11
4.4.1 General ... 11
4.4.2 Lateral loading ... 11
4.4.3 Vertical loading ... 14
4.4.4 Longitudinal loading ... 15

5 Performance requirements ... 17
5.1 General ... 17
5.2 Force, energy and load requirements ... 17
5.3 Temperature and material requirements ... 18
5.3.1 General ... 18
5.3.2 Bolts and nuts ... 18
5.3.3 Impact strength ... 18

6 Reporting results ... 19

7 〉A1〈 Labelling of ROPS 〉A1〈 ... 19
7.1 〉A1〈 General 〉A1〈 ... 19
7.2 〉A1〈 Label specifications 〉A1〈 ... 19
7.3 〉A1〈 Label content 〉A1〈 ... 19

Annex A (normative) Test report for ISO 8082-1 ... 21

Bibliography ... 23

Figures

Figure 1 — Determination of lateral simulated ground plane (LSGP) ... 9

Figure 2 — Machine attachment to bedplate ... 11

Figure 3 — Load-distribution device for ROPS with four-post system ... 12

Figure 4 — Load-distribution device for ROPS with two-post system **13**
Figure 5 — Force–deflection curve for lateral loading **14**
Figure 6 — Vertical load distribution and loading **15**
Figure 7 — Longitudinal loading **16**

Tables

Table 1 — Symbols **8**
Table 2 — Instrument accuracy requirements **10**
Table 3 — Minimum force attained during lateral loading **17**
Table 4 — Minimum energy absorbed during lateral loading **17**
Table 5 — Minimum force attained during longitudinal loading **18**
Table 6 — Minimum Charpy V-notch impact strength **19**