ISO 11680-1:2021-10 (E)

Machinery for forestry - Safety requirements and testing for pole-mounted powered pruners - Part 1: Machines fitted with an integral combustion engine

Contents

Page

Foreword v

Introduction vii

1 Scope 1

2 Normative references 1

3 Terms and definitions 2

4 Safety requirements and/or protective measures 4
4.1 General 4
4.2 Protection against contact with power driven components 4
4.2.1 Requirements 4
4.2.2 Verification 4
4.3 Handles 6
4.3.1 Requirements 6
4.3.2 Verification 6
4.4 Harness 6
4.4.1 Requirements 6
4.4.2 Verification 6
4.5 Cutting attachment 7
4.5.1 Saw-chain cutting attachment 7
4.5.2 Circular saw blade cutting attachment 7
4.5.3 Cutting attachment strength 8
4.6 Transport cover for cutting attachment 9
4.6.1 Requirements 9
4.6.2 Verification 9
4.7 Distance to cutting attachment 9
4.7.1 Requirements 9
4.7.2 Verification 10
4.8 Engine starting device 10
4.8.1 Requirements 10
4.8.2 Verification 10
4.9 Engine stopping device 10
4.9.1 Requirements 10
4.9.2 Verification 11
4.10 Throttle control 11
4.10.1 Throttle trigger 11
4.10.2 Operation 11
4.10.3 Throttle control latch 12
4.11 Clutch 12
4.11.1 Requirements 12
4.11.2 Verification 13
4.12 Tanks 13
4.12.1 Requirements 13
4.12.2 Verification 13
4.13 Protection against contact with parts of the machine under high voltage 13
4.13.1 Requirements 13
4.13.2 Verification 13
4.14 Protection against contact with hot parts 14

4.14.1 Requirements 14
4.14.2 Verification 14
4.15 Exhaust gases 15
4.15.1 Requirements 15
4.15.2 Verification 15
4.16 Vibration 15
4.16.1 Reduction by design at source and by protective measures 15
4.16.2 Vibration measurement 15
4.17 Noise 15
4.17.1 Reduction by design at source and protective measures 15
4.17.2 Noise measurement 15
4.18 Electromagnetic immunity 16
4.18.1 Requirements 16
4.18.2 Verification 16
4.19 Fuel feed line strength and accessibility 16
4.19.1 Requirements 16
4.19.2 Verification 16
4.20 Fuel tank structural integrity 16
4.20.1 Requirements 16
4.20.2 Verification 16

5 Information for use 17
5.1 Instructions 17
5.1.1 General 17
5.1.2 Technical data 17
5.1.3 Other information 17
5.2 Markings and warnings 19
5.2.1 General requirements 19
5.2.2 Marking requirements 20
5.2.3 Warning requirements 21
5.3 Test of labels 21
5.3.1 Preparation of test specimens and control specimens 21
5.3.2 Wipe resistance test 21
5.3.3 Adhesion test 22

Annex A (informative) List of significant hazards 23

Annex B (normative) Procedures for the evaluation of the strength and accessibility of fuel feed lines 25

Annex C (normative) Verification of protection against contact with hot parts 26

Bibliography 28